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ANNOTATED TABLES OF VEGETATION GROWING ON DREDGED MATERIAL THRO--ETC(U)
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SUBJECT: Transmittal of Miscellaneous Paper D-78-7

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1. The miscellaneous paper transmitted herewith contains the results of one of the research efforts (work units) of the Corps of Engineers' Dredged Material Research Program (DMRP). This study was conducted under the direction of the Habitat Development Project (HDP) of the DMRP. The HDP had as its main objectives the development of wetland and upland habitats on dredged material and the evaluation of the impact of disposal in shallow water and upland sites.

2. This report, "Annotated Tables of Vegetation Growing on Dredged Material Throughout the United States," (Work Unit 4F05) presents a listing of plant species found on 202 dredged material islands and near-shore disposal sites during the course of the DMRP. Tabular material is presented by common and scientific name for 1120 species, and information is provided regarding the propagation of selected species.

3. The material presented in this report provides a rapid reference to the wide variety of plant species found growing voluntarily on dredged material. The natural occurrence of such species on dredged material is useful information in the selection of plant species for use in habitat development.

John Cannon
JOHN L. CANNON
Colonel, Corps of Engineers
Commander and Director

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This document presents data collected on the vegetation of dredged material islands and sites in Corps of Engineer-maintained waterways throughout the United States. More than 2000 dredged material islands and numerous dredged material sites have been built in the past 100 years; 202 of these were intensively sampled and all vegetation recorded, identified, and/or collected as voucher specimens.

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20. ABSTRACT (Continued).

Cont

Six tables present the following data:

a. An anotated listing by common name of 1120 plant species occurring on dredged material;

b. A selection of 361 upland and high marsh plant species and 115 wetland plant species that may be planted on dredged material for wildlife habitat enhancement and/or substrate stabilization;

c. Matrixes of the 361 upland and the 115 wetland plant species; and

d. An alphabetical group listing by scientific name and authority of the 1120 plant species occurring on dredged material.

These data were prepared to provide managers with data pertinent to planned plant establishment on wetland and upland dredged material islands and sites throughout the United States.

Preface

This report was written as part of Task 4F, "Island Habitat Development," of the Habitat Development Project (HDP), Dredged Material Research Program (DMRP). The DMRP was sponsored by the Office, Chief of Engineers, U. S. Army, and was assigned to the Environmental Laboratory (EL) of the U. S. Army Engineer Waterways Experiment Station (WES), Vicksburg, Miss.

Manager of Task 4F was Ms. Mary C. Landin, who prepared this report. Work progressed under the general supervision of Dr. H. K. Smith, Manager of the HDP, Dr. Roger T. Saucier, Special Assistant for Dredged Material Research, and Dr. John Harrison, Chief, EL.

Director of WES during the preparation of this report was COL John L. Cannon, CE. Technical Director was Mr. F. R. Brown.

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ANNOTATED TABLES OF VEGETATION GROWING ON DREDGED MATERIAL THROUGHOUT THE UNITED STATES

Background

1. This document presents data collected on the vegetation of dredged material islands and sites in Corps of Engineer-maintained waterways throughout the United States. These data were collected as part of the Habitat Development Project research in the Dredged Material Research Program (DMRP). More than 2000 dredged material islands and numerous dredged material sites have been built in the past 100 years; 202 of these were intensively sampled and all vegetation recorded, identified, and/or collected as voucher specimens.

2. Vegetation plays a key role in the ability of wildlife to utilize any habitat, and dredged material habitat is no exception. Efforts to determine what vegetation is present, its use by wildlife, its role in site stabilization, and the rates of colonization and succession of vegetation on these areas have been made by the DMRP in order to better understand management needs of the dredged material islands and sites. Islands were found to be of importance, and indeed critical habitat in many instances, to a unique group of wildlife species, the colonial nesting sea and wading birds (pelicans, cormorants, herons, egrets, ibises, spoonbills, gulls, terns, and skimmers) (Soots and Landin 1978). Islands and other dredged material sites are also utilized by many waterfowl, shorebird, songbird, raptor, reptile, rodent, small mammal, and invertebrate species as well.

3. Over 1000 dredged material islands and sites were covered by aerial surveys to determine wildlife use, and islands with and without intensive wildlife use (such as by bird colonies) were selected for detailed scrutiny. Many factors were found to be influencing colonization and succession rates of vegetation on the islands and sites selected:

a. Location in the waterway.
b. Island or site size and configuration.
c. Island height and gradient.

d. Plant propagule sources.

(1) Existing on the site.

(2) On adjacent or nearby locations.

e. Wildlife and human utilization of the island or site.

f. Salinity.

g. Currents, waves, and tidal actions.

h. Climate.

(1) Rainfall.

(2) Day length (photoperiods).

(3) Temperature (thermoperiods).

Explanation of Tables

4. With the exception of the marsh plant species tables, the tables in this report are presented by growth habit groups: ferns and their allies, grasses, aquatic and low marsh plants not included elsewhere, herbs, vines, shrubs and small trees, and large trees. Table 1 presents an annotated listing by common name for easy reference to 1120 plant species occurring on dredged material. Frequency and occurrence are briefly noted. Plant species were found on dredged material in the following areas:

a. Connecticut -- 2 islands.

b. Florida -- 45 islands.

c. Great Lakes -- 23 islands and sites.

d. Louisiana -- 1 site.

e. Maryland -- 5 sites.

f. Mississippi -- 2 islands.

g. New Jersey -- 20 islands.

h. North Carolina -- 25 islands.

i. Pacific Northwest -- 17 islands.

j. Texas -- 36 islands.

k. Upper Mississippi River -- 26 islands and sites.

5. Table 2 presents a selection of 361 upland and high marsh plant species that may be planted on dredged material for wildlife habitat enhancement and substrate stabilization. Table 3 presents a matrix of

upland plants based on the same 361 species. Certain pertinent information for the manager is presented, such as best propagule types and propagule collection periods, temporary storage requirements, and planting periods. Also presented are species range, heights, growth habits, wildlife value, salinity tolerances, and pertinent remarks concerning cultivation value, pest species, and habitat occupation. The species occurring on dredged material are noted as well as their availability from commercial sources. Plant species were selected based on their food, cover, and breeding value for wildlife, and for stabilization of substrate.

6. Tables 4 and 5 present pertinent information beneficial to site planners in wetlands habitats. Recommended propagules, planting and storage techniques, ranges, soil tolerances, moisture requirements, wildlife value, nuisance potential, and soil stabilization abilities are given, as well as pertinent remarks concerning individual values and benefits to be derived from each species. A total of 115 species are listed and were selected for their ability to grow on wetlands sites including dredged material, their stabilization ability, and their wildlife value. Many other species have potential use on dredged material but are not given because growth and survival on dredged material are not known.

7. Table 6 presents an alphabetical, grouped listing by scientific name and authority of the 1120 species occurring on dredged material for quick botanical reference.

8. These data were prepared to provide managers with data pertinent to planned plant establishment on wetland and upland dredged material islands and sites throughout the United States. The reader is referred to Coastal Zone Resources Division (CZRD) (1978), Environmental Laboratory (1978), Hunt et al. (1978), and Soots and Landin (1978) for more detailed discussion and information concerning specific habitat recommendations.

9. Published sources of plant species lists used in this report are DMRP reports by Chaney et al. (1978), Coastal Zone Resources Corporation (CZRC) (1977), Lewis and Lewis (1978), McCaffrey and Buckley (1978), Parnell et al. (1978), Peters et al. (1978), Scharf et al. (1978), Thompson and Landin (1978), and Ziegler and Sohmer (1977). Other species listed are from the author's unpublished data and observations.

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Table 1

Annotated Listing by Common Names of
Plant Species
on Dredged Material Islands and Sites

FERNS AND THEIR ALLIES

Bracken fern (Pteridium aquilinum). Uncommon, in open areas and thickets.

Christmas fern (Polystichum acrostichoides). Uncommon, in woods and high places.

Feather moss (Eurhynchium oreganum). Uncommon.

Field horsetail (Equisetum arvense). Uncommon to frequent, in sandy areas.

Grape fern (Botrychium neglectum). Uncommon, in grassy woods and low areas.

Hay-scented fern (Dennstaedtia punctilobula). Uncommon, in mixed woodland areas.

Juniper haircap moss (Polytrichum juniperinum). Uncommon.

Lady fern (Athyrium filix-femina). Uncommon, in grassy woods and low areas.

Licorice fern (Polypodium glycyrrhiza). Uncommon on trees.

Little shaggy moss (Rhytidiadelphus loreus). Uncommon.

Maiden hair fern (Polypodium vulgare). Uncommon on trees and rocks.

Marsh horsetail (Equisetum palustre). Uncommon in wet areas.

Marsh shield fern (Dryopteris thelypteris). Uncommon in wooded wet areas.

Mountain wood fern (Dryopteris austriaca). Uncommon in pines and woods.

Net-veined chain fern (Lorinseria areolata). Uncommon in moist soils.

Rattlesnake fern (Botrychium virginianum). Uncommon in woods.

Resurrection fern (Polypodium polypodiodes). Uncommon on trees.

Scouring rush (Equisetum hyemale). Uncommon to common in wet areas.

Sensitive fern (Onoclea sensibilis). Uncommon in moist soils and low areas.

Silvery fern (Athyrium thelypteroides). Rare in moist shaded areas.

Stairstep moss (Hylocomium splendens). Uncommon.

Sword fern (Polystichum munitum). Uncommon in pines and conifers.

GRASSES

American beach grass (Ammophila breviligulata). Common in sandy coastal areas in eastern U.S. Tolerates some salinity.

(Sheet 1 of 57)

American dune grass (Elymus mollis). Common grass of coastal dunes and sandy beaches over entire U.S. Tolerates some salinity and drought.

American mannagrass (Glyceria grandis). Common grass of freshwater marshes in eastern U.S.

Autumn bentgrass (Agrostis perennans). Common eastern upland grass with highly variable growth habits.

Bahia grass (Paspalum notatum). Uncommon to common introduced, cultivated pasture grass of southern U.S.

Barley (Hordeum vulgare). Uncommon to common cultivated cereal grass of northern U.S.

Barnyard grass (Echinochloa crusgalli). Frequent grass of moist soils in entire U.S. Cultivated for waterfowl food. Tolerates slight salinity.

Beach panic grass (Panicum amarum). Common grass in wet sandy areas. Tolerates some salinity.

Beaked panic grass (Panicum anceps). Uncommon to common in moist sandy areas in eastern U.S.

Big bluestem (Andropogon gerardi). Common cultivated prairie grass in northern U.S.

Big cordgrass (Spartina cynosuroides). Common in coastal marshes in eastern U.S. Tolerates some salinity.

Bluegrass (Poa annua). Common cultivated upland grass in eastern U.S.

Bluejoint reedgrass (Calamagrostis canadensis). Frequent grass in freshwater marshes and meadows in eastern U.S.

Bottlebrush (Hystrix patula). Uncommon grass in woods and thickets of eastern U.S.

Brome grass (Bromus inermus). Common upland grass in meadow and open areas over entire U.S.

Broomsedge (Andropogon virginicus). Frequent grass of open waste areas over entire U.S.

Brownseed paspalum (Paspalum plicatulum). Uncommon tropical grass in open wet areas in deep south.

Buffelgrass (Cenchrus ciliaris). Uncommon introduced grass of open sandy areas in eastern U.S.

Bull paspalum (Paspalum boscianum). Common grass in wet open areas over entire U.S.

Bushy beardgrass (Andropogon glomeratus). Common grass in marshes and swamps in southern U.S.

Canada bluegrass (Poa compressa). Uncommon introduced grass cultivated for pastures in northern U.S.

Canadian wild rye (Elymus canadensis). Frequent grass over entire U.S. in wet and upland areas.

Carolina canary grass (Phalaris caroliniana). Uncommon to common grass in old fields and wet soils of eastern U.S.

Catchfly grass (Leersia lenticularis). Uncommon grass in eastern U.S. in ditches, swamps, and creek banks.

Cheat grass (Bromus tectorum). Frequent grass in upland soils over entire U.S.

Ciliate paspalum (Paspalum ciliatifolium). Uncommon grass in eastern U.S. in open areas.

Coast arm-grass (Brachiaria platyphylla). Uncommon grass in sandy coastal areas. Tolerates slight salinity.

Coast muhly (Muhlenbergia capillaris). Common grass in open woods of southern U.S.

Coast paspalum (Paspalum setaceum). Uncommon grass of sandy open woods in southern U.S.

Coast sandspur (Cenchrus incertus). Common grass of sandy beaches and islands in eastern U.S. Tolerates some salinity.

Common Bermuda grass (Cynodon dactylon). Abundant grass of entire U.S. in moist, marshy areas. Tolerates some salinity.

Common velvetgrass (Holcus lanatus). Common in sandy soils. Introduced, sometimes cultivated as pasture grass.

Corn (Zea mays). Cultivated cereal grass in entire U.S. Some varieties bred to tolerate salinity.

Cutgrass (Leersia virginica). Common grass in moist soils in eastern U.S.

Dallis grass (Paspalum ditatatum). Frequent grass of southern U.S. in most soils.

Deertongue (Muhlenbergia rigens). Uncommon to common grass in dry upland areas of eastern U.S.

Dropseed (Muhlenbergia frondosa). Common grass of interior northern U.S. in most soils.

Dune sandspur (Cenchrus tribuloides). Common on sandy beaches and dunes in eastern U.S. Tolerates salinity and drought.

European beach grass (Ammophila arenaria). Uncommon introduced grass of coastal dunes and beaches. Tolerates salinity and drought.

Fall witchgrass (Leptoloma cognatum). Uncommon grass in dry soil and sandy fields over entire U.S.

Fescue (Festuca bromoides). Uncommon grass in upland sandy areas in eastern U.S.

Fescue (Festuca octoflora). Frequent grass in open areas over entire U.S.

Few-flowered panic grass (Panicum oligosanthes). Uncommon grass of sandy moist woods and thickets in eastern U.S.

Field sandspur (Cenchrus pauciflorus). Frequent grass in waste places over entire U.S.

Fingergrass (Chloris petraea). Common grass of eastern coastal plains in sandy open areas.

Florida dropseed (Sporobolus domingensis). Uncommon tropical grass of south Florida coastal beaches and islands.

Fowl meadowgrass (Poa patustris). Common upland grass in open areas of northern interior U.S.

Foxtail barley (Hordeum jubatum). Abundant grass in waste places in entire U.S.

Foxtail bristlegrass (Setaria geniculata). Uncommon grass in open areas, and in salt marshes in eastern U.S. Tolerates some salinity.

Frank's lovegrass (Eragrostis frankii). Common grass of sandy bars and river banks in eastern U.S.

Giant bristlegrass (Setaria magna). Uncommon grass in moist areas in eastern U.S.

Giant reed (Arundo donax). Common sub-tropical, introduced, ornamental grass in southern U.S. & California

Goose grass (Elusine indica). Common grass in open waste areas over entire U.S.

Green bristlegrass (Setaria viridis). Common grass in waste areas in northern U.S.

Gulf cordgrass (Spartina spartinae). Uncommon grass in saltmarshes of gulf coast. Tolerates salinity.

Gulfdune paspalum (Paspalum monostachyrum). Rare grass in coastal dunes & moist areas of south Fla. & Texas. Tolerates some salinity.

Hairgrass (Agrostis scabra). Uncommon grass of upland areas over entire U.S.

Hairgrass (Aira elegans). Uncommon grass of coastal plain in southeast U.S.

Hairgrass (Aira praecox). Uncommon grass of east & west coasts in sandy open areas. Tolerates slight salinity.

Hooded windmill grass (Chloris cucullata). Uncommon prairie grass in dry soils in southcentral plains states.

Indian grass (Sorghastrum nutans). Common prairie grass in dry soils over entire U.S.

Italian ryegrass (Lolium multiflorum). Abundant, introduced, cultivated cereal grass over entire U.S., especially southern U.S.

Japanese chess (Bromus japonicus). Common grass in upland open areas over entire U.S.

Johnson grass (Sorghum halepense). Abundant grass in upland waste areas in southern U.S.

Jungle rice (Echinochloa colonum). Common introduced grass in ditches and moist areas in southern U.S.

Kentucky bluegrass (Poa pratensis). Abundant grass in upland areas. Used for lawns and pastures.

King Ranch bluestem (Bothriochloa ischaemum). Uncommon grass of upland open areas in south Texas.

Knotgrass (Paspalum distichum). Uncommon grass in moist or flooded areas over southern and western U.S. Tolerates slight salinity.

Lacegrass (Eragrostis capillaris). Common grass in dry, open areas in eastern U.S.

Large crabgrass (Digitaria sanguinalis). Abundant grass in disturbed soils in southern U.S.

Little barley (Hordeum pusillum). Common grass in dry, upland areas over entire U.S. Tolerates alkaline soils.

Little bluestem (Andropogon scoparius). Common grass in dry, open areas over entire U.S. except far west.

Little foxtail grass (Setaria glauca). Common grass in waste areas over entire U.S.

Lovegrass (Eragrostis ciliaris). Frequent grass on sandy shores and open areas in southeastern U.S.

Lovegrass (Eragrostis trichodes). Uncommon grass of interior plains in sand barrens and open areas.

Meadow barley (Hordeum brachantherum). Uncommon grass in marshy areas in western U.S.

Mediterranean lovegrass (Eragrostis barrelieri). Uncommon introduced grass in waste areas of southwest U.S.

Melic grass (Melica mutica). Uncommon grass in woods and thickets in southeastern U.S.

Narrowleaf panic grass (Panicum angustifolium). Uncommon grass in sandy pine woods and coastal areas of eastern U.S.

Nash windmill grass (Chloris latisquamea). Uncommon grass in upland areas of Texas and Arizona.

Natal grass (Rhynchelytrum repens). Uncommon introduced grass in upland waste areas in southern U.S.

Orchard grass (Datylis glomerata). Common grass in open areas over entire U.S.

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Pacific cordgrass (Spartina foliosa). Abundant grass of west coast saltmarshes. Tolerates sea water and flooding.

Panic grass (Panicum clandestinum). Common grass in sandy moist areas in eastern U.S.

Perennial ryegrass (Lolium perenne). Common grass of upland areas in entire U.S.

Pink natal grass (Rhynchelytrum roseum). Uncommon introduced grass in sandy pastures and meadows of southeastern U.S.

Plains bristlegrass (Setaria levcopila). Common upland grass of interior U.S.

Prairie cordgrass (Spartina pectinata). Common in marsh areas over entire U.S. Tolerates some salinity.

Prairie three-awn (Aristida intermedia). Uncommon grass in wet sandy soils of Mississippi River valley.

Prairie three-awn (Aristida oligantha). Common grass in dry open areas in eastern and far western U.S.

Prairie wedgescale (Sphenopholus obtusata). Common grass in open moist areas and old fields over entire U.S.

Purple lovegrass (Eragrostis pectinacea). Common grass in open waste areas over entire U.S.

Purple lovegrass (Eragrostis spectabilis). Common grass in sandy areas in eastern and southwestern U. S.

Quackgrass (Agropyron repens). Abundant in open waste areas over entire U.S.

Rabbitfoot polypogon (Polypogon monspeliensis). Abundant introduced grass in waste areas over coastal and midwestern U.S.

Rattail fescue (Festuca myuros). Uncommon introduced grass in open coastal areas of U.S.

Red lovegrass (Eragrostis oxylepis). Common grass in sandy soils of southern U.S.

Red fescue (Festuca rubra). Uncommon grass in open moist areas of eastern U.S.

Redtop (Agrostis gigantea). Abundant grass in cultivation for pastures and lawns in northern U.S.

Redtop bentgrass (Agrostis alba). Abundant introduced grass in pastures and lawns in northern U.S.

Reed bentgrass (Calamagrostis inexpansa). Common grass in marshes in northern U.S.

Reed canary grass (Phalaris arundinacea). Common grass in moist areas over entire U.S.

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Rescue grass (Bromus catharticus). Frequent grass in pastures and wast areas in southern U.S.

Rhode Island bentgrass (Agrostis tenius). Abundant grass in lawns & meadows in northern U.S.

Rice cutgrass (Leersia oryzoides). Uncommon grass in wet and flooded soils of southern U.S.

Roundseed panic grass (Panicum spaerocarpon). Uncommon grass in sandy soils in eastern U.S.

Running bentgrass (Agrostis stolonifera). Uncommon grass in moist areas on north Atlantic coast.

Ryebrome (Bromus secalinus). Abundant introduced grass in waste areas over entire U.S.

Saltgrass (Distichlis spicata). Abundant grass of high saltmarshes in eastern U.S. Tolerates salinity.

Saltmeadow cordgrass (Spartina patens). Abundant grass of high saltmarshes, meadows, and dunes in eastern U.S. Tolerates some salinity.

Sand dropseed (Sporobolus crytandrus). Frequent grass in sandy open areas over entire U.S.

Sand grass (Triplasis purpurea). Common grass in dry sand on east and gulf coasts and midwest. Tolerates drought and some salinity.

Sandbar (Cenchrus longispinus). Common grass in sandy open areas over entire U.S.

Sandspur (Cenchrus echinatus). Uncommon tropical grass in open and waste areas in deep south.

Schrader's rescue grass (Bromus unioloides). Uncommon introduced grass cultivated for winter forage in U.S.

Sea oats (Uniola paniculata). Uncommon grass of coastal dunes in eastern U.S. Tolerates some salinity and drought.

Seashore bluegrass (Poa macrantha). Common grass on sand dunes along Pacific coasts. Tolerates drought.

Seashore paspalum (Paspalum vaginatum). Frequent grass on seashores and brackish sands in southeast U.S. Tolerates some salinity.

Sheep panic grass (Panicum ovinum). Rare grass in open areas in lower Mississippi River valley.

Shoredune panic grass (Panicum amarulum). Common grass on sandy shores and dunes in southeast U.S.

Shoregrass (Mononthochloe littoralis). Abundant grass on mud and sand shores and tidal flats in deep south. Tolerates salinity.

Sicklegrass (Parapholis incurva). Uncommon introduced grass on mud flats and in salt marshes on east and west coasts. Tolerates salinity.

Silver bluestem (Bothriochloa saccharoides). Uncommon tropical grass in moist areas of Florida and Texas.

Silver hairgrass (Aira caryophylla). Uncommon grass in open dry areas along U.S. coasts.

Slender wheatgrass (Agropyron trachycaulum). Uncommon upland grass in open areas in northern U.S.

Smooth cordgrass (Spartina alterniflora). Abundant grass of eastern saltmarshes. Tolerates salt water and flooding.

Smooth crabgrass (Digitaria ischaemum). Common grass in disturbed soils in eastern U.S.

Smooth creeping lovegrass (Eragrostis hypnoides). Common grass on sandy river banks and wet areas over entire U.S.

Smutgrass (Sporobolus poiretii). Frequent introduced grass on pastures and waste areas in southern U.S.

Soft chess (Bromus mollis). Common introduced grass in waste areas in northern U.S.

Spike bentgrass (Agrostis exarata). Frequent grass in moist open ground in western U.S.

Splithead bluestem (Andropogon ternarius). Uncommon grass in upland areas in southeast U.S.

Spreading witchgrass (Panicum dichotomiflorum). Common grass in open moist sandy areas of eastern U.S.

St. Augustine grass (Stenotophrum secundatum). Abundant deep south lawn grass.

Switchgrass (Panicum virgatum). Common grass of moist areas in southern U.S.

Tall dropseed (Sporobolus asper). Common grass in prairies and sandy meadows over entire U.S.

Tall fescue (Festuca arundinacea). Frequent cultivated grass of pastures and meadows over entire U.S.

Texas crabgrass (Digitaria texana). Uncommon grass in disturbed soils in south Texas.

Thickspike wheatgrass (Agropyron dasystachyum). Uncommon grass on plains and sandy beaches in western U.S.

Three-awn (Aristida longespica). Uncommon grass in sandy soils in eastern U.S.

Tickle grass (Agrostis hyemalis). Uncommon grass in upland areas in eastern U.S.

Timothy (Phleum pratense). Common cultivated grass in pastures in northern U.S.

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Torpedo grass (Panicum repens). Common grass of freshwater marshes in eastern U.S.

Tropic dropseed (Sporobolus indicus). Uncommon introduced grass in waste areas in deep south.

Tropic sprangletop (Leptochloa virgata). Uncommon tropical grass in open areas in deep south.

Tufted hairgrass (Deschampsia caespitosa). Common grass of low marshes in Pacific northwest.

Tumble lovegrass (Eragrostis sessilispica). Uncommon upland grass in sandy prairies in Texas, New Mexico, and Oklahoma.

Vasey grass (Paspalum urvillei). Common grass of ditches and waste areas in southern U.S.

Virginia dropseed (Sporobolus virginicus). Common grass of sandy beaches in eastern U.S.

Walter's millet (Echinochloa walteri). Common cultivated grass in moist soils in eastern U.S. Grown as waterfowl food.

Water panic grass (Panicum paludevagum). Common grass in wet places in southern U.S.

Wedgescale (Sphenopholus intermedia). Common grass in moist woods and thickets over entire U.S.

Wheatgrass (Agropyron intermedium). Uncommon introduced grass cultivated for pastures and rangeland in Pacific northwest.

White tridens (Tridens albescens). Uncommon grass in plains and open woods in central southwest U. S.

Whorled dropseed (Sporobolus pyramidatus). Uncommon grass on sandy shores and waste areas in deep south, Texas, and Florida.

Wild chess (Bromus kalmii). Common grass in dry and sandy soils in northeast U.S.

Wild rye (Elymus virginicus). Frequent grass in moist areas and low woods over entire U.S.

Wild timothy (Muhlenbergia racemosa). Frequent grass in most soils over entire U.S. except southeast.

Witchgrass (Panicum capillare). Frequent upland grass in open waste areas over entire U.S.

..oolly panic grass (Panicum longinosum). Common grass in sandy pine and oak woods in southeast U.S.

------- (Microstegium vimineum). Uncommon introduced grass on shaded banks and roadsides in eastern U.S.

------- (Opismenus setarius). Uncommon grass in shaded coastal areas in southeastern U.S.

AQUATIC AND LOW MARSH PLANTS

Alligator weed (Althernanthera philoxeroides). Common freshwater emergent marsh plant in southeastern U.S.

Arrow arum (Peltandra virginica). Common freshwater interior and coastal emergent plant in eastern U.S.

Arrowhead (Sagittaria spatulata). Uncommon freshwater emergent plant in eastern U.S. Waterfowl food.

Awl fruited sedge (Carex stipata). Uncommon plant in swamps and wet meadows over entire U.S.

Awned cyperus (Cyperus inflexus). Uncommon plant in wet sandy soils over entire U.S. except far west.

Awned nutsedge (Cyperus aristatus). Uncommon fragrant plant in wet sandy soils over entire U.S. except far west.

Baldwin spike rush (Eleochoris baldwinii). Uncommon plant in wet soils in eastern U.S.

Baltic rush (Juncus balticus). Uncommon interior U.S. marsh plant in fresh and alkali marshes over entire U.S.

Bigelow's glasswort (Salicornia bigelowii). Common plant of coastal salt marshes. Tolerates high salinities & tides.

Black needlerush (Juncus roemerianus). Common brackish to salt marsh plant in eastern U.S.

Black rush (Juncus gerardi). Uncommon in coastal brackish marshes in northern U.S.

Black smartweed (Polygonum paranychia). Uncommon plant in moist areas in northern U.S.

Blunt sedge (Carex tribuloides). Uncommon bright green plant in meadows in Florida, Arizona, and gulf coast.

Blunt spike rush (Eleocharis obtusa). Uncommon plant in interior freshwater marshes over entire U.S.

Broadleaf arrowhead (Sagittaria latifolia). Abundant emergent plant in freshwater marshes over entire U.S.

Broadleaf cattail (Typha latifolia). Abundant emergent plant in freshwater marshes over entire U.S.

Bushy knotweed (Polygonum ramosissimum). Common plant in saline soils over entire U.S., especially on coasts.

Cattail sedge (Carex typhina). Uncommon emergent plant in swamps in eastern U.S.

Chufa (Cyperus esculentus). Frequent plant in freshwater marshes over entire U.S. except west. Abundant in deep south. Cultivated for waterfowl.

Climbing false buckwheat (Polygonum scandens). Uncommon in open woods and thickets over entire U.S.

Coarse cyperus (Cyperus odoratus). Uncommon plant in wet soils over entire U.S. except far west.

Coastal sedge (Carex phyllomanica). Uncommon plant in coastal fresh marshes in east and west coasts.

Common threesquare (Scirpus americanus). Common emergent plant in interior & coastal fresh, brackish, and salt marshes over entire U.S. Tolerates some salinity.

Common spike rush (Eleocharis palustris). Frequent emergent plant in interior and coastal fresh and brackish marshes over entire U.S., primarily northern U.S. Tolerates salinity.

Crested sedge (Carex cristatella). Uncommon plant in low meadows and thickets in northern U.S.

Dark green bulrush (Scirpus atrovirens). Common emergent plant in swamps in eastern U.S. Frequent in south along streams.

Dotted smartweed (Polygonum punctatum). Common plant in freshwater marshes in eastern U.S.

Dry-spiked sedge (Carex siccata). Uncommon plant in fields and meadows in northern and southwestern U.S.

Dudley's rush (Juncus dudleyi). Uncommon to common plant in damp soil and open areas over entire U.S.

Dwarf spike rush (Eleocharis parvula). Uncommon to common emergent plant of coastal and interior fresh and brackish marshes in eastern U.S. Rare on west coast.

Eel grass (Zostera marina). Common marine submergent in waters adjoining dredged material islands and deposits.

Erect smartweed (Polygonum erectum). Common plant in dry or moist soils in waste places in eastern U.S.

European glasswort (Salicornia europaea). Common marsh plant in coastal and interior salt marshes over entire U.S. Tolerates high salinities.

Fimbry (Fimbristylis castanea). Common in coastal brackish and salt marshes in eastern U.S.

Fimbrystilis (Fimbristylis spadicea). Abundant in interior and coastal fresh and brackish marshes in eastern U.S.

Flat nutsedge (Cyperus compressus). Uncommon plant in fields and waste places in eastern U.S.

Flat nutsedge (Cyperus polystachyos). Uncommon plant in wet fields and meadows over entire U.S. except far west.

Fox sedge (Carex vulpinoidea). Uncommon to common plant in swamps and wet meadows in eastern U.S.

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Globe nutsedge (Cyperus ovularis). Uncommon plant in fields and meadows in eastern U.S.

Grassleaf rush (Juncus marginatus). Uncommon plant in grassy areas in eastern U.S.

Greenish-white sedge (Carex albolutescens). Uncommon plant in wet soil along inland lakes and east and west coasts.

Hairy fruited sedge (Carex laeviconica). Uncommon in marshes and wet meadows in eastern U.S. and Pacific northwest.

Hardstem bulrush (Scirpus acutus). Uncommon plant in fresh and brackish marshes over entire U.S.

Jaumea (Jaumea carnosa). Uncommon plant in coastal salt marshes on west coast.

Knotted rush (Juncus nodosus). Rare to uncommon in moist areas in northern U.S. and in Nevada.

Large-headed sedge (Carex macrocephala). Uncommon plant in fresh marshes in western U.S.

Lady's thumb (Polygonum persicaria). Common introduced plant in waste places over entire U.S.

Least spike rush (Eleocharis acicularis). Common emergent plant of freshwater marshes in northeastern U.S.

Lilaeopsis (Lilaeopsis occidentalis). Uncommon creeping plant in mud by rivers, brackish and salt marshes along east and gulf coast.

Lyngby's sedge (Carex lyngbyei). Common plant in coastal brackish and salt marshes on west coast.

Manatee grass (Syringodium filiforme). Uncommon marine submergent plant adjoining dredged material islands in southern waters.

Marsh boltonia (Boltonia asteroides). Common plant in freshwater marshes over entire U.S.

Marsh cress (Rorippa islandica). Uncommon introduced plant on wet shores and in waste areas in northeastern U.S.

Marsh dayflower (Aneilema keisak). Uncommon reclining plant in freshwater marshes of southeastern U.S.

Marsh smartweed (Polygonum coccineum). Common emergent plant in freshwater marshes in eastern U.S.

Marsh pepper (Polygonum hydropiper). Frequent emergent plant in freshwater marshes of eastern U.S.

Muhlenberg's sedge (Carex muhlenbergii). Uncommon in fields and meadows in eastern U.S.

Muskingum sedge (Carex muskingumensis). Uncommon in moist woods and thickets in northcentral U.S.

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Naiad (Najas gracillima). Common floating plant in fresh to brackish marshes in eastern U.S. (adjacent to dredged material islands and washing onto islands).

Narrowleaf arrowhead (Sagittaria rigida). Uncommon emergent plant in fresh marshes of eastern U.S.

Narrowleaf cattail (Typha angustifolia). Common emergent plant in fresh and brackish coastal marshes of eastern U.S. Also known as saltwater cattail.

Nodding smartweed (Polygonum lapathifolium). Abundant plant in freshwater marshes and wet ground over entire U.S. Occurs in low meadows.

Nutsedge (Cyperus articulatus). Uncommon plant in wet fields in eastern U.S.

Nutsedge (Cyperus linguloris) Uncommon plant in fields and meadows in eastern U.S.

Nutsedge (Cyperus planifolius). Uncommon plant in wet soils in eastern U.S.

Nutsedge (Cyperus virens). Uncommon plant in wet fields and meadows in eastern U.S.

Nuttall's sedge (Cyperus filicinis). Uncommon plant in salt marshes on east and gulf coasts.

Olney's threesquare (Scirpus olneyi). Common plant in brackish marshes in west and midwest. Frequent on west coast. Tolerates some salinity.

Oneflower nutsedge (Cyperus uniflorus). Uncommon plant in fields & meadows in eastern U.S.

Pacific sedge (Carex obnupta). Common plant in fresh to brackish marshes on west coast. Tolerates slight salinity.

Pennsylvania smartweed (Polygonum pennsylvanicum). Common plant in fresh marshes in eastern U.S.

Pennywort (Hydrocotyle verticillata). Abundant plant in sandy coastal marshes in eastern U.S.

Pickerelweed (Pontederia cordata). Common emergent plant in freshwater marshes of eastern U.S.

Pointed sedge (Carex scoparia). Uncommon plant in moist soil in northwestern U.S. and southeastern U.S.

Porcupine sedge (Corex hystericina). Uncommon plant in swamp and low meadows in eastern and southwestern U.S.

Prostrate knotweed (Polygonum aviculare). Common plant in sandy soils in fresh and brackish areas over eastern U.S. Frequent on some dredged material islands.

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Purple nutsedge (Cyperus rotundus). Abundant plant in most soils, wet or dry, over entire U.S. except far west.

Red-rooted sedged (Cyperus erythrorhizos). Common plant in freshwater marshes in eastern U.S. Tolerates flooding in winter only.

River bulrush (Scirpus fluviatilis). Common plant in freshwater marshes in northeastern U.S. Uncommon in southwest U.S.

Rush (Juncus coriaceus). Uncommon plant in moist places in northern U.S.

Sabatia (Sabatia stellaris). Uncommon in coastal brackish and salt marshes of eastern U.S.

Saltmarsh bulrush (Scirpus maritimus). Uncommon plant in brackish and salt marshes in southeastern U.S.

Saltmarsh bulrush (Scirpus robustus). Common plant brackish to salt marshes on U.S. Coasts.

Saltmarsh spike rush (Eleocharis albida). Uncommon plant in coastal brackish marshes in eastern U.S. Tolerates some salinity.

Saltwort (Batis maritima). Uncommon plant in coastal salt marshes in southeastern U.S. and California. Tolerates salinity.

Saltwort (Salsola kali). Common spiny plant on sea beaches on east coast.

Sand spike rush (Eleocharis montevidensis). Uncommon plant in wet sandy soils in eastern U.S.

Saw grass (Cladium jamaicensis). Abundant emergent plant, in freshwater marshes in Florida. Uncommon to common in rest of southeast U.S.

Schweinitz's cyperus (Cyperus schweinitzii). Common plant on sandy lake and stream banks in northeastern U.S.

Sea lavender (Limonium carolinianum). Uncommon plant in coastal salt marshes in southeastern U.S.

Sea lavender (Limonium nashii). Uncommon plant in coastal salt marshes in eastern U.S.

Sea lavender (Limonium vulgare). Uncommon plant in coastal salt marshes in eastern U.S.

Sea lettuce (Ulva lactuca). Common marine submergent washing onto dredged material beaches.

Seaside arrowgrass (Triglochin maritima). Common fresh to brackish marsh plant in Pacific northwest.

Sedge (Carex brevior). Uncommon plant in wet fields & meadows over entire U.S.

Shining cyperus (Cyperus vivularis). Uncommon plant in wet soils in eastern U.S.

Slender rush (Juncus tenius). Frequent plant in most soils in fields and lawns over entire U.S.

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Slender-stemmed cyperus (Cyperus lupulinus). Uncommon plant in wet soils in eastern U.S.

Slough sedge (Carex trichocarpa). Common in interior marshes and wet meadows in northern U.S.

Smartweed (Polygonum argyrocoleon). Uncommon plant in wet soils in eastern U.S.

Soft rush (Junaus effusus). Frequent to abundant freshwater marsh plant in southeastern U.S.

Softstem bulrush (Scirpus validus). Common freshwater marsh plant over entire U.S.

Southern arrowgrass (Triglochin striata). Uncommon freshwater marsh plant in southeast U.S.

Southern bulrush (Scirpus californicus). Uncommon to common marsh plant over entire U.S.

Southern smartweed (Polygonum densiflorum). Frequent plant in freshwater marshes in eastern U.S.

Spike rush (Eleocharis calva). Uncommon plant in fresh and brackish marshes over entire U.S.

Spike rush (Eleocharis halophila). Uncommon plant in fresh and brackish marshes over entire U.S.

Straw-colored cyperus (Cyperus strigosus). Common plant in moist meadows, swamps, and along streams in eastern U.S.

Straw sedge (Carex tenera). Uncommon in woods in northern U.S. and California.

Toad rush (Juncus bufonis). Frequent plant in wet soils, old ponds, stream banks, and roadsides over entire U.S.

Toothed cyperus (Cyperus dentatus). Uncommon plant in sandy swamps and on shores on east coast.

Tule cattail (Typha domingensis). Uncommon emergent plant in freshwater marshes in southeastern U.S. and California.

Water horehound (Lycopus americanus). Frequent in wet soils over entire U.S.

Water horehound (Lycopus rubellus). Frequent in wet soils in eastern U.S.

Water hyssop (Bacopa monnieri). Uncommon in coastal fresh and brackish marshes in southeastern U.S.

Water smartweed (Polygonum amphibium). Common floating emergent plant in interior freshwater marshes over entire U.S.

Water parsnip (Suim suave). Uncommon emergent plant in wet places and muddy banks over entire U.S.

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Water pennywort (Hydrocotyle bonariensis). Common plant in sandy wet areas on eastern & gulf coasts. Tolerates salinity.

Water plantain (Alisma plantago-aquatica). Common emergent plant in interior freshwater marshes over entire U.S.

Water plantain (Alisma subcordatum). Uncommon emergent plant in freshwater marshes over entire U.S.

Water primrose (Jussiaea repens). Abundant floating emergent plant in interior freshwater marshes in southeastern U.S.

Water ptilimnium (Ptilimnium capillaceum). Uncommon plant in fresh and brackish marshes in eastern U.S.

Water sedge (Carex emoryi). Uncommon emergent plant in swamps and along streams in northern and southwestern U.S.

Water starwort (Callitriche fassettii). Uncommon floating submergent in freshwater streams and marshes in eastern U.S.

Water starwort (Collitriche heterophylla). Common floating submergent in freshwater marshes and lakes in northern U.S.

White-topped umbrella grass (Dichromena colorata). Uncommon plant in moist sandy soil in eastern U.S. Occurs in tropics.

Widgeongrass (Ruppia maritima). Common in coastal fresh and brackish marshes over entire U.S. Cultivated as waterfowl food.

Woody glasswort (Salicornia virginica). Frequent plant in coastal salt marshes over entire U.S.

Wool grass (Scirpus cyperinus). Common plant in swamps and sandy soils in eastern U.S.

Woolly sedge (Carex lanuginosa). Uncommon plant in swamps and wet meadows.

Yellow cyperus (Cyperus iria). Uncommon introduced plant in waste places and swamps in eastern U.S.

Yellow-fruited sedge (Carex annectans). Uncommon plant in fields in northeastern U.S.

HERBS

Ageratum (Eupatorium coelestinum). Common stout herb in moist soil in eastern U. S.

Air jam (Dioscorea bulbifera). Uncommon twining herb in moist thicket in deep south.

Alsike clover (Trifolium hybridum). Common cultivated herb in pastures and fields in southeastern U. S.

Alyssum (Alyssum alyssoides). Uncommon introduced herb in waste areas in northeastern U. S.

American brooklime (Veronica americana). Uncommon herb in swamps and streams in northern U. S.

American nightshade (Solanum americanum). Common herb in waste areas in eastern U. S.

American sea rocket (Cakile edentula). Common herb on sandy shores throughout entire U. S. Tolerates slight salinity.

American snoutbean (Rhynchosia americana). Common twining herb in dry sandy soil in eastern u. S.

Anemone (Anemone canadensis). Uncommon stout herb in wet areas in northern U. S.

Annual saltmarsh aster (Aster sublatus). Uncommon herb on wet sandy shores, islands, and salt marshes on east and gulf coasts.

Arrowleaf false mallow (Sida rhombifolia). Uncommon erect herb in wet areas in southeastern U. S.

Asian dayflower (Commelina communis). Common introduced procumbent herb in moist soils in southeastern U. S.

Aster (Aster ontarionsis). Uncommon erect herb in moist soils in northern U. S.

Aster (Aster simplex). Uncommon herb in moist soils in eastern U. S.

Aster (Aster subulatis). Common fleshy herb in salt marshes on east coast.

Aster (Aster vinimeus). Common to frequent herb in moist soils in eastern U. S.

Avens (Geum laciniatum). Common small herb in swamps and wet areas in northern U. S.

Bay bean (Canavalia maritima). Uncommon herb in moist sandy soils in southeastern U. S.

Beach evening primrose (Oenothera drummondii). Frequent herb sandy shores and islands in eastern U. S. Tolerates slight salinity.

Beach ground cherry (Physalis viscosa). Uncommon small herb in wet sandy soils in eastern U. S.

Beach heather (Hudsonia tometosa). Uncommon dense herb on sand shores and in pine barrens in eastern and across northern U. S.

Beach orache (Atriplex arenaria). Common silvery bushy herb of sea beaches on east coast.

Beach pea (Lathyrus japonicus). Common legume on sandy shores on east and gulf coasts.

Beach sand spurry (Spergularia macrotheca). Common spring herb on wet sandy shores on east and gulf coasts.

Bedstraw (Galium palustre). Common trailing clinging herb in most soils in eastern U. S.

Beggartick (Bidens frondosa). Common erect herb in moist soils in eastern U. S.

Beggartick (Bidens pilosa). Uncommon herb in moist waste places in eastern U. S.

Berlandier amaranth (Amaranthus berlandieri). Uncommon branching herb in moist soils in deep south soils.

Bessey's gerardia (Gerardia tenuifolia). Uncommon slender herb in dry woods and thickets in northeastern U. S.

Bird pepper (Capsicum annuum). Uncommon small herb in moist soils in deep south and Texas.

Birdsfoot trefoil (Lotus cornicaulatus). Uncommon introduced procumbent herb in waste areas in northeastern U. S.

Bitter cress (Cardimine pennsylvanica). Uncommon in swamps and wet areas in eastern U. S.

Bitter sneezeweed (Helemium amarum). Common to abundant stout bitter herb in waste areas and pastures in southeastern U. S.

Bittersweet (Celastrus scandens). Uncommon viny herb in rich soils in northern U. S.

Black medic (Medicago lupulina). Frequent small herb in moist soils in eastern U. S.

Black mustard (Brassica nigra). Common herb in wet soils in northern U. S.

Black nightshade (Solanum nigrum). Uncommon small herb in moist soils in northern U.S.

Bloodleaf (Iresine rhizomatosa). Uncommon erect herb in dry soils in eastern U.S.

Blue curl (Trichostema suffrutescens). Uncommon branched herb in dry sandy areas along east coast.

Blue flag (Iris virginica). Uncommon fleshy stout herb with showy flowers in moist sandy soils in eastern U.S.

Blue pea (Clitoria ternalea). Uncommon introduced legume with showy flowers in Florida.

Blue vervain (Verbena hastata). Common stiff erect herb in moist soils and waste areas throughout U.S.

Bluntpod bundleflower (Desmanthus obtusus). Common herb in dry soils in southwestern U.S. & Texas.

Bog-hemp (Boerhmeria cylindrica). Frequent rough herb in moist soils over eastern U.S. to Kansas.

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Boneset (Eupatorium perfoliatum). Common erect herb in moist soils in northern U.S.

Bouncing betty (Saponaria officinalis). Uncommon introduced herb with showy flower clusters in northern U.S.

Brass button (Cotula coronopifolia).

Bristleleaf dogweed (Dyssodia tenuiloba). Uncommon erect herb in moist soils and waste places in eastern U.S.

Bristly crowfoot (Ranunculus pennsylvanicus). Uncommon erect branching herb in wet open areas in northern U. S.

Broadpetal strawberry (Fragria virginiana). Common small herb in moist rich areas in eastern U.S.

Brown-eyed susan (Rudbeckia hirta). Uncommon herb with showy flowers in dry soils in southern U.S.

Buckthorn plantain (Plantago aristata). Abundant dark green herb in dry soils throughout entire U.S.

Bull thistle (Carduus lanceolatus). Common spiny herb in moist soils throughout U.S.

Bull thistle (Circsium vulgare). Common spiny herb in moist soils in eastern U.S.

Bundleflower (Desmanthus virgatus). Common branching herb in dry soils in eastern U.S.

Bur clover (Medicago polymorpha). Common introduced herb in waste places and meadows in eastern U.S.

Bur cucumber (Sicyos angulatus). Uncommon viney herb in moist areas in eastern U.S. to Kansas.

Butter and eggs (Linaria vulgaris). Common introduced herb in fields and waste areas over entire U.S. except far west.

Buttercup (Ranunculus scelaratus). Common stout herb in swamps and wet ditches over entire U.S. Abundant along coasts.

Caesar weed (Urena lobota).

California figwort (Scrophularia californica). Uncommon strong-smelling herb in open woods and thickets in western U.S.

Camphorweed (Heterotheca subaxillaris). Frequent herb in sandy coastal soils in eastern U.S.

Camphor daisy (Machaeranthera phyllocephala). Common stout herb with showy flowers in dry soil in eastern U.S.

Canada thistle (Cirsium arvense). Abundant spiny thistle in moist to wet soils throughout entire U.S.

Canadian sand spurry (Spergularia canadensis). Common prostrate small herb in muddy soils in northern U. S.

Candyflower (Montia sibirica). Uncommon dense herb in wet places in northern U. S. Prefers cold climates.

Canela (Pluchea purpurascens). Uncommon purplish herb in swamps and wet areas in eastern U. S.

Cardinal flower (Lobelia cardinalis). Common erect robust herb with showy flowers in moist to wet soils in eastern U. S.

Carpetweed (Mollugo verticillata). Common prostrate herb in waste places and cultivated fields over entire U. S., especially southeastern U. S.

Carolina geranium (Geranium carolinianum). Frequent low herb in sandy soils in southeastern U. S.

Carolina mollow (Modiola caroliana). Common branched herb with showy flowers in low grounds in southeastern U. S.

Carolina phyllanthus (Phyllanthus carolinensis). Uncommon wiry herb in sandy or gravelly soil in eastern U. S.

Carolina wolfberry (Lycium carolinianum). Common introduced herb on thickets and waste areas in eastern U. S. to Kansas.

Castor bean (Ricinus communis). Common erect herb in waste places in southeastern U. S. Cultivated as ornamental and medicinal plants.

Catchfly (Silene cserei). Uncommon erect herb in dry soils in eastern U. S.

Cathedral bells (Kalanchoe pinnata). Uncommon tropical fleshy herb in sandy soils in Florida.

Catnip (Nepeta cataria). Common herb in moist soils in northern U. S.

Chinese mustard (Brassica juncea). Common herb in moist soils in northern U. S.

Chisme (Portulaca mundula). Uncommon prostrate herb in fields and waste areas in southern U. S.

Clammyweed (Polanisia dodecandra). Uncommon branching herb in dry soils over entire U. S.

Clammyweed (Polanisia graveolens). Common branching herb on sandy and gravelly shores over entire U. S.

Clearweed (Pilea pumila). Common erect herb in shaded swamps and low areas in eastern U. S. to Kansas.

Cleavers (Galium aparine). Common clinging herb in moist soils in eastern U. S., especially in north central states.

Climbing hempweed (Mikania scandens). Uncommon twining herb in swamps and moist soils in eastern U. S.

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Coast bedstraw (Galium hispidulum). Uncommon clinging herb in moist sandy soils in eastern U. S.

Coast brookweed (Samolus ebractealus). Uncommon erect herb in swamps, brooks, and brackish marshes near coasts over entire U. S.

Coast milkweed (Asclepias lanceolata). Common simple herb in swamps and coastal soils in eastern U. S.

Coffee senna (Cassia occidentalis). Common branched erect herb in waste places in eastern U. S. Abundant in deep south.

Cocklebur (Xanthium strumarium). Abundant shrubby herb in fields and waste areas in eastern U. S., especially southeast.

Common burdock (Arctium minus). Common introduced small herb in waste places over entire U. S.

Common chickweed (Stellaria media). Abundant small herb in fields and waste areas in eastern U. S., especially south.

Common chicory (Cichorium intybus). Frequent branched herb in waste areas and fields throughout U. S.

Common dandelion (Taroxacum officinale). Abundant small herb in lawns, pastures, and waste areas throughout entire U. S.

Common frogfruit (Phylla modiflora). Common erect herb in low wet areas in Texas.

Common milkweed (Ascelepias syriaca). Frequent erect herb in moist soils in eastern U. S., especially northern U. S.

Common motherwort (Leonurus cardiaca).

Common mullein (Verbascum thapsum). Abundant erect stout herb in fields and waste areas over northern U. S.

Common pigweed (Amaranthus hybridus). Frequent bushy herb in moist rich soils in eastern U. S.

Common plantain (Plantago major). Abundant low herb in moist soils in waste areas and lawns throughout entire U. S.

Common ragweed (Ambrosia artemisiifolia). Abundant erect herb in moist sandy soils throughout entire U. S.

Common sowthistle (Sonchus oleraceus). Abundant introduced leafy herb in fields and waste places over entire U. S.

Common sunflower (Helianthus annuus). Common erect herb in moist soils throughout entire U. S.

Common tansy (Tanacetum vulgare). Frequent herb in moist soils eastern U. S.

Common vetch (Vicia sativa). Common legume in waste places and cultivated for forage and soil conservation over entire U. S.

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Common wintercress (Barbarea vulgaris). Common branching leafy herb in waste areas over entire U. S.

Common wormwood (Artemisia absinthium). Frequent shrubby herb in waste areas over entire U. S.

Coral bean (Erythrina herbacea). Uncommon branched herb in upland soils in southeastern U. S.

Coreopsis (Coreopsis lanceolata). Common erect herb with showy flowers in most soils in northeastern U. S. to Michigan.

Corn salad (Valerianella stenocarpa). Uncommon erect herb in prairies and woodlands in central U. S.

Corpus Christi fleabane (Erigeron myrionactus). Uncommon herb with showy flowers in moist soils in Texas.

Cow cress (Lepidium campestre). Common herb in waste areas and fields over northern U. S. to Virginia.

Cow parsnip (Heracleum lanatum). Common very stout herb in moist soils throughout entire U. S. except deep south.

Cow pea (Vigna luteola). Frequent cultivated legume in most soils in southeastern U. S.

Crab's eye (Abrus precatorius).

Creeping buttercup (Ranunculus repens). Common prostrate herb in moist sandy soils of eastern U. S.

Creeping charlie (Glecoma hederacea). Common leafy herb in waste areas, woods, and thickets over entire U. S. except deep south.

Creeping cucumber (Melothria pendula). Uncommon viney herb in thickets in eastern U. S.

Croton (Croton punctatus). Uncommon branched herb in dry soil in eastern U. S.

Crow poison (Northoscordum bivalve). Uncommon bulbous herb in sandy soils in eastern U. S. to Nebraska.

Cudweed (Gnaphalium falcatum). Uncommon pubescent herb in dry soils in eastern U. S.

Cudweed (Gnaphalium pensilvanicum). Uncommon herb in dry open areas in eastern U. S.

Curly dock (Rumex crispus). Frequent erect stout herb in moist soils in eastern U. S.

Cut-leaved evening primrose (Oenothera laciniata). Common procumbent herb in sandy dry soils in eastern U. S.

Dahlbergia (Dahbergia ecastoyshyllum).

Daisy fleabane (Erigeron annuus). Abundant erect herb with showy flower clusters in fields over eastern U. S. to Missouri.

Daisy fleabane (Erigeron quercifolius). Uncommon erect herb in fields and waste areas over eastern U. S.

Daisy fleabane (Erigeron strigosus). Common erect herb in fields over entire U. S.

Dalea (Dalea emarginata). Uncommon shrubby herb on prairies in central U. S.

Dayflower (Commelina diffusa). Uncommon herb in moist areas in eastern U. S.

Dayflower (Commelina erecta). Uncommon herb in marshes and low areas in southeastern U. S.

Daylily (Hemerocallis fulva). Uncommon herb with showy flowers in most soils in eastern U. S. Common in cultivation.

Deer pea vetch (Vicia ludoviciana). Common legume in moist soils from Texas to Florida.

Desert Christmas cactus (Opuntia leptocaulis). Uncommon fleshy herb in dry sandy soils in Texas and southwest U. S.

Ditch stonecrop (Penthorum sediodes). Uncommon erect branched herb in ditches and swamps in eastern U. S. to Kansas.

Dog fennel (Eupatorium capillifolium). Abundant erect fine-leaved herb in fields and wasteplaces on southeastern U. S.

Dog fennel (Eupatorium compositifolium). Common erect fine-leaved herb in waste areas in Florida.

Douglas's aster (Aster subspicatus). Uncommon erect herb in dry soils in northeastern U. S.

Downy ground cherry (Physalis pubescens). Uncommon low herb in sandy soil in eastern U. S.

Drummond skullcap (Scutellaria drummondii). Uncommon hirsute herb in dry shady soils in Texas.

Dwarf dalea (Dalea nana). Uncommon shrubby herb in dry soils in central U.S.

East coast prickly pear cactus (Opuntia compressa). Uncommon fleshy herb in dry sandy soils along east coast.

Ebony spleenwort (Asplenium platyneuron). Uncommon creeping plant on banks in alkaline soils in eastern U.S.

Elephant's foot (Elephantopus coelestimum). Uncommon erect herb in dry woods in eastern U.S.

Elephant's foot (Elephantopus nudatus). Uncommon erect stout herb in sandy woods in southeastern U.S.

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English plantain (Plantago lanceolata). Common introduced herb in fields and waste areas in eastern U.S.

European bassia (Bassia hirsuta). Uncommon introduced pubsecent herb in waste areas in Massachusetts and New Jersey.

European sea rocket (Cakile maritima). Common herb on sea beaches on east and west coasts. Tolerates some salinity.

Evening primrose (Oenothera biennis). Frequent erect stout herb in dry soils in eastern U.S. to Minnesota.

Evening primrose (Oenothera fruticosa). Uncommon erect herb in dry soil in eastern U.S.

Evening primrose (Oenothera parviflora). Uncommon erect herb in dry soil in northern U.S.

False dandelion (Agoseris heterophylla). Uncommon tufted herb in dry soils in eastern U.S.

False dandelion (Pyrrhopappus carolinianus). Uncommon leafy herb in dry fields in southeastern U.S.

False dragonhead (Physostegia formosior). Uncommon erect herb in moist soils in northern U.S.

False indigo (Amorpha fruticosa). Common shrubby herb along streams in eastern U.S.

False loosestrife (Ludwigia palustris). Frequent procumbent herb in muddy ditches and swamps in eastern U.S. and California.

False mallow (Sida acuta). Uncommon erect herb in dry soils in eastern U.S.

False mallow (Sida ciliaris). Uncommon erect herb in dry soils in eastern U.S.

False pennywort (Dichondra carolinensis). Common low creeping herb in sandy soils in southeastern U.S.

False pimpernel (Lindernia dubia). Uncommon shrubby herb in swamps and wet soils in eastern U.S.

False Solomon's seal (Smilacina racemosa). Uncommon leafy herb in moist shaded woods and thickets in northeastern U.S. to Georgia.

False Solomon's seal (Smilacina stellata). Uncommon leafy herb in moist soil in eastern U.S. including parts of deep south.

Fascicled agalinis (Agalinis fasciculata). Uncommon fine-leaved herb in marshes in southeastern U.S.

Fiddle dock (Rumex pulcher). Common erect branched herb in waste places in southeastern U.S.

Field daisy (Crysanthemum leucanthemum). Uncommon branched herb with showy flowers in dry soils in northeastern U.S.

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Field mint (Mentha arvensis). Common fragrant herb in moist soils in eastern U.S.

Field pennycress (Thlaspi arvense). Common introduced erect herb in waste areas in northeastern U.S.

Field sowthistle (Sonchus arvensis). Common leafy herb in fields and waste areas in eastern U.S.

Figwort (Scrophularia marilandica). Uncommon smelly herb in dry soils in eastern U.S.

Fireweed (Erechtites hieracifolia). Frequent erect herb in sandy soils in eastern U.S., including sea beaches.

Five-finger cinquefoil (Potentilla norvegica). Common, erect, stout herb in dry soil over entire U.S.

Flax (Linum alatum). Uncommon slender herb in waste places and fields over entire U.S.

Fleabane (Erigeron philadelpicus). Uncommon slender herb in fields and woods throughout U.S.

Florida bloodleaf (Iresine celosia). Uncommon herb in sandy soils in Florida.

Florida bluehearts (Buchnera floridana). Uncommon rough hirsute herb in sandy soils in Florida.

Florida flaveria (Flaveria floridana). Uncommon erect herb in sandy soils in Florida and deep south.

Florida pellitory (Parietaria floridana). Uncommon simple herb in dry sandy soils in Florida and deep south.

Florida prickly pear cactus (Opuntia stricta). Uncommon fleshy herb in dry sandy soils in Florida.

Flowering straws (Lygodesmia aphylla). Uncommon branched stiff herb in dry soils in northcentral U.S.

Forget-me-not (Myosotis laxa). Common small herb in brooks and wet muddy areas in eastern U.S. to Tennessee.

Four o'clock (Mirabilis nyctaginea). Common cultivated herb in lawns and flower gardens in dry soils over entire U.S.

Foxglove (Digitalis purpurea). Frequent introduced stout erect herb in dry soils in northeastern U.S.

Fringed loosestrife (Lysimachia ciliata). Common erect herb in moist thickets over entire U.S.

Froelichia (Froelichia floridana). Common erect hairy herb in dry soils in southeastern U.S.

Frogfuit (Lippia lanceolata). Common erect branched herb in wet areas in southeastern U.S.

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Frost aster (Aster pilosus). Uncommon herb in dry soils in eastern U. S.

Galactia (Galactia macreei). Common prostrate herb in dry sandy soils in southeastern U.S.

Galinsoga (Galinsoga ciliata). Common introduced branching herb in waste areas throughout U.S.

Garden asparagus (Asparagus officinalis). Common cultivated herb in dry to moist soils throughout U.S.

Gaura (Gaura angustifolia). Uncommon erect branched herb in dry soil in eastern U.S.

Germander (Teucium canadense). Common erect simple herb in moist thickets and marshes in eastern U.S.

Giant chickweed (Myosoton aquaticum). Uncommon herb in moist to wet soils in eastern U.S.

Giant goldenrod (Solidago gigantea). Common erect branched herb with showy flowers in dry soils in eastern U.S. to plains states.

Giant ragweed (Ambrosia trifida). Common in all moist waste areas.

Giant vetch (Vicia gigantea). Uncommon cultivated legume in most soils over entire U.S.

Glandular croton (Croton glandulosus). Common silvery branched herb in dry soils in southern U.S.

Globe berry (Ibervillea tripartita).

Goat's beard (Tragopogon dubius). Common introduced branched erect herb in fields and waste areas over northern U.S.

Goat's beard (Tragopogon major). Common introduced erect herb in fields and waste areas over northern U.S.

Golden ragwort (Senecio glabellus). Uncommon wooly herb in swamps and wet places over southern U.S.

Goldenrod (Solidago racemosa). Uncommon erect simple herb on river banks in northeastern U.S.

Goldenrod (Solidago rugosa). Abundant hirsute erect herb in dry soils in eastern U.S.

Goldenrod (Solidago tenuifolia). Uncommon erect herb in dry sandy soil in eastern U.S.

Gorse (Ulex europaeus). Uncommon introduced spiny branched herb in waste areas in northeastern U.S.

Gray nicker bean (Caesalpinia crista). Uncommon branched herb in dry soils in Texas and plains areas.

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Great lobelia (Loblia syphelitica). Frequent stout leafy herb in moist soils in eastern U.S.

Great willow-herb (Epilobium angustifolium). Common erect stout herb in dry soils over northern U.S.

Green dragon (Arisaema dracontium). Uncommon herb in moist shaded woods in eastern U.S.

Green pigweed (Amaranthus retroflexus). Common stout erect herb in waste areas throughout U.S.

Green-thread (Thelesperma filifolium). Uncommon branched herb in dry soils in central and southwestern U.S.

Groundnut (Apios americana). Common climbing herb in moist soils in eastern U.S. to Kansas.

Hairy flowered spiderwort (Trandescantia hirsutiflora). Uncommon procumbent herb in moist soils in eastern U.S.

Hammerwort (Parietaria pensylvanica). Common reclining herb on dry banks in northeastern U.S.

Harebell (Componula rotundifolia). Common herb with showy flowers in moist meadows over northern U.S. and California.

Hawksbeard (Crepsis capillaris). Common whorled-leaf herb in fields and waste areas in northeastern U.S.

Heartleaf nettle (Urtica chamaedryoides). Common stinging herb in thickets and open woods in eastern U.S.

Hedge hyssop (Gratiola neglecta). Uncommon erect herb in wet areas in eastern U.S.

Heliotrope (Heliotropium angiospermum). Uncommon branched herb in wet sandy soils and waste areas in eastern U.S.

Heliotrope (Heliotropium polyphyllum). Uncommon branched herb in waste areas in eastern U.S.

Hemlock parsley (Conioselimum pacificum). Uncommon leafy herb in swamps and wet areas in Pacific northwest.

Herb-robert (Geranium robertianum). Common low branching herb in moist areas in northern U.S.

Hoary alyssum (Berteroa incana). Common erect branched herb in waste areas in northern U.S.

Honewort (Cryptotaenia canadensis). Uncommon erect branching herb in woods in central U.S.

Hooker's evening primrose (Oenothera hookeri). Uncommon herb in dry soils in western U.S.

Horsecrippler cactus (Echinocactus texansis). Common fleshy herb in dry sandy soils in Texas and southwest U.S.

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Horsemint (Monarda punctata). Common pubescent branched herb in dry fields in eastern U.S. to Kansas.

Horse nettle (Solanum carolinese). Frequent small branched herb in waste areas and moist soils in eastern U.S.

Horseweed (Conyza candensis). Frequent erect herb in dry sandy soils on east & gulf coasts. Tolerates slight salinity.

Horseweed fleabone (Erigeron canadensis). Frequent branched herb in fields and waste areas throughout U.S.

Illinois bundleflower (Desmanthus illinoensis). Uncommon branched shrub in fields and dry soils in northern U.S.

Indian basket (Gaillardia pulchella). Common branched herb with showy flowers in dry sandy soils on east and gulf coasts. Tolerates slight salinity.

Indian hemp (Apocynum cannabinum). Uncommon in moist sandy soils in northeastern U.S.

Ironweed (Veronia altissima). Common procumbent herb in brooks and swamps over entire U.S.

Joe-pye-weed (Eupatorium maculatum). Abundant stout erect herb in moist soils in southeastern U.S.

Jointweed (Polygonella articulata). Common wiry herb on sandy coastal and Great Lakes shores in eastern U. S.

June bean (Canavalia maritima). Uncommon herb in moist sandy soils on east and west coasts.

Karnes sensitivebriar (Schrankia lalidens). Uncommon branched herb in dry soils in southeastern U.S.

Kidder daisy (Aphanostephus kidderi). Uncommon erect branched herbs in dry soils in central and southern U.S.

Kidneyleaf buttercup (Ranunculus abortivus). Common branched herb in woods and moist soils in eastern U.S.

Kitchen sorrel (Rumex acetosa). Frequent introduced erect leafy herb in waste areas in northeastern U.S.

Knotweed leafflower (Phyllanthus polygonoides). Uncommon slender erect herb in sandy soil in eastern U.S.

Ladies' tresses (Spilanthes americana). Frequent branched herb in wet soils in eastern U.S.

Lady's sorrel (Oxalis europaea). Common introduced low branching herb in woods, fields, and waste areas in eastern U.S.

Lambsquarters (Chenopodium album). Abundant branched erect herb in fields and waste areas throughout U.S.

Lance-leafed loosestrife (Lysimachia hybrida). Uncommon erect branched herb in waste areas, fields, and thickets in eastern U.S.

Late flowering thoroughwort (Eupatorium serotinum). Common branched herb in moist soils in eastern U.S. to Kansas.

Lazy daisy (Aphanostephus skirrhobosis). Uncommon erect branched herb in dry soils in southwestern U. S. and Texas.

Lead plant (Amorpha herbacea). Common bushy herb in dry soils in central and southwestern U. S.

Leafy-bracted beggartick (Bidens comosa). Common erect branched herb in wet soils.

Leavenworth vetch (Vicia leavenworthii). Uncommon cultivated legume in most soils in southeastern U. S.

Lesser ladies' tresses (Spilanthes ovalis). Common branching herb in wet soils in eastern U. S.

Liverleaf (Hepatica acutiloba). Uncommon leafy herb in woods in northeastern U. S. to Minnesota.

Loosestrife (Lythrum alatum). Common erect herb in moist areas in northeastern U. S.

Loosestrife (Lythrum lanceolatum). Common erect herb in moist areas in southeastern U. S.

Low poppymallow (Callirhoe involucrata). Uncommon leafy herb with showy flowers in dry soil in central U. S.

Madacascar periwinkle (Catharanthus roseus).

Mad-dog skullcap (Scutellaria lateriflora). Common erect leafy herb in wet places in eastern U. S.

Mallow (Malvoviscus arboreus). Uncommon shrubby herb with showy flowers in waste areas in eastern U. S.

Manzella coreopsis (Coreopsis cardaminaefolia). Uncommon branched herb in moist soils in southern U. S.

Maritime pinweed (Lechea maritima). Uncommon tufted stout herb on sandy sea-shores in eastern U. S.

Marsh bedstraw (Galvin obtusum). Common clinging herb in wet soils in eastern U. S.

Marsh cleavers (Galvim tinctorium). Common clinging herb in wet soils in northeastern U. S.

Marsh fleabane (Pluchea camphorota). Frequent branched herb in salt marshes on east and gulf coasts. Tolerates some salinity.

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Marsh marigold (Caltha biflora). Uncommon stout herb in swamps and meadows in northeastern U.S.

Marsh monkey flower (Mimulus guttatus). Uncommon stout simple herb in wet meadows in California, New York, and Connecticut.

Marsh skullcap (Scutellaria galericulata). Uncommon erect leafy herb in wet soils in eastern U.S.

Marsh vetchling (Lathyrus palustris). Common twining legume in wet soils in eastern U.S.

Masterwort (Heracleum maximum). Common stout herb in moist soil in northeastern U.S.

Mat bluets (Hedyotis humifusa). Uncommon branched erect herb in wet open areas in eastern U.S.

Mayweed (Antheneis cotula). Common smelly branched herb in fields and waste areas over entire U.S.

Meadow goldenrod (Solidago canadensis). Frequent erect herb in meadows and fields over entire U.S.

Mexican tea (Chenopodium ambrosoides). Common branched herb in waste places over entire U.S.

Milk purslane (Euphorbia supina). Uncommon erect slender herb in dry soil in eastern U.S.

Milk vetch (Astragulus canadensis). Uncommon branched herb along streams in northern U.S.

Milkweed (Asclepias oenotheroides). Uncommon simple herb in moist soils in northern U.S.

Mock pennyroyal (Hedeoma hispida). Common erect branched herb in dry plains in central U.S.

Monkey ear (Mimulus ringens). Common erect 4-sided herb in swamps and along streams in northern U.S.

Mouse ear (Cerastium brachypodium). Common tufted herb in dry soil in central U.S.

Mouse-ear chickweed (Cerastium vulgatum). Common introduced tufted herb in fields and woods over entire U.S.

Musk thistle (Carduus nutans). Common spiny branched introduced herb in waste areas in northeastern U.S.

Naked prairie-coneflower (Ratibida peduncularis). Common rough branched herb in dry prairies in central U.S.

Neptunia (Neptunia lutea).

New England aster (Aster novae-angliae). Common stout erect leafy herb with showy flowers in fields and swamps in northern U.S.

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Night-flowering catchfly (Silene noctiflora). Common stout erect herb in waste areas in northern U.S.

Nightshade (Solanum dulcamara). Common low herb in marshy areas in eastern U.S.

Nightshade (Solanum gracile). Uncommon low herb in moist soils in eastern U.S.

Nipplehead cactus (Mammillaria guncmifera). Common fleshy herb in dry sandy soils in Texas and southeast.

Nodding beggartick (Bidens arnua). Common erect branched herb in moist soils in eastern U.S.

Nodding bluets (Hedyotis subviscosa). Common branched erect herb in wet open areas in eastern U.S.

Northern bedstraw (Galium boreale). Common clinging herb in moist areas in northern U.S.

Northern dune tansy (Tanacetum douglasii). Uncommon stout herb with showy flowers in moist soil in northern U.S.

Northern silene (Stellaria calycantha). Uncommon procumbent herb in wet waste areas in northern U.S.

Nuttall (Trepocarpus arethusae).

Old-man-in-the-spring (Senecio vulvaris). Common branched herb in waste areas and cultivated soils in northern U.S.

Orange hawkweed (Hieracium aurantiacum). Common hirsute tufted herb in fields, woods, and roadsides in northeastern U.S.

Ox-eye (Heliopsis helianthoides). Common branched herb with showy flowers in open areas in northern U.S. and Florida.

Pacific marsh cinquefoil (Potentilla pacifica). Common branched procumbent herb in sandy soil on Pacific coast.

Pacific water parsley (Denanthe sarmentosa). Uncommon slender herb in wet areas and swamps in western U.S.

Paintbrush owl-clover (Orthocarpus castillyoides). Uncommon erect herb in dry soils in western U.S.

Pale goosefoot (Chenopodium albescens). Uncommon branched dense herb in dry soils and waste areas in eastern U.S.

Palmer amaranth (Amarathus palmeri). Uncommon erect branched herb in dry soils in southwestern U.S. and northeastern U.S.

Parsnip (Pastinaca sativa). Common leafy branching herb in waste areas in eastern U.S.

Partridge pea (Cassia fasciculata). Frequent branched legume with showy flowers in dry soils in southeastern U.S. Cultivated for wildfowl food

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Passion flower (Passiflora lutea). Uncommon viney herb in thickets and dry soils in southeastern U.S.

Patience dock (Rumex patientia). Common simple erect herb in waste areas in northern U.S.

Pea (Daubentonia punicea).

Pearly everlasting (Anaphalis margaritacea). Uncommon woolly whitish herb in dry soils in northern U.S.

Pellitory (Parietaria praetermissa). Uncommon slender herb in dry soils in northern U.S.

Pencil flower (Stylosanthes viscosa). Uncommon wiry branched herb in dry soils in eastern U.S.

Peppergrass (Lepidium densiflorum). Common introduced basal-leaved herb in dry soils in northern U.S.

Pickpocket (Capsilla bursa-pastoris). Frequent introduced basal-leaved herb in waste areas and fields over northern U.S.

Pineapple weed (Matricaria matricarioides). Common leafy herb in waste areas over entire U.S.

Pink purslane(Portulaca pilosa). Uncommon hirsute spreading herb in dry soils in southeastern U.S.

Pinweed (Stipulicida setacea). Frequent tufted, branching herb in waste areas over entire U.S.

Plains coreopsis (Coreopsis tinctoria). Frequent branched herb with showy flowers in moist soils in central U.S.

Plains gaura (Gaura brachycarpa). Common erect branched herb in dry soils in central U.S.

Plantain (Plantago hybrida). Common small herb in dry soils in eastern U.S.

Plantain (Plantago rugellii). Common small herb in fields, woods, and waste areas in northern and southcentral U.S.

Pokeberry (Phytolacca americana). Common red branched herb in waste areas and dry soils in eastern U.S.

Poor joe (Diodia teres). Uncommon rigid rough branched herb in dry sandy soil over entire U.S. except far west.

Popinac (Leucaena leucocephala).

Prairie agalinis (Aalinis heterophylla). Common small branched herb in wet woods and on prairies in southcentral U.S.

Prairie bluets (Hedyotis nigricans). Common very small herb in dry soil in central U.S.

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Prairie parsley (Polytaenia nuttallii). Uncommon leafy herb in dry soils in central U.S.

Prickly false mallow (Sida spinosa). Common spiny erect branched herb in waste areas in eastern U.S. to Texas.

Prickly pear cactus (Opuntia humifusa). Common fleshy herb in dry sandy soils and along coasts and islands in southern U.S.

Prickly sowthistle (Sonchus asper). Common erect leafy herb in waste areas over entire U.S.

Prostrate starwort (Stellaria prostrata). Uncommon prostrate weak herb in fields and moist areas in eastern U.S.

Purple agalinis (Aglinis purpurea). Common branched slender herb in moist fields and meadows in eastern U.S. to Missouri.

Purple cudweed (Gnaphalium purpureum). Uncommon rough erect herb in dry sandy soils in eastern U.S. to Kansas.

Purslane (Portulaca oleracea). Common prostrate branching herb in fields and waste areas over entire U.S.

Purslane speedwell (Veronica peregrina). Common branched herb in moist areas and cultivated fields over entire U.S.

Queen Anne's lace (Daucus carota). Frequent branched herb with showy flowers in fields and waste areas over entire U.S.

Rabbitfoot clover (Trifolium arvense). Common branched herb in fields and waste areas in eastern U.S. to Missouri.

Rabbit tobacco (Gnaphalium obtusifolium). Common erect branched herb in dry open areas in eastern U.S. to Kansas.

Ragwort (Senecio imparipinnatus). Uncommon branched herb in waste areas in eastern U.S.

Rattlebean (Sesbania drummondii). Uncommon branched legume in moist soils in southeastern U.S.

Rattlebox (Crotalaria mucronata). Uncommon branched legume in dry open areas in southeastern U.S.

Red clover (Trifolium pratense). Frequent branched herb with showy flowers in fields and waste areas in eastern and northern U.S.

Red seeded plantain (Plantago rhodosperma). Uncommon small herb in waste areas in eastern U.S.

Red spiderling (Boerhaavia coccinea).

Resinweed (Grindela integrifolia). Uncommon branched erect herb with showy flowers in dry soils in eastern U.S. to Texas.

Retama (Parkinsonia aculeata).

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Rhombic evening primrose (Oenothera rhombipetala). Uncommon erect herb in dry soils and on prairies in central U.S.

Richardia (Richardia brasiliensis).

Ridgeseed spurge (Euphorbia glyptosperma). Common branched prostrate herb in sandy soils in eastern U.S. to Texas.

Rio Grande phlox (Phlox glabriflora). Uncommon erect herb with showy flowers in sandy soils in Texas.

Rose pink (Sabatia campestris). Common branched 4-angled herb on prairies and in dry soils in central U.S.

Rouge plant (Rivina humilis). Uncommon herb in sandy soils in Florida.

Rough avens (Geum virginianum). Common branched stout low herb in moist soils in northern U.S.

Rough hedge nettle (Stachys hispida). Common erect rough hirsute herb in moist soil in eastern U.S. to Minnesota.

Round copperleaf (Acalypha radians). Uncommon copper-colored herb in dry woods and thickets in eastern U.S.

Roundleaf scuefpea (Psoralea rhombifolia). Uncommon branched herb in dry soils in central U.S.

Sabatia (Sabatia stellaris). Common branched herb in salt meadows and sea beaches on east coast.

Saltmarsh aster (Aster tenuifolius). Common branched herb in brackish and salt marshes on east and gulf coasts.

Saltmarsh loosestrife (Lythrum lineare). Common branched slender herb in brackish and salt marshes on east and gulf coasts.

Saltmarsh mallow (Kostelalzkya virginica). Uncommon erect branching herb with showy flowers in brackish and salt marshes on east and gulf coasts.

Saltmarsh sand spurry (Spergularia marina). Common spiny herb in brackish and salt marshes and sandy shores on east and gulf coasts.

Saltweed (Philoxerus vermicularis). Uncommon branched herb in brackish and salt sandy soils on east coast.

Sandmat (Cardionema racesissima). Uncommon herb in coastal sandy soils in Pacific northwest.

Sand rose-gentian (Sabatia arenicola). Uncommon branched herb in sandy soils in eastern U.S.

Sand spurry (Spergularia platensis). Uncommon prostrate branched herb in sandy soils in eastern U.S.

Sand spurry (Spergularia echinosperma). Uncommon branched herb in moist sandy soils in eastern U.S.

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Scarlet pea (Indigofera minata). Uncommon branched legume in sandy soils in southeastern U.S.

Scarlet pimpernel (Anagallis arvensis). Common branched herb in waste areas over entire U.S.

Scrambled eggs (Corydalis micrantha). Uncommon slender branched herb in woods in southern and central U.S.

Seabeach purslane (Arenaria peploides). Common fleshy stout herb in seashore sands on east coast.

Seabeach sandwort (Honkenya peploides). Common fleshy herb on sea beaches on east and gulf coasts.

Sea blite (Suaeda linearis). Common on east & Gulf coast islands and beaches. Salt tolerent.

Sea blite (Suaeda maritima). Common on east and gulf coast islands and beaches. Salt tolerent.

Sea ox-eye (Borrichia frutescens). Common on coastal islands and beaches on east and gulf coasts. Salt tolerent.

Sea plantain (Plantago maritima). Common small herb in sandy soils in Pacific northwest.

Sea purslane (Sesuvium maritimum). Common branched herb on sandy beaches on east and gulf coasts.

Sea purslane (Sesuvium portulacastrum). Common herb on sandy beaches on east and gulf coasts.

Sea rocket (Cakile fusiformis). Common fleshy branched herb on sandy shores in eastern U.S.

Sea rocket (Cakile harperi). Uncommon fleshy branched herb on sandy shores in eastern U.S.

Seashore lupine (Lupinus littoralis). Common erect branched herb on sandy shores in the Pacific northwest.

Seaside agalinis (Agalinis maritima). Common fleshy erect branched herb in salt marshes on east coast.

Seaside evening primrose (Oenothera humifusa). Common branching herb with showy flowers on sand dunes and beaches on east and gulf coasts.

Seaside geradia (Gerardia maritima). Common erect fleshy herb in salt marshes and meadows on east coast.

Seaside heliotrope (Heliotropium curassavicum). Common fleshy branched herb in sandy seashores on east and gulf coasts.

Seaside mahoe (Thespesia populnea).

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Seaside goldenrod (Solidago sempervirens). Frequent, erect, stout herb in sandy soils on east and gulf coasts.

Sea-watch (Angelica lucida). Uncommon erect branching herb in swamps and moist areas in Pacific northwest.

Sensitivebriar (Schrankia microphylla). Common large branching prostrate herb in dry soils in southern U.S.

Sensitivebriar (Seobania exaltata). Uncommon branching herb with showy flowers in fields and waste areas in eastern U.S.

Shade betony (Stachys crenata). Uncommon erect slender herb in moist thickets and woods in western U.S.

Sheep sorrel (Rumex acetosella). Common erect leafy herb in waste areas over entire U.S.

Shore orache (Atriplex patula). Common branched shrubby herb on sandy shores on east and gulf coasts.

Showy false mallow (Sida lindheimeri). Uncommon erect branched herb with showy flowers in dry soils in southern U.S.

Showy primrose (Oenothera speciosa). Uncommon branching herb with showy flowers in sandy soils in eastern U.S.

Silver bursage (Ambrosia chamissonis). Uncommon erect branched herb in dry waste areas in Pacific northwest.

Silvery cinquefoil (Potentilla argentea). Uncommon branched tufted herb in dry soils in northcentral U.S.

Silverleaf sunflower (Helianthus argophyllus). Uncommon erect herb with showy flowers in prairies and fields in southern U.S.

Silverweed (Potentilla anserina). Common tufted whitish herb on shores and in salt marshes on east and west coasts.

Skullcap (Scutelloria epilobiifolia). Uncommon erect branched herb in open woods in eastern U.S.

Skullcap (Scutellaria muriculata). Uncommon erect branched herb in waste areas and woods in eastern U.S.

Skunk cabbage (Lysichitum americanum). Frequent herb in moist soils in Pacific northwest.

Sleepy catchfly (Silene antirrhina). Common erect slender herb in waste places and woods in eastern U.S.

Slender amaranth (Amaranthus viridus). Uncommon erect leafy herb in waste areas in eastern U.S.

Slender goldenweed (Croptilon divaricatum). Uncommon herb in waste areas in eastern U.S.

Slimlobe celery (Apium leptophyllm). Uncommon slender herb in waste areas in southern U.S.

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Slimpod milk vetch (Astragalus leptocarpus). Uncommon slender erect herb in dry soils in central U.S.

Small bedstraw (Galium trifidum). Uncommon clinging herb in moist soils in Pacific northwest.

Small coast germander (Teucrium cubense). Uncommon erect branched herb in moist soils near coast in eastern U.S.

Small fleabane (Erigeron pasillus). Uncommon branched herb in fields and moist soils in eastern U.S.

Smooth hedge nettle (Stachys tenuifolia). Uncommon smooth erect branched herb in moist fields and thickets in eastern U.S.

Snakeroot (Sanicula canadensis). Uncommon branched herb in dry soils in eastern U.S.

Snakeroot (Sanicula marilandica). Uncommon branched erect herb in woods and dry soils in southeastern U.S.

Snapdragon vine (Maurandya antirrhiniflora).

Sneezeweed (Helanium autumnale). Common branched herb with showy flowers in swamps, woods, and wet meadows in eastern U.S. Also called swamp sunflower.

Snoutbean (Phynchosia minima). Uncommon erect stout herb in dry woods soils in southeastern U.S. to Texas.

Soft aster (Heterotheca pilosa). Uncommon erect hirsute herb in dry soil in eastern U.S.

Solomon's seal (Polygonatum canaliculatum). Common herb in moist woods and along streams in eastern U.S.

Sorrel (Rumex hastatulus). Uncommon woody herb on east coast and in dry soils in central U.S.

Southern peppergrass (Lepidium austrinum). Common basal-leaved herb in dry soils in southeastern U.S.

Southern ragweed (Ambrosia bidentata). Common branched leaf herb on prairies in southern U.S.

Soybean (Glycine max). Abundant cultivated legume in most soils over entire U.S.

Spatulate-leaved frogfruit (Lippia nodiflora). Common branched herb in moist soils in southern U.S.

Spanish moss (Tillandsia usneoides). Common parasitic herb growing from mature trees in deep south, especially near gulf coast.

Spider lily (Hymenocallis latifolia). Common cultivated bulbous herb in dry soils in southeastern U.S.

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Spiderling (Boerhaavia diffusa).

Spiderwort (Transdescantia ohiensis). Uncommon weak-stemmed herb in moist soils in central U.S.

Spiked loosestrife (Lythrum salicaria). Common erect branched herb in swamps and wet meadows in northeastern U.S.

Spiny pigweed (Amaranthus spinosus). Common erect spiny herb in rich moist areas in southeastern U.S.

Spotted cats-ear (Hypochaeris radicata). Common basal-leaved herb in waste areas of northern U.S.

Spotted spurge (Euphorbia maculata). Common hirsute branched herb in dry soil in eastern U.S.

Spotted star-thistle (Centaurea maculosa). Uncommon branded herb in waste areas in northeastern U.S.

Spotted touch-me-not (Impatiens capensis). Uncommon branched herb in moist soils in northern U.S.

Springbark clover (Trifolium wormskjoldii). Uncommon branched herb in sandy soils in Pacific northwest.

Spring ladies' tresses (Spilanthes vernalis). Common branched herb in moist or wet soils in eastern U.S.

Spurge (Chamaesyce blodgetti). Uncommon branched herb in moist soils in eastern U.S.

Spurge (Chamaesyce hirta). Uncommon branched herb in moist soils in eastern U.S.

Spurge (Euphorbia dentata). Uncommon branched herb in moist soils in southeastern U.S.

Spurge (Euphorbia polygonifolia). Common branched prostrate herb on sandy shores on east coast and Great Lakes.

Spurge (Euphorbia serpens). Uncommon branched small herb in waste areas in northcentral U.S.

Stickweed (Hackelia virginiana).

Stinging nettle (Urtica dioica). Frequent branched stinging herb in dry woods and thickets over entire U.S.

Stonecrop (Sedum sarmentosum). Uncommon tufted herb in dry soils in eastern U.S.

String lily (Crinum americanum).

Swamp milkweed (Asclepias incarnata). Common erect stout herb in moist soils in eastern U.S.

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Sundrops (Oemothera perennis). Uncommon erect herb with showy flowers in dry soils in northern U.S.

Sunflower (Helianthus debilis). Uncommon erect herb with showy flowers in eastern U.S.

Swallowwort (Cynanchum angustifolium). Uncommon viney herb with large pads in moist soils and thickets in eastern U.S.

Swamp beggartick (Bidens connata). Common branched erect herb in swamps and moist soil in eastern U.S.

Swamp dock (Rumex verticillatus). Common erect leafy herb in wet soils in eastern U.S.

Swamp loosestrife (Lysimachia terrestris). Common branched herb in swamps and wet soils in southeastern U.S.

Swamp rose mallow (Hibiscus palustris). Common shrubby herb with showy flowers in wet soils and ditches in southeastern U.S.

Sweet clover (Meliotus indicus). Abundant branched herb in waste and cultivated areas in Pacific northwest.

Tall beggartick (Bidens vulgata). Common erect herb in moist soil over entire soils.

Tall bellflower (Campanula americana). Uncommon erect herb in moist thickets and woods in central U.S.

Tall unquefoil (Potentilla arguta). Uncommon erect stout herb in dry soils in northeastern U.S.

Tall coneflower (Rudbeckia laciniata). Common branched herb with showy flowers in moist thickets over entire U.S.

Tall goldenrod (Solidago altissima). Common stout hirsute herb with showy flowers in dry soil in eastern U.S.

Tallow plantain (Plantago hookeriana). Uncommon small herb in dry soils in eastern U.S.

Tall prairie-gentian (Eustoma exaltatum). Uncommon erect stout herb in dry soils in southcentral U.S.

Tall wormwood (Artemisia caudata). Common slender leafy herb in dry sandy soils in eastern U.S. Abundant on sea beaches.

Tansy ragwort (Senecio jacobaea). Common woolly stout herb in waste areas in northeastern U.S.

Tege guaje (Leucaena pulnerulenta). Uncommon tropical herb in sandy soils in Texas.

Texas frogfruit (Phylla incisa). Uncommon branched herb in moist soils in Texas.

Texas geranium (Geranium texanum). Uncommon branched low herb in dry soils in Texas.

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Texas nightshade (Solanum triquetrum). Uncommon herb in waste areas and moist thickets in Texas.

Texas palafoxia (Palafoxia texana). Uncommon stout erect herb in dry soil in Texas.

Texas prickly pear cactus (Opuntia lindheimeri). Common fleshy herb in dry sandy soils in Texas and southwest U.S.

Texas snoutbean (Rhynchosia texana). Uncommon branched herb in dry sandy soils in Texas.

Texas vervain (Verbena halei). Common erect stiff herb in waste areas in Texas.

Thistle (Carduus smallii). Uncommon erect spiny herb in moist soils in eastern U.S.

Thornless thistle (Centaurea americana). Common rough stout herb in dry soils in southern U.S.

Thoroughwort (Eupatorium hyssopifolium). Common rough bushy herb in dry fields in eastern U.S.

Three-seeded mercury (Acalypha rhombiodea). Common erect branched herb in dry woods and thickets in eastern U.S.

Tick trefoil (Desmodium glabellum). Common procumbent herb in dry sandy woods in eastern U.S.

Toadflax (Linaria canadensis). Common fleshy erect herb in dry soils over entire U.S.

Touch-me-not (Impatiens biflora). Common branched herb with showy flowers in moist soils over northern U.S.

Touch-me-not (Impatiens noli-tangere). Uncommon branched herb with showy flowers in moist soils in northeastern U.S.

Trailing wild bean (Strophostyles helvola). Common prostrate twining herb in sandy soil in eastern U.S.

Tread softly (Cnidoscolus stimulosus). Uncommon stinging bristly herb in dry sandy soils on gulf and east coasts.

Tropical neptunia (Neptunia pubescens).

True aloe (Aloe vera). Uncommon tropical fleshy herb in sandy soils in Texas and Florida.

Tumble mustard (Sisybrium altissimum). Common erect rigid herb in waste areas over northern U.S.

Varnish leaf (Dondonaea viscosa).

Velvetleaf (Abutilion theosprasti). Uncommon stout velvety herb in waste areas in eastern U.S. Common in southeastern U.S.

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Venus' looking glass (Specularia biflora). Uncommon slender herb in dry soil in southern U.S.

Vervain (Verbena bonaniensis). Uncommon erect herb in dry soils in eastern U.S.

Vervain (Verbena brasiliensis). Uncommon erect herb in dry soils in eastern U.S.

Vervain (Verbena scabra). Uncommon erect herb in dry soils in eastern U.S.

Vetch (Vicia angustifolia). Frequent twining herb in dry soils and waste areas in southeastern U.S.

Vetch (Vicia americana). Frequent, twining herb with showy flowers in dry soils and pastures in southeastern U.S.

Violet (Violet spp.). Genus common to abundant in woods and thickets throughout entire U.S.

Virginia dayflower (Commelina virginica). Common procumbent herb in moist soils in southeastern U.S.

Virginia peppergrass (Pepidium virginicum). Frequent herb in dry sandy soils in eastern U.S. Abundant on sandy east coast.

Vulpia (Vulpia octoflora).

Water amaranth (Amaranthus cannabinis). Uncommon branched erect herb in swamps and on river shores in eastern U.S.

Water amaranth (Amaranthus tamariscinus). Uncommon branched erect herb in swamps in southwest U.S. and Texas.

Water amaranth (Amaranthus tuberculatus). Uncommon branched erect herb in wet places in eastern U.S.

Water dock (Rumex orbiculatus). Common stout erect herb in swamps and wet soil in eastern U.S.

Water hemlock (Cicuta bulbifera). Uncommon stout erect branching herb in swamps and wet places in eastern U.S.

Water hemp (Acnida altissima). Uncommon erect stout herb in wet soils in eastern U.S.

Water hemp (Acnida fasciculata). Uncommon branched erect herb in swamps in southern U.S.

Water horehound (Lycopus americanus). Common stiff erect herb in wet soils over entire U.S.

Water horehound (Lycopus rubellus). Uncommon erect branched herb in wet soils in eastern U.S. to Minnesota.

Water horehound (Lycopus virginicus). Uncommon erect herb in wet soil in eastern U.S.

Watson's willow-herb (Epilobium watsonii). Uncommon erect stout herb in moist soils in Pacific northwest.

Western mugwort (Artemisia ludoirciana). Common woolly branched herb in dry soil in western U.S.

Western ragweed (Ambrosia psilostachya). Common thick-leaved herb in moist open soils in western U.S.

White bog-orchid (Habenaria dilatata). Uncommon leafy herb in bogs and wet woods in northern U.S.

White campion (Lychnis alba). Common pubescent branching herb in waste areas in northeastern U.S.

White clover (Trifolium repens). Abundant branching low herb in moist soils over entire U.S.

White heath aster (Aster ericoides). Common hirsute bushy herb in dry soil in northern U.S.

White milkwort (Polygala alba). Uncommon woody erect herb in prairie soils in central U.S.

White snakeroot (Eupatorium rugosum). Uncommon herb in dry soils in northern U.S.

White sweet clover (Melilotus albus). Frequent erect branched herb in waste areas in eastern U.S.

White thoroughwort (Eupatorium album). Uncommon branched herb in sandy soils in eastern U.S.

Whorled milkweed (Aselepias verticillata). Uncommon whorl-leaved herb in dry soils in eastern U.S.

Wild balsam apple (Momordica charantia). Uncommon twining herb along streams and in waste areas in eastern U.S.

Wild blue lettuce (Lactuca canadensis). Common leafy erect herb in moist soils and waste areas in eastern U.S. Frequent in deep south.

Wild columbine (Aquilegia candensis). Uncommon branching herb in rocky woods in eastern U.S.

Wild cucumber (Echinocystis lobata). Uncommon branched twining herb in thickets in eastern U.S.

Wild hemp (Cannabis sativa). Common introduced erect herb in waste areas in northern U.S.

Wild lettuce (Lactuca biennis). Common erect herb in dry soils and waste areas in eastern U.S.

Wild lettuce (Lactuca floridana). Common herb in waste areas in Florida and deep south.

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Wild lettuce (Lactuca graminifolia). Uncommon erect herb in dry soils in northern and eastern U.S.

Wild lettuce (Lactuca hirsuta). Uncommon hirsute erect herb in dry soil in eastern U.S.

Wild lettuce (Lactuca scariola). Common prickly herb in fields and waste areas in northern U.S.

Willow dock (Rumex salicifolius). Common branched herb in moist soils in eastern U.S.

Willow-herb (Epilobium glandulosum). Common erect herb in moist soils in eastern U.S.

Willow-leafed dock (Rumex mexicanus). Common branched herb in moist soils and waste areas in eastern U.S.

Winged pigweed (Cycloloma atriplicifolium). Uncommon bushy herb along streams and in moist soils in central U.S.

Wiry blue-eye-grass (Sisyrinchium biforme). Uncommon leafy herb in grassy fields in eastern U.S.

Wood nettle (Laportea canadensis). Frequent to abundant herb in open woods and thickets in central U.S.

Wood sorrel (Oxalis dillenii). Uncommon low branching herb in fields and waste places in eastern U.S.

Woolly croton (Croton capitatus). Frequent silvery branched herb in dry soils in southern U.S.

Woolly stemodia (Stemodia tomentosa). Uncommon hirsute herb in waste areas in northern U.S.

Wormseed mustard (Erysimum cheiranthoides). Common erect branched herb along streams and fields in northern U.S.

Wormwood (Artemisia biennis). Common leafy branched herb in waste areas throughout U.S.

Wormwood (Artemisia serrata). Uncommon stout branched herb in dry soils and on prairies in eastern and central U.S.

Yarrow (Achillea millefolium). Common erect herb in waste areas in eastern U.S.

Yellow abronia (Abronia latifolia). Uncommon erect branching herb in dry soils in Pacific northwest.

Yellow clover (Trifolium agrarum). Common to frequent low herb in most soils in eastern U.S., especially north.

Yellow cress (Rorippa palustris). Uncommon branching herb in lakes, streams, and wet areas in northern U.S.

Yellow cress (Rorippa teres). Uncommon branched herb in wet areas in northern U.S.

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Yellow dock (Fumex persicaroides). Common stout branched herb on sandy shores across northern U.S.

Yellow flag (Iris pseudacorus). Uncommon fleshy herb in moist to dry soils in northern U.S.

Yellow parentucellia (Parentucellia viscosa).

Yellow sweet clover (Metitotus officinalis). Common low herb in most soils in eastern U.S.

Yellow wood sorrel (Oxalis stricta). Common branched herb in waste areas & fields in eastern U.S., especially south.

Yerba (Eclipta alba). Common rough herb along streams and in waste areas in eastern U.S. to Nebraska.

----- (Calylophus australis).

----- (Euthamia leptocephala). Uncommon branched herb in moist soil in southcentral U.S. and Texas.

----- (Hemicarpa micrantha). Uncommon tufted herb in moist sandy soil over entire U.S. except southwest.

----- (Limnosciadium pumilum).

----- (Matelea decipiens).

----- (Scaevola plumieri).

----- (Thelypteris normalis).

----- (Wedelia tribolata).

VINES

Beach morning glory (Ipomoea stolonifera). Common vine of dunes and sandy areas on east and gulf coasts.

Bittersweet (Celastrus orbiculatus). Common woody vine in woods areas in eastern U.S.

Canada moonseed (Menispermum canadense). Uncommon to common vine in thickets and woods, clambering over vegetation and climbing in trees, in eastern U.S.

Carolina moonseed (Menispermum carolinum). Uncommon to common vine in thickets and woods, clambering over vegetation and climbing in trees, in southeastern U.S.

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Catbriar (Smilax hispida). Uncommon to common vine climbing in trees and thickets in eastern U.S.

Climbing milkweed (bindweed) (Cynanchum palustre). Frequent vine clambering over other vegetation in open areas in eastern U.S.

Common dodder (Cuscuta obtusiflora). Uncommon vine growing on other vegetation in eastern U.S.

Common greenbriar (Smilax rotundifolia). Common vine in open areas and in thickets in eastern U.S.

Cusp dodder (Cuscuta cuspidata). Rare vine growing on other vegetation in southern U.S.

Field dodder (Cuscuta pentagona). Rare vine growing on other vegetation in southern U.S.

Fox grape (Vitus labrusca). Common woody vine climbing in thickets and woods in eastern U.S.

Fringed catbrier (Smilax bona-nox). Common vine climbing in thickets and growing in open areas in eastern U.S.

Frost grape (Vitus vulpina). Common vine growing in open areas and thickets in northeastern U.S.

Hedge bindweed (Convolvulus sepium). Common to abundant vine clambering over vegetation in eastern U.S.

Japanese honeysuckle (Lonicera japonica). Frequent woody vine clambering over other vegetation throughout entire U.S.

Marine ivy (Cissus incisa). Uncommon to common vine clambering over vegetation in sandy open areas in eastern U.S.

Moonflower (Ipomoea tuba). Abundant vine on beaches in Florida.

Muscadine (Vitus rotundifolia). Common woody vine climbing high in trees and thickets in southeastern U.S. Also occurs in open areas.

Pacific morning glory (Convolvulus soldanella). Uncommon to common vine on beaches and sandy areas on west coast.

Peppervine (Ampelopis arborea). Common vine clambering over vegetation or climbing high in trees in eastern U.S.

Poison ivy (Rhus radicans). Frequent ground cover under trees and climbing onto trees throughout entire U.S.

Railroad vine (Ipomoea pes-caprae). Abundant vine on beaches and tidal areas in Florida.

Riverbank grape (Vitus riparia). Common woody vine climbing high in trees or in open areas in eastern U.S.

Saltmarsh morning glory (Ipomoea sagittata). Common vine clambering over vegetation in eastern U.S.

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Sharppod morning glory (Ipomoea trichocarpa). Uncommon vine clambering over vegetation in open areas.

Simple-leaved peppervine (Ampelopsis cordata). Uncommon to common vine on woods edge in eastern U.S.

Strangler fig (Ficus aurea). Uncommon vine only in Florida climbing high into woody vegetation.

Summer grape (Vitus aestivalis). Common vine clambering over vegetation or climbing high into woods and thickets in eastern U.S.

Supplejack (Berchemia scandens). Common woody vine climbing high in trees and thickets in eastern U.S.

Trumpet creeper (Campsis radicans). Common woody vine with showy flowers climbing high in trees and thickets in eastern U.S.

Vine milkweed (Ipomoea alba). Uncommon vines clambering over vegetation in open areas and prostrate in eastern U.S.

Virginia creeper (Parthenocissus quinquefolia). Frequent vine climbing high in trees and thickets in eastern U.S.

Wild bamboo (Smilax auriculata). Uncommon vine climbing in thickets and trees.

Wild morning glory (Ipomoea trilobata). Common vine in open areas, prostrate or clambering over vegetation, in eastern U.S.

Woodbine (Parthenocissus inserta). Uncommon vine climbing in thickets and trees in eastern U.S.

SHRUBS AND SMALL TREES

Alder (Alnus serrulata). Common shrub along streams and lakes in eastern U. S.

Alder (Alnus sinuata). Common shrub along streams and rivers in Pacific northwest.

American beautyberry (Callicarpa americana). Abundant shrub in open woods and thickets in eastern U. S.

American elderberry (Sambucus canadensis). Common shrub in waste areas, thickets, and fence rows in eastern U. S.

American mistletoe (Phoradendron flavescens). Abundant parasitic woody plant in oaks and hardwoods in southeastern U. S.

American mountain-ash (Sorbus americana). Common in low woods and moist areas in northeastern U. S.

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American plum (Prunus americana). Common tree along streams and rivers in moist soil in eastern U.S.

Arbutus (Arbutus menziesii). Common leathery shrub in dry soil on west coast.

Athel (Tamarisk africana). Uncommon tropical, introduced tree in dry areas of Texas.

Autumn olive (Elegnus umbellata). Common cultivated shrub in most dry soils in eastern U.S.

Baldhip rose (Rosa gymnocarpa). Uncommon shrub in dry soils in Pacific northwest.

Barberry (Berberis thunbergii). Common cultivated shrub in most soils throughout entire U.S.

Bayberry (Myrica pensylvanica). Frequent aromatic shrub in coastal sandy soils in eastern U.S.

Beach plum (Prunus maritima). Uncommon tree in sandy coastal soils on east coast.

Bearberry honeysuckle (Lonicera involucrata). Uncommon shrub in most interior soils in northern U.S.

Blackberry (Rubus argutus). Abundant thorny shrub in most soils in eastern U.S.

Blackberry (Rubus bifrons). Frequent thorny shrub in dry soils in eastern U.S.

Black mangrove (Avicennia germinans). Frequent tree on saltwater shores and islands in south Florida. Occasional in Texas.

Black raspberry (Rubus leucodermis). Common spiny shrub in moist soils in Pacific northwest.

Black raspberry (Rubus occidentalis). Common spiny shrub in moist soils in eastern U.S.

Black willow (Salix nigra). Abundant tree in wet freshwater areas throughout U.S.

Brazilian peppertree (Schinus terebinthefolius). Frequent introduced tree on sandy soils in south Florida. Cultivated as ornamental.

Buffaloberry (Shepheria canadensis). Common scurfy shrub on stream banks in northern U.S.

Buttonbush (Cephalanthus occidentalis). Abundant shrub in swamps and marshes in interior southeastern U.S.

Buttonwood (Conocarpus erecta). Common tree in sandy soils in south Florida.

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Cabbage palm (Sabal palmetto). Common tree in sandy soils in Florida, Texas, and along gulf coast. Cultivated as ornamental.

Carolina rose (Rosa carolina). Frequent spiny shrub in waste areas and marshes in southeastern U.S.

Cascara buckthorn (Rhamnus purshiana). Common shrub in dry soils in Pacific northwest.

Catalpha (Catalpha speciosa). Common introduced tree in most soils in southeastern U.S. Cultivated as ornamental.

Century plant (Agave americana). Uncommon succulant plant in dry sandy soils in Florida and Texas.

Cherry laurel (Prunus caroliniana). Common cultivated shrub in most soils in southeastern U.S.

Chinaberry tree (Melia azedarach). Uncommon introduced tree in dry soils in southeastern U.S. Cultivated as ornamental.

Chinese tallow tree (Sapium sebiferum). Uncommon introduced cultivated tree in most soils in southeastern U.S.

Chinese tamarisk (Tamarisk chinesis). Uncommon introduced tree in dry sandy soils in deep south. Cultivated as ornamental.

Citrus (Citrus sinensis). Common cultivated tree in most soils in Florida, Texas, deep south, and southwestern U.S.

Coast red elderberry (Sambucus racemosa). Common shrub in moist open areas in Pacific northwest.

Common chokecherry (Prunus virginiana). Common shrub in most soils in eastern U.S.

Common juniper (Juniperus communis). Frequent shrub in upland soils in southern U.S. Cultivated as ornamental.

Common snowberry (Symphoricarpos albus). Uncommon shrub in woods and thickets in southeastern U.S.

Common St. John's wort (Hypericum perforatum). Common shrub in upland soils in eastern U.S.

Crabapple (Malus angustifolia). Uncommon tree in most upland soils in eastern U.S.

Crack willow (Salix fragiles). Uncommon introduced tree in wet soils in central and eastern U.S.

Creeping juniper (Juniperus horizontalis). Common shrub in upland soils in northern U.S. Cultivated as ornamental.

Dahoon (Ilex cassine). Common shrub in sandy coastal soils on gulf and east coasts. Tolerates slight salinity.

Desert olive (Forestiera angustifolia). Uncommon shrub in dry sandy soils in southwest U.S. and Texas.

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Devil's walking stick (Aralia spinosa). Common small tree in dry soils in woods or open areas in eastern U.S.

Dwarf St. John's work (Hypericum mutilum). Common shrub in fields and moist areas in eastern U.S.

Eastern hophornbeam (Ostrya virginiana). Frequent tree in moist to dry soils in woods and thickets in eastern U.S.

Elderberry (Sambucus callicarpa). Common shrub in waste places in eastern U.S.

European mountain-ash (Sorbus aucuparia). Uncommon introduced tree in dry soils in eastern U.S. Cultivated as ornamental.

Evergreen blackberry (Rubus laciniatus). Common spiny shrub in moist soils in western U.S.

False willow (Baccharis angustifolia). Uncommon shrub in sandy soils in eastern U.S., especially on coasts.

Fig (Ficus carica). Common cultivated tree in upland soils in southeastern U.S.

Florida elderberry (Sambucus simpsonii). Common shrub in moist sandy soils in Florida.

Florida privet (Forestiera segregata). Common shrub in moist soils in Florida.

Flowering dogwood (Cornus florida). Frequent small tree with showy flowers in eastern U.S. Cultivated throughout U.S. as ornamental.

Gallberry (Ilex glabra). Uncommon shrub in sandy coastal soils along east and gulf coasts.

Gray dogwood (Cornus racemosa). Common shrub in moist soils in northern U.S.

Ground blueberry (Vaccinium myrsinitis). Common leathery shrub in low woods and thickets in eastern U.S.

Groundsel tree (Baccharis halimifolia). Frequent shrub in salt marshes on east and gulf coasts.

Guava (Psidium guajava). Uncommon shrub in sandy soils in Florida.

Halberd-leaved willow (Salix hastata). Uncommon small tree in moist soils in northcentral U.S. Cultivated as ornamental.

Hawthorn (Crataegus fabellata). Uncommon thorny small tree on stream banks in northcentral U.S.

Highbush blueberry (Vaccinium corymbosum). Common shrub in swamps, thickets, and woods in southeastern U.S.

Highbush cranberry (Viburnum edule). Common shrub in low areas in Pacific northwest.

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Himalayan blackberry (Rubus discolor). Uncommon introduced shrub in moist areas in Pacific northwest.

Honey mesquite (Prosopis glandulosa). Common small tree in dry sandy soils in southwestern U.S.

Honeysuckle (Lonicera x bella). Uncommon cultivated shrub in moist soils.

Hooker willow (Salix hookeriana). Uncommon shrub in moist areas in Pacific northwest.

Indian almond (Terminalia catappa). Uncommon introduced small tree in moist soils in Florida.

Juneberry (Amelanchier laevis). Common small tree in dry woods in eastern U.S. to Missouri.

Lantana (Lantana involucrata). Uncommon tropical shrub in moist soils in Texas.

Lantana (Lantana ovatifolia). Uncommon tropical shrub in moist soils in Texas.

Macartney rose (Rosa bracteata). Uncommon introduced spiny shrub in woods and waste areas in southeastern U.S.

Marginated century plant (Agave americana var. marginata). Uncommon succulant plant in dry sandy soils in Florida, Texas, and southwestern U.S.

Marsh elder (Iva frutescens). Frequent shrub in salt marshes and on sandy shores on east and gulf coasts.

Marsh hibiscus (Hibiscus moscheutos). Common shrub with showy flowers in wet and moist areas in southeastern U.S.

Meadow rose (Rosa blanda). Common thornless shrub in moist areas in northern U.S.

Multiflora rose (Rosa multiflora). Frequent spiny shrub in moist areas in eastern U.S. Cultivated as ornamental over entire U.S.

Naked wood (Myricanthes fragrans). Uncommon tropical shrub in moist sandy soils in Florida and Texas.

Narrowleaf marsh elder (Iva angustifolia). Uncommon shrub in salt marshes and on sea shores in eastern U.S.

Nine-bark (Physocarpus spulifolius). Common shrub in moist soils in northern U.S.

Nits and lice (Hypericum drummondii). Uncommon bushy shrub in dry soil in eastern U.S. to Kansas.

Northern dewberry (Rubus flagellaris). Common spiny shrub in waste places in northern U.S.

Oleander (Nerium oleander). Common tropical shrub in dry sandy soils in southern U.S., especially southwest. Tolerates salinity and cultivated as ornamental.

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Orange grass (Hypericum gentianoides). Uncommon erect shrub in sandy soil in eastern U.S. to Missouri.

Pacific dogwood (Cornus nuttallii). Common shrub in moist areas in Pacific northwest.

Pacific nine-bark (Physocarpus capitatus). Common shrub in moist soils in Pacific northwest.

Pacific willow (Salix lasiandra). Common gray-green small trees in moist soil in western U.S.

Painted leaf poinsettia (Poinsettia heterophylla). Uncommon tropical shrub with showy flowers in Florida. Cultivated as ornamental.

Peachleaf willow (Salix amygdaloides). Frequent small tree in moist soils in north central U.S.

Possumhaw (Ilex decidua). Frequent shrub with showy berries in moist soils in eastern U.S. to Kansas.

Prickly rose (Rosa acicularis). Common very spiny shrub in moist areas in northern U.S.

Raspberry (Rubus idaeus). Common, scarcely spined shrub in waste areas and thickets in eastern U.S.

Red alder (Alnus rubra). Common shrub along streams and rivers in Pacific.

Red currant (Ribes sanguineum). Uncommon shrub in moist soils in northern U.S.

Red elderberry (Sambucus pubens). Uncommon shrub in rocky and woody areas in northern U.S.

Red mangrove (Rhizophora mangle). Common tropical small tree on salt water shores in Florida.

Red osier dogwood (Cornus stolonifera). Abundant shrub with red stems in moist soils in northern U.S.

Roosevelt groundsel (Baccharis neglecta). Common bushy shrub in moist sandy soils and along streams in deep south.

Rough-leaved dogwood (Cornus drummondii). Common shrub in moist soils in central U.S.

Round-leaved dogwood (Cornus rugosa). Uncommon shrub in shady rocky areas in northern U.S.

Russian olive (Eleagnus angustifolia). Common thorny shrub in dry sandy soils in eastern U.S. Cultivated for wildlife.

Salal (Gardtheria shallon). Common shrub in moist woods in Pacific northwest. Cultivated for florist greenery.

Salmonberry (Rubus spectabilis). Common shrub in moist soils in Pacific northwest.

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Saltcedar (Tamarisk parviflora). Common small tree of salt marshes and sandy shores on southeastern U.S. coasts.

Sandbar willow (Salix interior). Frequent small tree in moist area in northern and eastern U.S.

Sand blackberry (Rubus cuneifolius). Common spiny shrub in sandy soils in southeastern U.S.

Sand cherry (Prunus pumila). Uncommon spreading shrub on sandy or gravelly shores in northern U.S.

Sand pine (Pinus clousa). Common evergreen shrub on sandy shores and islands on gulf coast.

Sawtooth oark (Quercus acutissima). Uncommon small tree in sandy soils in southeastern U.S.

Schlecht blackberry (Rubus ursinus).

Scotch broom (Cytisus scoparius). Frequent bushy shrub on hills and dry areas in Pacific northwest. Cultivated as ornamental.

Scouler willow (Salix scouleriana). Common small tree in moist soils in western U.S.

Seacoast marsh elder (Iva imbricata). Uncommon shrub in salt marhses on east and gulf coasts.

Serviceberry (Amelanchier canadensis). Common small tree of dry woods in southeastern U.S.

Shining sumac (Rhus copallina). Common small shrub in waste areas in eastern U.S. Abundant in deep south.

Shore pine (Pinus virginiana). Common small evergreen tree in poor soils and beaches in eastcentral U.S.

Shrub orache (Atriplex polycarpa). Uncommon shrub in sandy beach soils in eastern U.S.

Shrub poison ivy (Rhus radicans). Abundant shrub in marshes, swamps, and woods in southeastern U.S.

Shrub verbena (Lantana camara). Common shrub with showy flowers in deep south and Florida. Cultivated as ornamental.

Sitka mountain-ash (Sorbus sitchensis). Common small tree in moist areas in Pacific northwest.

Silky dogwood (Cornus obliqua). Common shrub in moist soils in northern and eastern U.S.

Smooth sumac (Rhus glabra). Common small tree in waste areas in eastern and central U.S.

Snowberry (Chiococca alba). Uncommon erect shrub in moist soils and on river banks in northern U.S. and California.

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Southern dewberry (Rubus trivalis). Abundant spiny shrub in waste areas in southeastern U.S.

Spanish dagger (Yucca treculeana). Uncommon stiff spined plant in dry sandy soils in southern U.S.

Spice bush (Lindera benzoin). Uncommon smooth shrub in moist woods, thickets, and along streams in northeastern U.S.

Spiraea (Spiraea tomentosa). Uncommon erect shrub in swamps and low ground in northeastern U.S.

Staghorn sumac (Rhus typhina). Common small tree in dry waste areas in eastern and central U.S. Abundant in northcentral U.S.

St. John's wort (Hypericum hypericoides). Uncommon shrub in moist soil in eastern U.S.

Swamp dogwood (Cornus amomum). Frequent shrub in wet and moist areas in southeastern U.S.

Swamp gooseberry (Ribes lacustre). Common spiny shrub in swamps and wet woods over entire U.S.

Swamp privet (Forestiera acuminata). Common shrub in wet and moist areas in southeastern U.S.

Swamp rose (Rosa palustris). Common spiny shrub in moist areas in southeastern U.S.

Tamarisk (Tamarisk gallica). Uncommon small tree in dry sandy soils in southeastern U.S.

Tartarian honeysuckle (Lonicera tartarica). Uncommon shrub in waste areas in northeastern U.S. Cultivated as ornamental.

Texas huisache (Acacia smallii). Common small tree in sandy soils in Texas.

Texas lantana (Lantana horrida). Uncommon tropical shrub in moist soils in Texas.

Thorny eleagnus (Eleagnus pungens). Common thorny evergreen shrub in many soils in eastern U.S. Cultivated as ornamental and for rights-of-ways over entire U.S.

Toothache tree (Zanthoxylum clava-herculis). Common thorny shrub in waste areas and woods in southeastern U.S.

Turkey oak (Quercus laevis). Common small tree in sandy coastal soils along east coast.

Water birch (Betula occidentalis). Common small tree in wet areas in western U.S. (not on coasts).

Wax myrtle (Myrica cerifera). Abundant evergreen aromatic shrub in sandy soils on east and gulf coasts.

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White mangrove (Languncularia racemosa). Common tropical shrub on salt water shores in Florida.

White mulberry (Morus alba). Common introduced small tree in moist soils in eastern U.S. Cultivated as ornamental.

White willow (Salix alba). Common shrub in moist soils in northern U.S. and California.

Wild black currant (Ribes americanum). Common erect unarmed shrub in woods in northern U.S. and southwest.

Wild indigo (Baptisia leucophaea). Uncommon bushy shrub on dry sandy shores in Texas.

Wild rose (Rosa rugosa). Uncommon spiny shrub in moist soils in northern U.S.

Wild Virginia rose (Rosa viriginiana). Uncommon spiny shrub in moist soils in southeastern U.S.

Willow (Salix rigida). Uncommon shrub in moist soils in northern U.S.

Yaupon (Ilex vomitoria). Frequent evergreen shrub in moist sandy soils on east and gulf coasts. Cultivated as ornamental.

Yellow sophora (Sophora tomentosa). Uncommon leguminous shrub on plains and prairies in southwest U.S. and Texas.

Yucca (Yucca pendula). Uncommon stiff prickly shrub in dry soils in southern U.S.

LARGE TREES

American beech (Fagus grandifolia). Common deciduous tree in wet areas, hardwood bottomlands, and along streams in eastern U.S. to Missouri.

American elm (Ulmus americana). Common deciduous tree in moist soils in open and in woods in eastern U.S. to Kansas.

American sycamore (Platanus occidentalis). Common deciduous tree in moist areas and stream banks in eastern and central U.S. to Colorado.

Australian pine (Casuarina equisetifolia). Abundant introduced evergreen tree in sandy soils in Florida and California.

Austrian pine (Pinus nigra). Uncommon introduced evergreen tree in moist soils in northeastern U.S.

Bald cypress (Taxodium distichum). Common deciduous tree in standing water and swamps in southeastern U.S.

Balsam poplar (Populus balsamifera). Uncommon deciduous tree in moist soils in Great Lakes region and western mountains.

Basswood (Tilia americana). Common deciduous tree in moist soils in eastern U.S. Very large leaves.

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Bigtooth aspen (Populus grandidentata). Common deciduous tree in moist soils in northeastern U.S.

Bitternut hickory (Carya cordiformis). Common deciduous tree in moist soils and hardwood bottomlands in eastern U.S.

Black cherry (Prunus serotina). Common deciduous tree in moist soils in eastern U.S. to Kansas. Cultivated as ornamental.

Black cottonwood (Populus trichocarpa). Common deciduous tree in wet areas and moist soils in Pacific northwest.

Black locust (Rovinia pseudo-acacia). Frequent deciduous leguminous tree in dry soils in eastern U.S.

Black oak (Quercus velutina). Common deciduous tree in dry soils in eastern U.S. to Kansas.

Black walnut (Juglans nigra). Common deciduous tree in most soils in eastern U.S. to Kansas. Very valuable furniture wood.

Boxelder (Acer negundo). Frequent deciduous tree in moist soils, dry poor soils, and in waste areas throughout entire U.S. except Texas and far west.

Bur oak (Quercus macrocarpa). Common deciduous trees in moist soils and bottomlands in central U.S., primarily northcentral.

Date palm (Phoenix dactylifera). Frequent tropical evergreen tree in sandy soils in Florida, Texas, deep south coasts, and California.

Desert hackberry (Celtis pallida). Uncommon deciduous tree in moist sandy soils in Texas and southwest U.S.

Douglas fir (Pseudotsuga menziesii). Common evergreen tree in mountain areas in western U.S. Valuable lumber tree.

Eastern cottonwood (Populus deltoides). Frequent deciduous tree along streams and in bottomlands in eastern U.S. to Kansas. Valuable lumber tree.

Eastern red cedar (Juniperus virginiana). Frequent evergreen tree in moist to dry soils, especially alkaline soils, in eastern U.S.

Green ash (Fraxinus pennsylvanica). Common deciduous tree in wet bottomlands in eastern U.S.

Hackberry (Celtis occidentalis). Common deciduous tree in moist soils in eastern U.S., primarily northeast.

Honeylocust (Gleditsia tricanthos). Common deciduous thorny tree in moist bottomlands in southeastern U.S.

Laurel oak (Quercus laurifolia). Uncommon semi-evergreen tree in sandy soils in deep south and Florida near coasts.

Lindheimer hackberry (Celtis lindheimeri). Common deciduous tree in moist soils in southeastern U.S.

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Live oak (Quercus virginiana). Common evergreen tree in coastal sandy soils in southeastern U.S.

Loblolly pine (Pinus taeda). Abundant evergreen tree in moist soils in southeastern U.S. Valuable lumber tree.

Lodgepole pine (Pinus contorta). Common evergreen tree in moist soils in western U.S. Valuable lumber tree.

Longleaf pine (Pinus palustris). Abundant evergreen tree in moist sandy soils in southeastern U.S., especially on coastal plain.

Mexican windmill palm (Washingtonia robusta). Common tropical evergreen tree in sandy soils in Texas. Cultivated as ornamental.

Northern white cedar (Thuja occidentalis). Common evergreen tree in alkaline, moist, and boggy soils in northeastern U.S.

Nuttall oak (Quercus nuttallii). Uncommon deciduous tree in moist bottomlands in deep south.

Oregon ash (Fraxinus latifolia). Uncommon deciduous tree in moist soils in Pacific northwest.

Ornamental data palm (Phoenix canariensis). Frequent tropical evergreen tree in sandy soils in Florida, Texas,and gulf coast. Cultivated as ornamental.

Pin oak (Quercus palustris). Common deciduous tree in moist bottomlands in northeastern U.S. to Missouri.

Persimmon (Diopyros virginiana). Common deciduous tree in waste areas and moist soils in southeastern U.S.

Port Orford cedar (Chamaecyparis lawsoniana). Uncommon evergreen tree in moist soils in Pacific northwest. Valuable lumber tree. Cultivated as ornamental.

Quaking aspen (Populus tremuloides). Frequent deciduous tree in mountain areas in western U.S. Cultivated as ornamental.

Reclinata palm (Phoenix reclinata). Common tropical evergreen tree in sandy soils in Florida.

Redbay (Persea borbonia). Uncommon evergreen aromatic tree in swamps and near streams in deep south and Florida.

Red elm (Ulmus rubra). Common deciduous tree in dry soils in eastern U.S.

Red maple (Acer rubrum). Frequent deciduous tree in moist to swampy soils in eastern U.S. Cultivated as ornamental.

Red mulberry (Morus rubra).

Red oak (Quercus rubra). Common deciduous tree in dry soils in eastern U.S. except deep south and Florida.

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Red pine (Pinus resinosa). Common evergreen tree in moist soils in northeastern U.S. Valuable lumber tree.

River birch (Betula nigra). Common deciduous tree in streams and swamps in eastern U.E.

Saltcedar (Tamarisk ramosissima). Common evergreen tree in sandy soils on gulf and east coasts.

Sassafras (Sassafras albidum). Common deciduous tree in moist woods and thickets in eastern U.S. Frequent in deep south.

Shumard oak (Quercus shumardii). Uncommon deciduous tree in moist bottomland soils in southeastern U.S. except south Florida.

Silver maple (Acer saccharinum). Common deciduous tree in bottomlands in eastern U.S. except coasts. Cultivated as ornamental.

Sitka spruce (Picea sitchensis). Uncommon evergreen tree in low moist areas in Pacific northwest.

Slash pine (Pinus elliottii). Common evergreen tree in moist soils in southeastern U.S. Valuable lumber tree.

Southern red cedar (Juniperus silicicola). Uncommon evergreen tree in moist to dry soils in Florida.

Sugarberry (Celtis laevigata). Common deciduous tree in moist soils in southeastern U.S.

Sugar maple (Acer saccharum). Common deciduous tree in moist soils in northeastern U.S. Cultivated as ornamental. Valuable furniture wood. Use for maple syrup.

Swamp white oak (Quercus bicolor). Common deciduous tree in swampy moist soils in northeastern U.S.

Sweetgum (Liquidambar styraciflua). Frequent deciduous tree in moist to dry soils in southeastern U.S.

Tree of heaven (Ailanthus altissima). Uncommon deciduous introduced tree in moist soils over most of U.S. Cultivated as ornamental.

Tulip poplar (Liriodendron tulipifera). Common deciduous tree in moist to wet soils in southeastern U.S.

Water oak (Quercus nigra). Frequent semi-evergreen tree in moist bottomlands in southeastern U.S.

Western hemlock (Tsuga heterophylla). Common evergreen tree in moist soils in Pacific northwest. Cultivated as ornamental. Valuable lumber tree.

White ash (Fraxinus americana). Common deciduous tree in moist to dry soils in eastern U.S. except south Florida.

Willow oak (Quercus phellos). Common deciduous tree in moist bottomlands in southeastern U.S. except south Florida.

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Table 2

Selected Upland Plant Species for Habitat Development on Dredged Material Sites*

Species** (Alphabetized by Common Name)	Best Propagule Type	Collection Periods†	Temporary Storage Requirements	Planting Periods	Range††	Mature Height	Growth Habits	Remarks
Grasses								
American beachgrass (*Ammophila breviligulata*)[1,2,3]	Transplants	Oct-March	In wet sand beds or in pots of sand	Feb-May	MA, NE, GL	To 1.5 m	Perennial cool season grass with stiff stems, full sun	Tolerates saline conditions, beach and dune areas, excellent for sandy beach and dune areas
American dunegrass (*Elymus mollis*)[1,3]	Transplants	Sept-March	In wet sand beds or in pots of sand	March-June	NE, RNW	To 1.5 m	Strong, erect, fast growing, full sun	Prefers sandy areas, good soil stabilizer
Bahia grass (*Paspalum notatum*)[1,3]	Seeds	July-Sept	Dry, cool area	March-June	SE, MA, FL, MS	To 0.5 m	Summer perennial, creeping base with upright stems, full sun	Cultivated for pasture, good cover, wide range of soils
Barley (*Hordeum vulgare*)[1,2,3]	Seeds	May-July	Dry, cool area	Oct-Nov	Entire U. S.	To 1.3 m	Annual, winter cover crop grass, full sun	Extensively cultivated for cover and grain, requires good soil bed
Barnyard grass (*Echinochloa crusgalli*)[1,3]	Seeds	June-Sept	Dry, cool area	May-Sept	Entire U. S. except FL	To 2 m	Annual grass, arching heads, full sun	Prefers moist soils, cultivated for waterfowl food
Beach panic grass (*Panicum amarum*)[1]	Transplants	Sept-March	In wet sand beds or in pots of sand	March-June	MA, SE, FL, MS	To 1.3 m	Perennial, few flowered, full sun	Prefers sandy soils
Beaked panic grass (*Panicum anceps*)[1]	Seeds	July-Sept	Dry, cool area	April-June	MA, SE, FL, MS, MRV, SP, MP	To 2 m	Perennial, hardy, fast growing, full sun	Prefers moist sandy soil
Big bluestem (*Andropogon gerardi*)[1,3]	Seeds	July-Sept	Dry, cool area	April-June	Entire U. S. except PNW, CA	To 2 m	Perennial, robust, tufted, dense sod, full sun	Important forage grass, prefers well-drained soils
Bromegrass (*Bromus inermus*)[1,3]	Seeds	July-Sept	Dry, cool area	April-June	Entire U. S. except SE, FL, MS, SP	To 2 m	Perennial, creeping rhizomes, erect stems, dense sod, full sun	Important forage grass, prefers well-drained soils
Broomsedge (*Andropogon virginicus*)[1]	Seeds	Sept-Oct	Dry, cool area	May-Sept	Entire eastern U. S. and CA	To 1 m	Perennial, dense culm, upright stems, full sun	Pest plant in pastures and crops, grows under most soil conditions
Browntop millet (*Panicum ramosum*)[3]	Seeds	Sept-Nov	Dry, cool area	March-July	SE, MA, MS, FL	To 0.6 m	Summer annual, erect stems, good seed producer, full sun	Prefers wet soils, excellent waterfowl food, no soil preparation necessary in many cases
Bull Paspalum (*Paspalum boscianum*)[1]	Seeds	July-Oct	Dry, cold room	March-June	MA, SE, FL, MS	To 2 m	Stout summer annual, fast growing, spreading, full sun	Prefers moist soils, good seed producer
Bushy beardgrass (*Andropogon glomeratus*)[1]	Seeds	Aug-Oct	Dry, cool area	April-June	NE, MA, SE, FL, MS, SP, SW, CA	To 2 m	Erect, dense, fast growing, full sun	Prefers moist soils
Calley Bermuda grass (*Cynodon dactylon* hybrid)[3]	Transplants, root stock	Year-round	In soil beds	March-June	SE, MS, SP, FL	To 0.5 m	Perennial, fast growing, sterile, full sun	Vigorous new hybrid Bermuda, pasture use

(Continued)

* Sources of these data are from unpublished data by the author and Britton and Brown (1970), Brockman (1968), Correll and Johnston (1970), CZMD (1978), Franklin and Dyrness (1973), Halls (1977), Harrar and Harrar (1962), Hartman and Kester (1959, 1975), Hitchcock (1950), Hitchcock and Cronquist (1973), Hotchkiss (1967), Long and Lakela (1971), Oefinger and Halls (1974), Radford et al. (1973), Rehder (1960), Sargent (1922), Thompson and Thompson (1961), and Wolfe and Kipps (1959).

** Numbers given after species names indicate the following information:
1-Known to occur on dredged material.
2-Planted on dredged material sites.
3-Known to be available commercially or from State and Federal nurseries.

† Collection periods, storage requirements and planting periods are only for best propagules. Many of these species may be handled in other ways for other propagule types not portrayed in this table.

†† SE = southeast; MS = midsouth; SP = south plains; MP = mid plains; NP = north plains; NE = northeast; MA = mid Atlantic; PNW = Pacific northwest; SW = southwest; FL = Florida; GL = Great Lakes; MRV = Mississippi River Valley; CA = California; MW = midwest.

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Grasses (Continued)								
Coastal Bermuda grass (*Cynodon dactylon* hybrid)[3]	Transplants, root stock	Year-round	In soil beds	March-June	SE, MA, FL, SP, MS	To 0.5 m	Perennial, fast growing, sterile, full sun	Planted extensively in southern pastures for grazing and hay, tolerates salt spray
Common Bermuda grass (*Cynodon dactylon*)[1,3]	Seeds	June-Sept	Dry, cool area	April-June	Entire U. S. except MW, PNW, NP, NE	To 0.2 m	Perennial, fast growing, abundant seeds, full sun	Pasture crop, lawns, pest in cultivated areas, tolerates wide range of conditions
Common reed (*Phragmites australis*)[1]	Root stock, rhizomes	Sept-March	In sand beds or pots of sand	Feb-June	GL, NE, MA, SE, FL, MS, SP	To 4 m	Perennial, fast growing, persistent, full sun	Pest plant in many areas, not recommended for any use other than soil stabilization
Corn (*Zea mays*)[1,2,3]	Seeds	July-Oct	Dry, cool area	March-June	Entire U. S.	To 3 m	Summer annual, upright, heavy seed producer, full sun	Cultivated extensively for grain, silage, and human consumption
Dallis grass (*Paspalum dilatum*)[1,3]	Seeds	June-Sept	Dry, cool area	Year-round (MS, FL) April-May (north)	SE, MS, FL, MA, SP, SW	To 1.5 m	Dense perennial, full sun	Cultivated pasture grass
Deertongue (*Muhlenbergia rigens*)[1]	Seeds	Aug-Oct	Dry, cool area	Oct-Nov; March-Apr	NE, MA, SE, MS, MP, NP, MRV	To 1.6 m	Warm season, full sun, dense clumps	Tolerates acid soils, seeds have strong dormancy
European beachgrass (*Ammophila arenaria*)[1,3]	Transplants	Oct-March	Hold in wet sand beds or in sand pots	Feb-May	PNW, CA	To 1.5 m	Perennial, cool season grass, rigid stems, full sun	Tolerates saline conditions, excellent for sandy beach and dune areas
Fall panic grass (*Panicum dichotomiflorum*)[1]	Seeds	Sept-Nov	Dry, cool area	Feb-June	Entire U. S. NP, PNW	To 1 m	Coarse, summer annual, fast growing, good seed producer, full sun	Tolerates wide range of soil conditions including wet areas, considered crop pest
Foxtail millet (*Setaria italica*)[3]	Seeds	June-Sept	Dry, cool area	April-July	Entire U. S. except MW, FL, SP	To 2 m	Summer annual, upright, fast growth, full sun	Cultivated extensively for grain and silage, prefers moist soils
Goose grass (*Eleusine indica*)[1]	Seeds	June-Sept	Dry, cool area	April-July	Entire U. S. except NP, PNW	To 0.5 m	Small culmed perennial, heavy seed producer, full sun	Pest plant in cultivated areas, grows in most soil conditions
Green bristlegrass (*Setaria viridis*)[1]	Seeds	July-Oct	Dry, cool area	April-July	Entire U. S.	To 1 m	Vigorous summer annual, clumped, full sun	Occurs in many soils, pest in crops, not palatable to browsers
Italian ryegrass (*Lolium multiflorum*)[1]	Seeds	May-July	Dry, cool area	Oct-Nov	Eastern U. S. and SP, NP, PNW, CA	To 1 m	Perennial in south, annual in north, hardy, forms dense root system, full sun	Cultivated for winter grazing, quick winter cover, and lawns
Japanese millet (*Echinochloa crusgalli* hybrid)[3]	Seeds	June-Sept	Dry, cool area	April-Sept	Entire U. S. except FL	To 1.5 m	Tall heavy annual, abundant seeds, full sun	Occurs in all soils, grown for waterfowl and cattle feed, is salt tolerant to some extent
Johnson grass (*Sorghum halepense*)[1,3]	Seeds	July-Oct	Dry, cool area	April-Sept	Entire U. S. except NP, MW, PNW	To 1.5 m	Hardy, fast growing, erect, strong seed producer, full sun	Planted for pastures and hay, pest in cultivated areas
Jungle rice (*Echinochloa colonum*)[1]	Seeds	June-Sept	Dry, cool area	May-Sept	Entire U. S. except NP, MW	To 0.4 m	Perennial, prostrate to erect, full sun	Good seed producer, prefers wet to moist soils

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Grasses (Continued)								
Large crabgrass (*Digitaria sanguinalis*)[1]	Seeds	June-Sept	Dry, cool area	April-Sept	Entire U. S. except NP	To 0.3 m	Creeping annual, fast growing, full sun	Occurs in all soils, pest in cultivated areas, immune to herbicides
Little hairgrass (*Aira praecox*)[1]	Seeds	June-Aug	Dry, cool area	April-June	MA, PNW, CA	To 0.2 m	Annual, tufted culms, full sun	Prefers sandy, dry coastal soils
Oats (*Avena sativa*)[3]	Seeds	May-June	Dry, cool area	Sept-Oct	Entire U. S.	To 1 m	Cool season annual, agronomic cereal crop, full sun	Occurs in almost all soil conditions, needs well-prepared seed bed
Orchardgrass (*Dactylis glomerata*)[1,3]	Seeds	June-Aug	Dry, cool area	Mar-Sept	Entire U. S.	To 1.3 m	Clumped, perennial, hardy, full sun to shade	Prefers well-drained soils and does well in many soils, cultivated for grazing, hay, and silage
Panic grass (*Panicum clandestinum*)[1]	Seeds	June-Aug	Dry, cool area	Mar-June	Eastern and mid-U. S.	To 1.3 m	Dense clumped perennials, strong rhizomes, full sun	Prefers moist sandy soil
Pearl millet (*Pennisetum glaucum*)[3]	Seeds	Sept-Oct	Dry, cool area	Mar-June	MA, SE, SP, SW	To 2 m	Robust, summer annual, heavy seed producer, full sun	Cultivated for grain and silage, prefers moist soil but tolerates drought
Perennial ryegrass (*Lolium perenne*)[1,3]	Seeds	May-July	Dry, cool area	Sept-Nov	SE, MS, SP, FL	To 1 m	Hardy, dense root system, full sun	Good winter cover, good winter wildlife food and cattle forage in the south
Prairie cordgrass (*Spartina pectinata*)[1,2,3]	Seeds	July-Oct	Dry, cool area	Apr-June	Entire U. S. except SE, FL, MS, CA	To 3 m	Tall perennial, full sun	Occurs in wet, coastal areas
Proso millet (*Panicum miliaceum*)[3]	Seeds	Sept-Oct	Dry, cool area	Mar-June	MW, SP	To 1.3 m	Summer annual, erect stems, full sun	Produces seeds in 4 months after planting, good food value, cultivated for grain
Quackgrass (*Agropyron repens*)[1]	Root stock	Sep-Mar	In sand beds or pots of sand	Mar-June	Entire U. S.	To 1.3 m	Perennial, long running root stock, hardy, full sun	Pest plant, exotic
Red fescue (*Festuca rubra*)[1,3]	Seeds	May-Aug (north)	Dry, cool area	Mar-May (north)	Entire U. S. except FL, SP, MS, SE	To 1 m	Hardy robust creeping grass forms a dense sod, shade to full sun	Cultivated extensively in mixed stands for pastures, lawns, and rights-of-ways
Redtop (*Agrostis alba*)[1,3]	Seeds	Aug-Oct	Dry, cool area	Apr-June	Entire U. S.	To 1 m	Tall hardy, stoloniferous, full sun	Cultivated for silage, hay, and grazing
Reed canary grass (*Phalaris arundinacea*)[1,3]	Seeds	Jun-Aug	Dry, cool area	Mar-June	Entire U. S.	To 2 m	Summer perennial, robust, fast growth, full sun	Prefers moist soil, but grows anywhere, cultivated on sewage areas and for pastures, good seed producer
Rescue grass (*Bromus catharticus*)[1,3]	Seeds	Jul-Oct	Dry, cool area	Apr-June	SE, MA, CA, SW	To 1 m	Robust, summer perennial, full sun	Cultivated in south as forage
Rice cutgrass (*Leersia oryzoides*)[1]	Seeds	Aug-Oct	Dry, cool area	Apr-Jul	Entire U. S.	To 1.3 m	Dense culms, perennial, much branched, shade to full sun	Prefers moist and wet soils
Rye (*Secale cereale*)[3]	Seeds	May-Jul	Dry, cool area	Sep-Nov (south) Apr-May (north)	Entire U. S.	To 1 m	Hardy cool season annual, high seed producer, full sun	Cultivated extensively for grain, cover, and green forage crops, especially in north

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Grasses (Continued)								
Saltgrass (*Distichlis spicata*)[1,2,3]	Transplants, seeds	Sep-May Jul-Sep	In sand beds or in pots of sand	Mar-June	Entire U. S. in saline areas except PNW, CA	To 0.3 m	Dense perennial, hardy, many rhizomes, good seed producer, full sun	Prefers moist, coastal areas, occurs in salt marshes and on sand dunes
Saltmeadow cordgrass (*Spartina patens*)[1,2,3]	Transplants, seedlings	Year-round (south) Mar-Oct (north)	In wet sand beds or in sand pots	Feb-Jun	NE, MA, SE, FL, MS, SP	To 1 m	Densely rooted, summer perennial, spreads best from tillers	Occurs in flooded saline areas to dry sand dunes, occurs frequently, and is successfully planted on dredged material
Sand dropseed (*Sporobolus cryptandrus*)[1]	Seeds	Sep-Oct	Dry, cool area	Apr-Jul	Entire U. S.	To 1 m	Erect perennial, hardy, slow growing, full sun	Prefers sandy soils, grows on prairie areas
Sea oats (*Uniola paniculata*)[1,2,3]	Transplants, seeds	Sep-Mar (trans) Aug-Oct (seeds)	In wet sand beds dry, cool area	Mar-June	MA, SE, FL, MS	To 2 m	Robust perennial, dense roots, full sun	Prefers sandy, coastal areas, excellent dune stabilizer, tolerates salt spray
Seashore bluegrass (*Poa macantha*)[1]	Transplants	Sep-Mar	In wet sand beds or pots of sand	Mar-June	PNW, CA	To 0.4 m	Creeping rhizomous perennial with upright culms, full sun	Prefers coastal sand dunes
Seashore paspalum (*Paspalum vaginatum*)[1]	Transplants	Sept-Mar	In wet sand beds or in sand pots	Sep-June	SE, FL, MS	To 0.4 m	Dense perennial, fast growing, full sun	Tolerates flooding and salt spray, occurs on dredged material islands in dense stands
Shoredune panic grass (*Panicum amarulum*)[1]	Seeds	Sept-Oct	Dry, cool area	Mar-May	NE, MA, FL, MS, SP	To 2 m	Upright, coarse, perennial, fast growing, full sun	Prefers sandy beach soils, tolerates salt sprays, occurs on dredged material islands
Sixweeks fescue (*Festuca octoflora*)[3]	Seeds	May-June	Dry, cool area	Mar-May	Entire U. S.	To 0.3 m	Annual, fast seed producer, full sun or shade	Cultivated as forage and hay crops
Smooth crabgrass (*Digitaria ischaemum*)[1]	Seeds	Jun-Sept	Dry, cool area	Apr-Sept	Entire U. S. except SW	To 0.3 m	Creeping, fast growing, annual, full sun	Occurs in many soil types, a pest in cultivated fields and gardens
Sorghum (*Sorghum vulgare*)[3]	Seeds	July-Oct	Dry, cool area	Apr-Sept	Entire U. S.	To 1.5 m	Upright, summer annual, heavy seed producer, full sun	Cultivated extensively as grain and silage crop, tolerates wide range of soils
Sudan grass (*Sorghum sudanese*)[3]	Seeds	July-Oct	Dry, cool area	Apr-July	Entire U. S. except NP, NE, PNW	To 3 m	Wandering, upright, annual, hardy, fast growing, full sun	Cultivated for hay and silage, tolerates wide range of soils
Switchgrass (*Panicum virgatum*)[1,3]	Seeds	June-Sept	Dry, cool area	Apr-Sept	Entire U. S. except NP, PNW, CA	To 2 m	Summer perennial, fast growing, hardy, full sun	Prefers moist soils, grows at water's edge, tolerant of salt spray
Tall fescue (*Festuca arundinacea*)[1,2,3]	Seeds	Apr-June (south) May-Aug (north)	Dry, cool area	Oct-Nov (S) Mar-May (N)	Eastern U. S. except FL; MP, PNW	To 1.5 m	Cool weather grass in south, summer grass in north, full sun	Cultivated for pastures
Texas millet (*Panicum texanum*)	Seeds	Jul-Oct	Dry, cool area	Mar-Aug	MA, SE, FL, MS, SP	To 2 m	Summer annual with spreading stems, full sun	Fast growing, considered crop weed, grows well on sand dunes
Timothy (*Phleum pratense*)[1,2,3]	Seeds	Jul-Sept	Dry, cool area	Apr-June	Entire U. S. except SP, FL, MS	To 1 m	Summer perennial, fast growing, erect, full sun	Cultivated extensively in north for hay

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Grasses (Continued)								
Torpedo grass (*Panicum repens*)[1]	Transplants	Sep-Mar	In wet soil beds or pots of sand	Sept-June	FL, MS, SP	To 0.1 m	Stout perennials, many rhizomes, dense cover, full sun	Sea beaches, prefers sandy moist soils, tolerates salt spray
Vasey grass (*Paspalum urvillei*)[1]	Seeds	July-Sept	Dry, cool area	Apr-June	FL, SE, MA, MS, SP, CA	To 2 m	Clumped, stout perennial, erect, hardy, full sun	Prefers moist soil, pasture grass, roadside cover
Virginia dropseed (*Sporobolus virginicus*)[1]	Seeds	Jun-Sept	Dry, cool area	Apr-June	MA, FL, MS	To 0.4 m	Perennial, branching rhizomes, erect culms, full sun	Occurs on sandy and muddy seashores, tolerates salt spray
Walter's millet (*Echinochloa walteri*)[1,3]	Seeds	July-Sept	Dry, cool area	April-Sept	SP, MS, FL, SE, MA, NE, GL	To 3 m	Stiff stems, abundant seeds, annual, full sun	Occurs in all soils, cultivated for waterfowl food, prefers wet soils
Wheat (*Triticum aestivum*)[3]	Seeds	May-July	Dry, cool area	Oct-Nov (winter) Mar-May (spring)	Entire U. S.	To 1 m	Winter annual, good seed producer, hardy, full sun	Cultivated extensively, tolerates cold, good cover and food crop
Wild rye (*Elymus virginicus*)[1]	Seeds	May-July	Dry, cool area	Sept-June	Entire U. S. except CA	To 1.2 m	Perennial, tufted erect culms heavy seeds, full sun	Prefers moist soils, good seed producer, tolerates salt spray somewhat
Wooly panic grass (*Panicum lanuginosum*)[1]	Seeds	July-Sept	Dry, cool area	April-June	MA, SE, FL, MS	To 0.7 m	Perennial, clumped, spreading shade and sun	Prefers moist soils, grows in woods and open areas, occurs on sea coast
Yellow bristlegrass (*Setaria lutescens*)	Seeds	July-Oct	Dry, cool area	April-July	Entire U. S. except SW, CA	To 1 m	Summer annual, good seed producer, full sun	Occurs in many soil conditions, pest in crops, not palatable to browsers
Herbs								
Alfalfa (*Medicago sativa*)[3]	Seeds (inoculated)	July-Sept	Dry, cool area	Aug-Sept or Feb-April	Entire U. S.	To 0.5 m	Perennial, much-branched legume, full sun	Requires good seedbed preparation, occurs on most soils, prefers rich, moist areas
Alsike clover (*Trifolium hybridum*)[1,3]	Seeds (inoculated)	Mar-Apr (south) June-Sept (north)	Dry, cool area	Nov-Feb (south) Mar-Jun (north)	Entire U. S.	To 0.5 m	Perennial, ascending branches full sun	Prefers moist, acidic soils, cultivated in areas other clays won't grow
Arrow-leafed tearthumb (*Polygonum sagittatum*)	Transplants, seeds	July-Sept	Dry, cool area	Mar-June	Eastern and mid-U. S.	To 0.6 m	Viney, annual, weak stemmed, spiney, full sun	Prefers moist soils
Beach pea (*Lathyrus japonicus*)[1]	Seeds (inoculated)	May-Sept	Dry, cool area	Feb-June	Entire coastal U. S.	To 0.3 m	Perennial viney plant, hardy, full sun	Prefers sandy moist soils, occurs on coastal beaches, dunes, and islands
Beach strawberry (*Fragaria chiloensis*)	Transplants	Sept-Mar	In sand beds or in pots of sand	Mar-June	PNW, SW	To 0.2 m	Perennial plants with runners full sun to shade	Prefers moist sandy soils
Big filaree (*Erodium botrys*)	Seeds	Apr-July	Dry, cool area	Sept-Nov	CA	To 0.2 m	Winter annual, full sun	Pest plant, occurs in most well-drained soils
Bird's foot trefoil (*Lotus corniculatus*)[1]	Seeds (inoculated)	June-Sept	Dry, cool area	Mar-June	NE, MA	To 0.6 m	Long rooted perennial, full sun	Pest plant, occurs in most soils, common on coasts
Bitersweet nightshade (*Solanum dulcamara*)[1]	Seeds	May-Sept	Dry, cool area	April-May	NE, MA, NP	To 2.6 m	Perennial, climbing stem, full sun to shade	Prefers moist soils and in woods, but grows in open areas
Black medic (*Medicago lupulina*)[1,3]	Seeds (inoculated)	Mar-June (south) June-Aug (north)	Dry, cool area	Nov-Feb (south) Mar-Jun (north)	Entire U. S.	To 0.3 m	Annual, shallow taproot, full sun	Prefers well-drained or dry soils, dormant in south in the summer

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Herbs (Continued)								
Black nightshade (*Solanum nigrum*)[1]	Seeds	July-Oct	Dry, cool area	Apr-Jun	Eastern U. S.	To 1 m	Erect, annual, hairy, hardy, full sun	Pest in cultivated areas, occurs in most soils
Blackseed plantain (*Plantago rugelii*)[1]	Seeds	June-Sept	Dry, cool area	Apr-Jun	Eastern and mid U. S.	To 1 m	Perennial, rootstock stout, thick, erect, hardy, full sun or shade	Pest plant, occurs in woods, fields, and waste areas
Bottlebrush (*Plantago arenaria*)[1]	Seeds	May-Oct	Dry, cool area	Apr-Jun	Eastern U. S.	To 1 m	Annual, many branched stem, full sun	Prefers well-drained open areas
Bracted plantain (*Plantago aristata*)[1]	Seeds	Jun-Oct	Dry, cool area	Apr-Jun	Entire U. S. except MW, PNW, CA, SW	To 0.5 m	Perennial, stout rootstock, erect, full sun	Prefers dry open areas
Broadleaf plantain (*Plantago major*)[1]	Seeds	May-Sept	Dry, cool area	Apr-June	Entire U. S.	To 0.2 m	Perennial, rootstock, short, thick, erect, full sun	Occurs in most soils, in waste places
Buckthorn plantain (*Plantago lanceolata*)[1]	Seeds	Apr-Nov	Dry, cool area	Mar-June	Eastern U. S.	To 0.3 m	Perennial, pubescent, short rootstock, full sun	In fields and waste places
Bush lupine (*Lupinus arboreus*)	Seeds	June-Sept	Dry, cool area soak in hot H_2O before planting	Apr-June	PNW, CA	To 0.6 m	Perennial, many branched, shrubby, full sun	In dry, open areas
Calandrinia (*Calandrinia maritima*)	Seeds	July-Sept	Dry, cool area	Mar-June	CA	--	--	In dry scrub areas, sandy coastal beaches
Camphorweed (*Heterotheca subaxillaris*)[1]	Seeds	July-Sept	Dry, cool area	Apr-June	MA, SE, FL, MS, SW, SP, MP	To 1 m	Biennial, many branched, many flowered, full sun	Prefers dry, sandy soils, sea beaches, occurs commonly on dredged material islands
Chufa (*Cyperus esculentus*)[1,2,3]	Tubers, seeds	July-Oct	Moist cold room (tubers) Dry, cool area (seeds)	Mar-June	Entire U. S.	To 0.6 m	Perennial sedge, robust, fast growing, numerous edible tubers full sun	Prefers wet to moist soils, prime wildlife food, extremely prolific
Coast deervetch (*Lotus formosissimus*)	Seeds (inoculated)	June-Sept	Dry, cool area	Apr-June	PNW, CA	To 0.5 m	Perennial, long roots, slender stems, full sun	Prefers dry, well-drained soils
Common chickweed (*Stellaria media*)[1]	Seeds	Dec-Feb	Dry, cool area	Oct-Dec	Entire U. S.	To 0.5 m	Weak, tufted annual, much branched, full sun	Pest plant in all agronomic situations
Common filaree (*Erodium cicutarium*)[1]	Seeds	Apr-July	Dry, cool area	Sept-Nov	NE, MA, SE, SP, GL, PNW, CA	To 0.2 m	Winter annual, taproots, many branched, full sun	Pest plant, occurs in most soils, prefers well-drained soils
Common lambsquarters (*Chenopodium album*)[1]	Seeds	July-Oct	Dry, cool area	April-June	Entire U. S.	To 1.3 m	Annual, erect, bushy common, shade to full sun	Pest plant, occurs in most soils, occurs on dredged material islands
Common mullein (*Verbascum thapsus*)[1]	Seeds	June-Sept	Dry, cool area	April-June	Entire U. S.	To 2.3 m	Erect, stout, biennial, full sun	Pest plant, occurs in open well-drained areas
Common purslane (*Portulaca oleracea*)[1]	Seeds	June-Sept	Dry, cool area	April-June	Entire U. S.	To 0.2 m	Annual, prostrate, free branching, deep roots, full sun	Prefers dry sandy areas
Common ragweed (*Ambrosia artimisiifolia*)[1]	Seeds	Sept-Nov	Dry, cool area	April-June	Entire U. S.	To 2.3 m	Annual, shallow roots, robust, common, full sun	Pest plant, occurs in most soils, tolerates salt spray, occurs on dredged material islands
Common spikerush (*Eleocharis palustris*)[1]	Transplants, seeds	April-Sept	In sand beds (trans.) moist, cool area	April-Sept	Entire U. S.	To 1 m	Perennial, upright, slender stems, full sun	Occurs in moist soils in interior areas

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Herbs (Continued)								
Common threesquare (*Scirpus americanus*)[1]	Transplants, seeds	Sept-Mar (trans) July-Oct (seeds)	In sand beds (trans.) moist cool area	Mar-June	Entire U. S. except SW	To 2 m	Perennial, upright, triangular stems, full sun	Occurs in moist soils in fresh and brackish areas, good wildlife food
Cow pea (*Vigna sinensis*)[1,3]	Seeds (inoculated)	June-Sept	Dry, cool area	Mar-Sept	Entire U. S.	To 0.5 m	Summer annual, viney, fast growing, good seed producer, full sun	Cultivated in most soils for human food, hay and forage, especially in the south
Crimson clover (*Trifolium incarnatum*)[3]	Seeds (inoculated)	Mar-Apr (south) June-Sept (north)	Dry, cool area	Dec-Feb (south) Mar-Jul (north)	Entire U. S.	To 0.5 m	Strong perennial in south, annual in north, procumbent stems, fast growing	Cultivated on most soils for hay and grazing, and on rights-of-ways
Croton (*Croton californicus*)	Seeds	Aug-Oct	Dry, cool area	Apr-June	CA, SW	To 1 m	Many branched, stout annual, robust, full sun	Occurs in waste areas and dry soils, pest plant
Curly dock (*Rumex crispus*)[1]	Seeds	Apr-July	Dry, cool area	Apr-June	Entire U. S.	To 1.3 m	Perennial, stout, deep tap root, erect, persistent, full sun	Pest plant, occurs in waste areas and crops and in most soils
Deerweed (*Lotus scoparius*)	Seeds	June-Sept	Dry, cool area	April-June	CA	To 0.5 m	Perennial, long tap roots, full sun	Occurs waste areas, dry soils
Dwarf spikerush (*Eleocharis parvula*)[1]	Transplants, seeds	Mar-Nov (trans) June-Sept (seeds)	In sand beds dry, cool area	Mar-June	Entire U. S. except SW	To 1 m	Perennial, tiny stems, turf-like, full sun	Occurs in moist soils in fresh, brackish areas
Filaree (*Erodium obtusiplicatum*)	Seeds	April-Sept	Dry, cool area	Nov-May	PNW, CA	To 0.3 m	Annual, tufted, ascending stems, full sun	Occurs in most soils, waste places and fields, prefers well-drained areas
Flat pea (*Lathyrus sylvestris*)[1,3]	Seeds (inoculated)	May-Sept	Dry, cool area	Feb-June	NE, MA, MRV, GL, PNW	To 2.3 m	Perennial, viney plant, forms mats, full sun to shade	Occurs in most soils, very slow growing
Flowering spurge (*Euphorbia corollata*)[1]	Seeds	April-Oct	Dry, cool area	Mar-June	Eastern and mid U. S.	To 1 m	Perennial, long stout rootstock, erect, full sun	Prefers dry soils
Giant ragweed (*Ambrosia trifida*)[1]	Seeds	July-Oct	Dry, cool area	Apr-June	Entire U. S. except PNW, CA	To 0.5 m	Annual, stout, erect, persistent, full sun	Pest plant, prefers moist soil, tolerates salt spray, common on coasts
Goosefoot (*Chenopodium murale*)[1]	Seeds	June-Sept	Dry, cool area	Mar-June	Entire U. S.	To 1 m	Annual, scruffy, erect, branched, full sun	Pest plant, occurs in most soils, in waste places
Hardstem bulrush (*Scirpus acutus*)[1,2]	Rhizomes, transplants	June-Sept	Dry, cool area	Mar-June	Entire U. S.	To 2 m	Perennial, stout, sharp stemtips, persistent, full sun	Prefers moist soils, pest in low ground pastures, extremely hardy
Hairy vetch (*Vicia hirsuta*)[3]	Seeds (inoculated)	Mar-Apr (south) Apr-Jul (north)	Dry, cool area	Nov-Feb (south) Mar-May (north	Entire U. S.	To 1 m	Annual or biennial, viney, weak stemmed, fast growing, full sun	Cultivated for forage, occurs in most soils, excellent erosion control
Hemp sesbania (*Sesbania exaltata*)[1]	Seeds	Aug-Nov	Dry, cool area	Mar-June	SW, MA, SE, FL, MS, SP	To 4 m	Annual legume, widely branched, robust, full sun	Occurs in most soils, pest in soybean fields
Hop clover (*Trifolium procumbens*)[3]	Seeds (inoculated)	Jan-Mar (south) Mar-Jun (north)	Dry, cool area	Oct-Feb (south) Jan-Apr (north)	Entire U. S.	To 0.3 m	Winter annual, low, forms carpet, procumbent, full sun	Occurs on poor dry soils, excellent nitrogen fixing legume, crowds out grasses
Horse nettle (*Solanum carolinense*)[1]	Seeds	May-Sept	Remove pulpy coat dry, cool area	Apr-June	Eastern U. S. and SP	To 1.3 m	Perennial, erect, spiny, branched, full sun	Occurs in most dry soils, pest plant in agricultural situations

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Herbs (Continued)								
Horseweed (*Erigeron canadensis*)[1]	Seeds	June-Nov	Dry, cool area	Apr-June	Entire U. S.	To 3.3 m	Annual, stout, erect, fast growing full sun	Pest plant, occurs on most soils, tolerates salt spray, common on dredged material islands
Japanese clover (*Lespedeza striata*)[3]	Seeds (inoculated)	May-Sept	Dry, cool area	Feb-April	Entire U. S.	To 1 m	Annual, erect, many branched, full sun	Cultivated for forage, and silage, excellent on poor well-drained soils
Jerusalem artichoke (*Helianthus tuberosus*)	Seeds	Sept-Oct	Dry, cool area	Apr-June	Eastern U. S. mid-U. S.	To 4 m	Perennial, fleshy, root-stock, tubers, stout, erect	Prefers moist soil, tubers are edible
Korean clover (*Lespedeza stipulacea*)[1]	Seeds (inoculated)	May-Sept	Dry, cool area	Feb-Apr	Entire U. S.	To 1 m	Annual, erect, many branched, full sun	Cultivated for forage, hay, and silage, excellent on poor well-drained soils
Ladino clover (*Trifolium repens* var. *latum*)[3]	Seeds (inoculated)	Mar-Apr (south) Apr-Jul (north)	Dry, cool area	Nov-Jan (south) Feb-Mar (north)	Entire U. S.	To 1 m	Perennial, fast growing, fleshy stems, creeping, full sun	Cultivated for forage, hay, and silage, excellent on poor, well-drained soils
Ladysthumb (*Polygonum persicaria*)[1]	Seeds	June-Oct	Dry, cool area	Apr-June	Entire U. S.	To 0.6 m	Annual, ascending stems, variable branching, full sun	Prefers moist soils, in waste places, pest plant in some areas
Lespedeza (*Lespedeza striata*)[3]	Seeds (inoculated)	May-Sept	Dry, cool area	Feb-May	Entire U. S.	To 0.6 m	Perennial, shrubby, full sun	Cultivated for forage, hay, and silage, highway rights-of-ways, well-drained soils
Lupine (*Lupinus polyphyllus*)	Seeds	May-Sept	Dry, cool area soak with hot H_2O prior to planting	Apr-June	PNW, CA, SW	To 0.5 m	Perennial, shrubby, full sun	Prefers dry, sandy soils
Malta starthistle (*Centaurea melitensis*)	Seeds	Apr-Sept	Dry, cool area	Feb-Apr	Entire U. S.	To 1.3 m	Annual, much branched, spiny yellow flowers, full sun	Occurs in most soils, waste and cultivated areas, pest plant
Mapleleaf goosefoot (*Chenopodium hybridum*)[1]	Seeds	Jul-Sept	Dry, cool area	Apr-June	Entire U. S. except PNW, CA	To 2.5 m	Annual, erect, bright green, branched, shade to full sun	Occurs in woods and thickets or in open, most soil types
Marsh pea (*Lathyrus palustris*)[1]	Seeds (inoculated)	May-Sept	Dry, cool area	Feb-June	Entire U. S.	To 1.3 m	Perennial, viney shrub, very persistent, full sun	Prefers moist areas
Marsh pepper (*Polygonum hydropiper*)[1]	Seeds	Jul-Sept	Dry, cool area	Mar-June	Entire U. S.	To 0.6 m	Annual, erect, reddish green, may be branched, full sun	Occurs in moist waste places, sometimes in standing water
Maximillian's sunflower (*Helianthus maximilliani*)	Seeds	Aug-Nov	Dry, cool area	Apr-Jul	MA, SE, MS, SP, MP, NP, PNW	To 2 m	Upright, coarse, stout, annual, full sun	Occurs in most soils, attractive flowers
Mexican tea (*Chenopodium ambrosioides*)[1]	Transplants, seeds	Aug-Oct	Dry, cool area	Apr-June	Entire U. S.	To 1 m	Annual in north, perennial in south, much branched, erect, full sun	Pest plant, occurs in most soils, in cultivated and waste areas
Musk filaree (*Erodium moschatum*)	Seeds	Feb-July	Dry, cool area	Nov-April	CA	To 0.5 m	Winter annual, semierect, full sun	Prefers dry well-drained soils
Narrowleaf vetch (*Vicia angustifolia*)[1,3]	Seeds	Feb-Apr (south) Apr-Jun (north)	Dry, cool area	Oct-Dec (south) Feb-May (north)	Entire U. S.	To 1 m	Perennial, viney, trailing, spreading, full sun	Cultivated for pastures, hay, and silage

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Herbs (Continued)								
Nodding smartweed (Polygonum lapthifolium)[1]	Seeds	June-Sept	Dry, cool area	March-June	Entire U. S.	To 1 m	Annual, much branched, nodes swollen, good seed producer, full sun	Occurs in most soils and in waste and cultivated areas
Nutsedge (Cyperus filiculmis)[1]	Corms, seeds	June-Aug	Dry, cool area	March-June	NP, MP, SP, FL	To 0.5 m	Perennial, hard oblong corms, ascending, full sun	Occurs in dry fields and on hills
Olney threesquare (Scirpus olneyi)[1]	Transplants, seeds	Sept-March	In sand beds or in sand pots	April-June	Entire U. S. coastline	To 2.3 m	Perennial, upright, stems 3-winged, full sun	Occurs in coastal and fresh moist areas, tolerates salinity
Orache (Atriplex patula)[1]	Seeds	Aug-Oct	Dry, cool area	April-June	Entire U. S. coastline	To 1 m	Annual, widely branched, fruiting bracts, fleshy, full sun	Occurs in saltmeadows, along coasts, and inland areas
Partridge pea (Cassia fasciculata)[1,3]	Seeds (inoculated)	July-Oct	Dry, cool area, soak seeds in water before planting	April-June	Eastern U. S.	To 1 m	Annual, widely branched, erect, spreading, full sun	In dry soils, common in south in cultivated fields and disturbed areas
Pennsylvania smartweed (Polygonum pennsylvanicum)[1]	Seeds	July-Sept	Dry, cool area	March-June	Eastern and mid U. S.	To 1.3 m	Annual, ascending, branched stems, full sun	Occurs on most soils, prefers moist soil, a sometimes pest plant
Pickleweed (Rumex occidentalis)[1]	Seeds	May-Aug	Dry, cool area	April-June	CA, PNW, NE, SW	To 1 m	Perennial, stout stem, erect, unbranched, full sun	Prefers wet places
Pokeberry (Phytolacca americana)[1]	Seeds	Sept-Oct	Dry, cool area	Mar-June	Entire U. S. except NP, PNW, MW, SW	To 3 m	Robust perennial, with several purple stems, full sun to shade	Occurs in most soil types, and waste places
Prostrate knotweed (Polygonum aviculare)[1]	Seeds	June-Oct	Dry, cool area	Apr-June	Entire U. S.	To 0.6 m	Annual, prostrate or ascending stems, creeping full sun	Pest plant in many areas, occurs in most soils
Prostrate pigweed (Amaranthus blitoides)	Seeds	June-Oct	Dry, cool area	Apr-June	NE, GL, MRV, NP	To 0.6 m	Annual, many branched, prostrate, spreading, full sun	Prefers well-drained soils, occurs in waste areas, pest plant
Prostrate spurge (Euphorbia supina)	Seeds	May-Sept	Dry, cool area	Mar-June	Entire U. S.	To 0.5 m	Perennial, procumbent branches, stout at rootstock, full sun	Prefers well-drained soils
Purple nutsedge (Cyperus rotundus)[1]	Tubers, seeds	July-Sept	Moist, cool area (tubers) dry, cool area (seeds)	March-July	Entire U. S.	To 0.5 m	Perennial, extremely hardy and persistent, full sun	Pest plant in lawns, gardens, fields, pastures
Purple vetch (Vicia americanus)[1]	Seeds (inoculated)	Mar-May (south) May-Jul (north)	Dry, cool area	Nov-Feb (south) Mar-May (north)	Entire U. S.	To 1 m	Perennial, viney, trailing, spreading, full sun	Cultivated for pastures, hay, and silage
Red clover (Trifolium pratense)[1,3]	Seeds (inoculated	Mar-Apr (south) Apr-Sep (north)	Dry, cool area	Jan-Mar (south) Mar-Jun (north)	Entire U. S. except MW	To 0.6 m	Perennial, ascending stems, many branched, full sun	Cultivated as forage and hay crops, soil conservation areas
Redroot pigweed (Amaranthus retroflexus)[1]	Seeds	June-Oct	Dry, cool area	March-June	Entire U. S.	To 1 m	Coarse, summer annual, deep red taproot, very hardy, and persistent, shade to full sun	Occurs on most soil types, pest plant in agronomic and feedlot situations
Reseeding soybean (Glycine ussuriensis)[3]	Seeds	Sept-Nov	Dry, cool area	Mar-July	SE, MS	To 4 m	Annual legume, viney stems, full sun	Cultivated as waterfowl food, occurs in most soils
River bulrush (Scirpus fluviatilis)[1]	Root stock	Sept-April	In sand beds or pots of sand	April-June	NE, MA, SE, CA	To 2 m	Perennial, erect, widely spreading seed head, full sun	Occurs in moist areas and interior U. S.

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Herbs (Continued)								
Saltmarsh bulrush (Scirpus robustus)[1,2]	Root stock	Sept-March	In sand beds or pots of sand	March-June	MS, SP, CA, PNW	To 2 m	Perennial, spiney seed, triangular stems, full sun	Prefers marshes, occurs on dredged material islands
Saltwort (Salsola kali)[1]	Transplants	Sept-March	In sand beds or in pots of sand	March-June	NE, MA, SE, FL	To 0.6 m	Annual, spiny, much branched, gray leaves, full sun	Prefers coastal moist areas, tolerates brackish soils
Sea blite (Suaeda maritima)[1]	Seeds	July-Sept	Dry, cool area	March-June	Entire U. S. in salt marshes	To 1 m	Annual, much branched, full sun	Prefers coastal moist areas, tolerates salt spray
Sea ox-eye (Borrichia frutescens)[3]	Seeds, transplants	July-Sept (seeds) Sept-March (trans.)	Dry, cool area (seeds) B&B or potted (trans.)	Feb-May	Eastern and southern U. S. coasts	To 0.5 m	Shrubby, fleshy, gray foliage, full sun	Occurs in sandy, coastal areas, tolerates salinity
Seashore lupine (Lupinus littoralis)[1]	Seeds	May-Sept	Dry, cool area, soak in H_2O before planting	March-June	PNW, CA	To 0.5 m	Perennial, scrubby, full sun	Prefers sandy beaches and marshes
Seaside dock (Rumex maritima)[1]	Seeds	July-Oct	Dry, cool area	April-June	Entire U. S. except SE, FL, MS	To 0.1 m	Perennial, deep roots, erect, fast growing, full sun	Prefers moist sandy areas, tolerates salt spray
Seaside goldenrod (Solidago sempervirens)[1]	Seeds	Aug-Dec	Dry, cool area	April-June	Eastern and southern U. S. coasts	To 2.6 m	Perennial, stout, erect, very leafy, large flower, full sun	Occurs on coasts and dredged material islands
Seaside plantain (Plantago maritima)[1]	Transplants, seeds	Mar-Oct (trans) Jun-Sept (seeds)	In sand beds or pots, dry, cool area	March-June	Entire coastal U. S.	To 0.2 m	Annual and perennial, fleshy rootstock and stems, full sun	Prefers salt marshes and seashores, tolerates salinity
Sericea lespedza (Lespedeza cuneata)[3]	Seeds	Sept-Dec	Dry, cool area	March-June	FL, MP, MA, SE, NRV, SP, MS	To 1 m	Woody perennial, dense fine foliage, good seed production, full sun	Occurs in moist soils, used on rights-of-ways, in pastures, hay fields, and conservation projects
Sheep sorrel (Rumex acetosella)[1]	Seeds	May-June	Dry, cool area	Feb-April	Entire U. S.	To 0.3 m	Perennial, basal rosette, full sun	Grows in infertile acid soils, will die in fertile soils
Showy tick-trefoil (Desmodium canadense)[1]	Seeds (inoculated)	July-Sept	Dry, cool area	April-June	Eastern U. S.	To 1.6 m	Perennial, erect, much branched, pubescent, shade or sun	Prefers rich soils, grows in woods or open areas
Silverleaf croton (Croton punctatus)[1]	Seeds	Aug-Oct	Dry, cool area	April-June	FL, SE, MS	To 1 m	Annual, many branched, silver leaves, full sun	Occurs in coastal soils, tolerates salt spray, tolerates drought
Southern bulrush (Scirpus californicus)[1]	Root stock	Sept-March	In sand beds or pots of sand	March-June	SE, MS, FL, CA	To 4 m	Perennial, triangular stems, upright, droopy spikelets, full sun	Occurs in coastal moist areas, tolerates brackish soils
Southern ragweed (Ambrosia bidentata)[1]	Seeds	July-Oct	Dry, cool area	April-June	SE, MS, SP	To 1 m	Annual, hirsute, many branched, full sun	Occurs in dry upland soils, pest plant, occurs in waste areas
Soybean (Glycine max)[1,2,3]	Seeds (inoculated)	Sept-Oct	Dry, cool area	April-July	Entire U. S.	To 0.6 m	Annual, fast growing, high seed production, full sun	Cultivated extensively for beans, excellent wildlife food
Spotted burclover (Medicago arabica)	Seeds (inoculated)	Feb-April (south) April-July (north)	Dry, cool area	Nov-Jan (south) Feb-May (north)	Entire U. S.	To 0.5 m	Annual, spreading, stout, spiny seeds, full sun	In poor, dry soils
Spotted spurge (Euphorbia maculata)[1]	Seeds	June-Nov	Dry, cool area	April-July	Entire U. S.	To 0.4 m	Annual, branched stem, prostrate, spreading, full sun	Prefers dry soils

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Herbs (Continued)								
Squarestem spikerush (*Eleocharis quadrangulata*)	Transplants, seeds	Apr-Jul (trans.) Jun-Aug (seeds)	In sand beds or pots (trans.), dry, cool area (seeds)	March-July	Entire U. S.	To 1 m	Perennial, slender stems, square stems, full sun	Prefers moist areas, occurs on coasts in fresh water
Sunflower (*Helianthus giganteus*)[1]	Seeds	July-Oct	Dry, cool area	April-June	Eastern and mid U. S.	To 4 m	Perennial, fleshy roots, creeping rootstock, branching, full sun	Prefers moist areas, stems often purple, showy flowers
Schweinitz's nutsedge (*Cyperus schweinitzii*)[1]	Seeds	Aug-Oct	Dry, cool area	April-June	NE, GL, MRV, NP, MP	To 1 m	Perennial, thickened corms, slender stems, full sun	Prefers sandy soils, and moist areas
Tansy mustard (*Descurainia pinnata*)[1]	Seeds	May-July	Dry, cool area	March-May	Entire U. S. except SW	To 0.6 m	Annual, erect, branched, slender ascending branches, full sun	Prefers dry soils
Tropic croton (*Croton glandulosus*)[1]	Seeds	Aug-Oct	Dry, cool area	April-June	SE, FL, MS, SP, MA, MRV	To 1.5 m	Annual, rough, hardy, full sun	Pest in pasture areas, occurs in moist soils
Tumble-weed (*Amaranthus albus*)[1]	Seeds	June-Sept	Dry, cool area	Mar-June	Entire U. S.	To 1 m	Annual, pale green, erect, bushy branched	Occurs in most soils, prefers dry
Virginia pepperweed (*Lepidium virginicum*)[1]	Seeds	May-Nov	Dry, cool area	Mar-June	Entire U. S. except CA, PNW	To 0.5 m	Many branched, hardy, full sun	In dry soils, pest plant in fields, on many dredged material islands
Western ragweed (*Ambrosia psilostachya*)[1]	Seeds	Sept-Nov	Dry, cool area	Apr-June	MW, CA, SW, NE, GL, NP, MP, SP	To 2 m	Perennial, creeping rootstock, hardy, full sun	Prefers well-drained soils, a pest plant
White clover (*Trifolium repens*)[1,2,3]	Seeds (inoculated)	Mar-May (south) May-Sep (north)	Dry, cool area	Jan-Mar (south) Mar-Jun (north)	Entire U. S. except MW	To 0.3 m	Shallow rooted perennial with creeping branches, full sun	Cultivated as pasture and hay crops, occurs on moist soils
White sweetclover (*Melilotus alba*)[1]	Seeds (inoculated)	Apr-May (south) Jun-Nov (north)	Dry, cool area	Nov-Feb (south) Mar-May (north)	Eastern U. S.	To 3.3 m	Annual, erect or ascending, branching, full sun	Roadsides, pastures, lawns, occurs in moist soils
Wild bean (*Strophostyles helvola*)[1]	Seeds (inoculated)	Sept-Oct	Dry, cool area	March-June	Eastern and mid-U. S.	To 3 m	Summer annual legume, viney, full sun	Occurs on beaches, tolerates salt spray
Wild buckwheat (*Polygonum convolvulus*)[1]	Seeds	June-Nov	Dry, cool area	Mar-June	Entire U. S.	To 1 m	Annual, viney plant, rapid growth, full sun	Occurs in most soils, a pest plant in crops
Wild sensitive pea (*Cassia nictitans*)	Seeds (inoculated)	June-Nov	Dry, cool area	Mar-June	Entire U. S.	To 0.3 m	Annual, erect, branching, full sun	Prefers dry soil
Wild strawberry (*Fragaria virginiana*)	Seeds, transplants	Mar-May (south) May-Jul (north)	In sand beds (trans.) dry, cool area (seeds)	Sept-Feb	Eastern and mid U. S.	To 0.1 m	Perennial, stout, slender stalks, shade or sun	Prefers dry, rich soil, edible berries
Woolly croton (*Croton capitatus*)[1,3]	Seeds	Aug-Oct	Dry, cool area	April-June	MA, SE, MS, SP, MP, MRV	To 2.3 m	Robust, branching annual, good seed production, full sun	Pest in pastures, grows on most soils, prefers sandy areas
Woolly indianwheat (*Plantago purshii*)[1]	Seeds	May-Aug	Dry, cool area	March-June	MW, SP, NP, MP	To 0.3 m	Annual, ascending leaves, slender stems, full sun	Prefers dry plains and prairies, other dry areas
Yellow starthistle (*Centaurea solstitialis*)[1]	Seeds	July-Sept	Dry, cool area	April-June	NE, MA, MRV, MW, CA	To 0.6 m	Annual, branched, winged stems, full sun	Pest plant in cultivated areas
Yellow sweetclover (*Melilotus officinalis*)[1]	Seeds (inoculated)	May-Jun (south) Jul-Nov (north)	Dry, cool area	Nov-Feb (south) Apr-Jun (north)	Eastern U. S.	To 0.3 m	Annual, erect or ascending, branching, full sun	Occurs in waste areas and fields, most soils

(Continued)

Table 2 (Continued)

Species	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
[illegible]	Seeds	Sept-Nov	Dry, cool area	March-June	NE, MA, SP, SW, GL, MRV	To over 8m	Twining, woody vine, ascending trees or trailing on ground	Prefers rich, moist soil
[illegible]	Tuber, seeds	Sept-Mar (tubers) June-Sep (seeds)	In soil beds, dry, cool area	Feb-June	MA, SE, FL, MS, SP	Long trailing stems	Tuber rootstocks, stout, hardy, evergreen, spines, shade	Prefers moist areas in woods and thickets
[illegible]	Rooted stems, seeds	Sept-April	In sand beds, dry, cool area	Mar-June	Eastern U. S. and SP	To 4 m	Perennial, twining, large roots	Prefers sandy beaches and dunes
[illegible] greenbrier ([illegible])[1]	Seeds	May-Aug	Dry, cool area	Mar-June	Eastern and mid-U. S.	Long trailing stems	Woody, 4-angled shoots, spiny, shade to sun	Prefers moist areas in woods and thickets, occurs in dry areas
[illegible] (Bignonia capreolata)	Seeds	May-August	Dry, cool area	Mar-June	SE, MS, FL, MRV	To 20 m	Woody, cross visible in cross-section, shade or sun	Prefers moist woods, occurs in moist open areas
Fox grape (Vitis labrusca)[1]	Seeds	Aug-Sept	Remove pulpy coat dry, cool area	Mar-June	MA, NE, MRV, SE	To 30 m	Climbing, large stem, shade	Prefers thickets, native stock for cultivated grape hybrids
Fringed catbrier (Smilax bona-nox)[1]	Tuber, seeds	Sept-Mar (tubers) Apr-Jul (seeds)	In soil beds (tubers) dry, cool area (seeds)	Apr-June	Eastern and mid-U. S.	Long trailing stems	Woody, 4-angled, large tubers, spiny leaves and stems, shade or sun	Prefers thickets, moist areas, occurs in dry habitats
Frost grape (Vitis vulpina)[1]	Transplants	June-Oct	Remove pulpy coat dry, cool area	Mar-June	NE, MA, SE, MW	Long trailing stems	Climbing, pubescent, thin shining leaves, shade or sun	Prefers moist rocky areas, occurs in open moist areas
Japanese honeysuckle (Lonicera japonica)[1]	Root stock, transplants	June-Sept	Dry, cool area	Feb-June	Entire U. S.	Long climbing stems	Pubescent, fragrant, persistent, shade or sun	Pest plant in unkept areas, excellent forage plant
Kudzu (Pueraria lobata)[3]	Root stock, transplants	Sept-March	In soil beds or pots of soil	Feb-June	Entire U. S.	Long climbing stems	Hairy, 3-foliate leaves, sun or shade	Pest plant in unkept areas, excellent cover vine, ornamental
Lanceleaf greenbrier (Smilax smallii)	Seeds	April-August	Dry, cool areas	Mar-June	SE, FL, SP, MS	Long trailing stems	Woody, slender, no tubers or spines, shade or sun	Prefer dry thickets
Muscadine grape (Vitis rotundifolia)[1,3]	Seeds, transplants	Aug-Oct	Remove pulpy coat dry, cool areas	March-June	SE, MA, FL, SP, MP, MS	Long trailing stems	Woody, slender stems, large leaves shade or sun	Prefers moist sandy soil in thickets, occurs in silt and clay in open
Peppervine (Ampelopsis arborea)[1]	Seeds	Sept-Oct	Dry, cool area	March-June	Entire U. S.	Long climbing stems	Numerous tendrils, aerial roots, fast growing, dense cover, sun or shade	Prefers wood and thickets, dry soil, but occurs in open areas
Sawbrier (Smilax glauca)	Seeds	Sept-Mar (tubers) June-Aug (seeds)	In soil beds (trans.) dry, cool area (seeds)	March-May	Eastern U. S. and SP	Long trailing stems	Deep, tuberous rootstock, stout spines, shade or sun	Prefers dry sandy soil, also called sassparilla
Summer grape (Vitis aestivalis)[1]	Seeds	Sept-Oct	Remove pulpy coat, dry, cool area	March-June	SE, MS, FL	Long trailing vine	Evergreen, coarse-stemmed, persistent, sun or shade	Prefers dry soil in woods, it occurs in open
Supplejack (Berchemia scandens)[1]	Seeds, transplants	May-August	Dry, cool area	March-June	MS, SE, FL, SP	High climbing stems	Shrub, tough, stout leaves and stems	Prefers moist woods, but occurs in open areas
Virginia creeper (Parthenocissus quinquefolia)[1]	Seeds	Aug-Oct	Remove pulpy coat dry, cool areas	March-June	NE, MA, MRV, MS, SP, MP, NP	High climbing stems	Large leaves, bark loose and shreddy, tendrils, shade or sun	Prefers dry soil in thickets, occurs in the open
Wild bamboo (Smilax auriculata)[1]	Seeds	Oct-Nov	Remove pulpy coat dry, cool area	March-June	SE, MS, FL	Long trailing vine	Evergreen, coarse stemmed, persistent, sun or shade	Forms low thickets in the open or wood areas

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Shrubs and Small Trees								
American elderberry (Sambucus canadensis)[1]	Transplants, seeds	Sept-March July-Sept	In nursery, dry, cool place	Feb-June	Eastern and mid-U. S.	To 9 m	Deciduous, many stemmed, large flowers, full sun	Prefers moist soils, but occurs over wide soil ranges
American hornbeam (Carpinus caroliniana)	Transplants	Sept-March	B&B* or potted in nursery	Feb-June	Eastern and mid-U. S.	To 9 m	Deciduous, round crown, partial or full shade	Prefers dry soils, often is understory in open woods
American plum (Prunus americana)[1]	Transplants, seeds	Sept-March July-Sept (seeds)	B&B or potted in nursery, dry, cool place	Feb-June	Eastern and mid-U. S.	To 9 m	Deciduous, spreading crown, full to partial sun	Prefers moist soils, occurs in dense thickets, edible fruit
Arrowwood viburnum (Viburnum dentatum)	Transplants	Sept-March	B&B or potted in nursery	Feb-May	MS, SE	To 3 m	Deciduous, shrubby, large flowers, partial sun	Prefers moist soils, common as understory
Autumn olive (Eleagnus umbellata)[1,2,3]	Transplants	Sept-March	B&B or potted in nursery	March-June	MA, SE, MS, FL, SP	To 5 m	Evergreen in south deciduous in north full sun, shrub full to partial sun	Prefers dry soils, drought resistent, very hardy
Bayberry (Myrica pensylvanica)[1]	Transplants	Sept-March	B&B or potted in nursery	Feb-June	NE, MA	To 3 m	Evergreen, very dense, full sun, shrub	Prefers sandy soils, occurs in coastal areas, common on dredged material, important habitat plant
Beach plum (Prunus maritima)[1]	Transplants, seeds	Oct-March	B&B or potted in nursery	Feb-May	MA, NE	To 2 m	Deciduous, low, many branched, full sun	Prefers sandy, coastal soils, edible fruit
Bearberry (Arctostaphylos uva-ursi)	Transplants, seedlings	Sept-March	B&B or potted in nursery, cleaned and stratified (seeds)	Feb-June	NE, MA, GL, MRV, NP, MW, CA, PNW	To 0.2 m	Evergreen, spreading shrubby, slow growth, shade to full sun	Occurs in dry, sandy, and rocky soils
Beautyberry (Callicarpa americana)[1]	Transplants, seeds	Sept-March	B&B or potted in nursery	Feb-June	SE, MS, FL, MA	To 2.5 m	Deciduous, shrubby abundant fruit, full sun to partial shade	Grows in variety of soil conditions, does best as understory plant
Bicolor lespedeza (Lespedeza bicolor)	Transplants	Sept-Nov Mar-June	B&B or potted in nursery	March-June	MA, SE, FL, SP	To 3 m	Deciduous legume, irregular shrub, full sun	Tolerates poor soils and drought conditions, prefers well-drained, dry areas
Black raspberry (Rubus occidentalis)[1]	Transplants	Sept-March	Potted in nursery or soil bed	Feb-June	NE, MA, SE, SP, MP	To 4 m	Deciduous, spiny, glaucous, roots from stem tips, full sun	Occurs in most soils, persistent, pest plant in pastures
Blue brush (Ceanothus thryiflorus)	Seeds	June-Aug	Dry, cool area	Feb-June	PNW, CA	To 1 m	Deciduous, shrubby, shade to sun *	Occurs in dry, rocky, sandy areas, used for tea substitute by pioneers
Blue elderberry (Sambucus caerulea)	Seeds	July-Oct	Cleaned and stratified seeds	Feb-June	SW, CA, PNW	To 8 m	Deciduous, many stemmed, showy flowers, full sun	Occurs in most soils in open or in edges of woods
Brazilian peppertree (Schinus terebinthifolius)[1]	Cuttings, transplants	Oct-April	In rooting medium (cuttings), B&B or potted (trans.)	Oct-June	FL	To 10 m	Evergreen, many branched, tropical, showy flowers, full sun	Occurs in most soils below freeze line in Florida, common on dredged material islands
Brewer saltbush (Atriplex breweri)	Seeds	June-Sept	Dry, cool area	Feb-June	CA, SW	To 0.5 m	Shrubby, dense, full sun	Occurs in dry, saline soil, also known as sage brush
Buffaloberry (Shepheria candensis)[1]	Seeds	July-Sept	Cleaned and stratified	March-June	NE, MA, GL, NP, SW	To 2.5 m	Deciduous, shrubby, shade to sun	Occurs in moist soils

(Continued)

* Balled and burlapped.

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Shrubs and Small Trees (Continued)								
Bush lupine (Lupinus albifrons)	Seeds	July-Sept	Dry, cool area	March-June	PNW, CA	To 0.5 m	Perennial, shrubby, many seed pods, full sun to part shade	Occurs in dry and well-drained soils, both in open and in edges of woods
California blackberry (Rubus ursinus)[1]	Seeds, transplants	Sept-Apr (trans.) Jun-Jul (seeds)	B&B or potted in nursery (transr.) cleaned and stratified (seeds)	Feb-May	PNW, CA	To 1 m	Perennial, woody, many branched, arching, full sun	Occurs in dry, well-drained areas in most soils, very dense wood
California buckthorn (Rhamnus californica)	Transplants	Sept-Mar	B&B or potted in nursery	Feb-May	PNW, CA	To 2 m	Deciduous, shrubby, thorny, full sun	Occurs in dry soils
Canadian serviceberry (Amelanchier canadensis)[1]	Seeds, transplants	Sept-Apr (trans.) May-June (seeds)	B&B or potted in nursery (trans.) cleaned and stratified (seeds)	Mar-June	SE, NE, MA	To 7 m	Deciduous, upright, shrubby, pubescent young twigs, full to partial sun	Prefers moist areas, occurs in most soils
Carolina ash (Fraxinus caroliniana)	Transplants	Sept-March	B&B or potted in nursery	Mar-June	MA, SE, FL, MP, MS, SP	To 14 m	Deciduous, pubescent, 5-7 leaflets, shade or sun	Occurs in moist or wet soils, in woods or in open
Carolina rose (Rosa carolina)[1]	Hips, cuttings	July-Oct (hips) April-Oct (cuttings)	Cleaned and stratified (hips), in rooting medium (cuttings)	Feb-June	Eastern and mid U. S.	To 1.5 m	Deciduous, thorny, arching, fast growing, full sun	Occurs in most soils, well-drained to dry, open areas
Cascara buckthorn (Rhamnus purshiana)[1]	Seeds	July-Sept	Cleaned and stratified	Apr-June	PNW, CA	To 7 m	Deciduous, shrubby, shade to full sun	Occurs in most soils, open areas or in woods
Cherry laurel (Prunus caroliniana)[1,3]	Transplants, cuttings	Sept-March	B&B or potted in nursery	March-June	SE, MS, MA	To 10 m	Evergreen, shrubby, ascending branches, full sun to partial shade	Occurs in most soils, cultivated as an ornamental
Chickasaw plum (Prunus angustifolia)[1]	Seeds	June-July	Cleaned and stratified	Feb-May	SE, MS, MA, SP	To 2 m	Deciduous, shrubby, thorny, large fruit, full sun	Ferns, thickets, occurs in most dry and well-drained soils
Common buckthorn (Rhamnus caroliniana)	Transplants	Sept-March	B&B or potted in nursery	Feb-June	SE, FL, MS, SP	To 10 m	Deciduous, shrub or tree, seeds few, shade or sun	Prefers moist soils, in open or edges of woods
Common chokecherry (Prunus virginiana)[1]	Seeds	Aug-Sept	Cleaned and stratified	Mar-June	MS, MRV, GL, MP, MW, SW, PNW, CA	To 10 m	Deciduous, shrubby underground stems, forms thickets, shade or sun	Occurs in most soils including sand dunes and rocky areas
Common deerberry (Vaccinium stamineum)	Transplants, seeds	Sept-Mar (trans.) Apr-June (seeds)	B&B or potted, cleaned and stratified	Feb-May	Eastern U. S.	To 2 m	Deciduous, much branched, irregular, shade or sun	Occurs in dry soils in woody, thickets, and edges of woods
Common juniper (Juniperus communis)[1]	Seeds, seedlings	Sept-March (seedlings) Sept-Nov (seeds)	B&B or potted in nursery, stratified at 5°C	March-June	GL, MS, SE		Spreading, narrowleaf evergreen shrub, full sun	Used as an ornamental shrub over a large range, quite hardy, tolerates alkaline soils
Common sweetleaf (Symplocos tinctoria)	Transplants	Sept-March	B&B or potted in nursery	Feb-May	MA, SE, MS	To 3 m	Deciduous, large waxy leaves, sweet taste, shade or sun	Occurs in woods and thickets, mostly in shade, sometimes in open areas
Crabapple (Malus angustifolia)[1]	Transplants, seeds	Sept-March (trans.) May-July (seeds)	B&B or potted (trans.) cleaned and stratified (seeds)	Feb-May	MA, SE, FA, MS	To 7 m	Deciduous, thorny, bitter fruit, showy flowers, full sun	Occurs in most dry soils, in open thickets
Dahoon (Ilex cassine)[1]	Transplants	Oct-March	B&B or potted in nursery	Feb-May	SE, FL, MS	To 8.5 m	Evergreen, thorny, slow growing, full sun	Prefers sandy moist areas, in woods or open, in coastal areas
Downy serviceberry (Amelanchier arborea)	Transplants	Sept-March	B&B or potted in nursery	Feb-June	SE, MS	To 14 m	Deciduous, large leaves, pubescent, shade or sun	Prefers dry, soils, in woods or open areas

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Shrubs and Small Trees (Continued)								
Eastern hophornbeam (*Ostrya virginiana*)[1]	Transplants	Sept-March	B&B or potted in nursery	Feb-June	NE, GL, MP, SP, MRV, SE, MA, FL, MS	To 10 m	Deciduous, hardwood, leaves yellow-green, shade or sun	Prefers dry soils, in woods or in open areas
Elderberry (*Sambucus glauca*)[1]	Seeds	June-Aug	Cleaned and stratified	Feb-June	MW, PNW, CA, SW	To 7 m	Deciduous, large seed-heads, few branches	Occurs in dry soils
Elderberry (*Sambucus callicarpa*)[1]	Seeds	June-Aug	Cleaned and stratified	Feb-June	PNW, CA	To 7 m	Deciduous, shrubby	Occurs in dry soils
Evergreen blackberry (*Rubus laciniatus*)[1]	Seeds	June-July	Cleaned and replanted	Aug-Sept	Eastern U. S.	To 4 m	Stout, deciduous, arching branches, persistent	Pest plant in pastures, cultivated for fruit
Firethorn (*Pyracantha coccinea*)[3]	Seeds, transplants	Sept-Jan (seeds) Sept-Mar (trans.)	Cleaned and stratified (seeds), B&B or potted (trans.)	Feb-May	MA, SE, SP, FL,MS	To 4 m	Evergreen, irregular, hardy, showy flowers and fruit, full sun	Occurs in most soils, does well in wet or dry areas, cultivated as ornamental
Flowering dogwood (*Cornus florida*)[1]	Transplants	Oct-Feb	B&B or potted in nursery	Feb-April	Eastern U. S. and SP	To 15 m	Deciduous, bushy crown, showy flowers, shade or sun	Occurs in dry soils, cultivated as ornamental, in woods or in open areas
Gallberry (*Ilex glabra*)[1]	Transplants	Oct-March	B&B or potted in nursery	Feb-May	NE, MA, SE, FL, MS	To 2 m	Evergreen, shrubby, dotted underside of leaves, shade or sun	Prefers sandy soil, occurs on coasts
Gray dogwood (*Cornus racemosa*)[1]	Transplants	Sept-March	B&B or potted in nursery	Feb-May	Eastern and mid-U. S.	To 2 m	Dense deciduous, shrubby, gray bark, shade or sun	Prefers moist soils, occurs in thickets, woods, open areas
Ground blueberry (*Vaccinium myrsinites*)[1]	Seeds	May-June	Cleaned and stratified	Jan-March	SE, MS, MA	To 2 m	Evergreen, pubescent, few branches, shade or sun	Prefers moist areas, in woods or open areas
Groundsel tree (*Baccharis halimifolia*)[1]	Seeds, transplants	Sept-Nov	B&B or potted (trans.) dry, cool area (seeds)	Jan-May	SE, MA, MS, SP, NE	To 3.5 m	Many branched, deciduous shrubby, full sun	Prefers moist areas, occurs on sea coasts, tolerates salinity
Halberd-leaved willow (*Salix hastata*)[1,3]	Transplants	Sept-March	B&B or potted	Feb-June	Entire U. S.	To 10 m	Many branched, deciduous full sun	Cultivated as ornamental
Hibiscus (*Hibuscus moscheutos*)[1]	Seeds, transplants	Sept-Mar (trans.) June-Aug (seeds)	B&B or potted (trans.) dry, cool area (seeds)	Feb-June	NE, SE, MA, FL, MS, SP	To 2.3 m	Deciduous, many branched, erect, large seed pods, full sun	Prefers moist soils, tolerates some salinity, occurs on coasts and inland
Highbush blueberry (*Vaccinium corymbosum*)[1,3]	Seeds, cuttings	Jan-Feb (trans.) June-Aug (seeds)	Cooled, cleaned, and planted (seeds) layered in rooting medium (trans.)	Feb-June	NE, SE, MA, FL, MS	To 4 m	Deciduous, erect, hardy, many branched, shade to full sun	Occurs in moist soils
Hollyleaf cherry (*Prunus ilicifolia*)	Seeds, transplants	July-Sept	Cleaned and stratified	Nov-May	CA	To 8 m	Evergreen, serrated holly-like leaves, full sun	Prefers dry soils
Honey mesquite (*Prosopis juliflora*)[1]	Seeds	Aug-Sept	Dry, cool area	Feb-May	SP, SW	To 14 m	Deciduous, shrubby, thorny irregular crown, full sun	Prefers dry, sandy, or loam soils, pest plant in western pastures
Hooker's willow (*Salix hookeriana*)[1]	Cuttings	year-round	Layered in rooting medium	Feb-June	PNW, CA	To 10 m	Deciduous, shrubby, pubescent, full sun	Prefers moist areas, tolerates shifting sand and flooding
Japanese lespedeza (*Lespedeza japonica*)	Seeds, inoculated	May-Sept	Dry, cool area	Feb-June	Entire U. S.	To 1 m	Shrubby, woody, perennial, full sun	Cultivated for grazing
Low blueberry (*Vaccinium vacillans*)	Seeds	June-July	Cleaned and stratified	Oct-May	SE, MA, MS	To 0.6 m	Shrubby, erect, rhizomous, stout, shade or sun	Prefers dry areas, thickets or woods

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Shrubs and Small Trees (Continued)								
Mapleleaf viburnum (Viburnum acerifolium)	Seeds	July-Oct	Cleaned and stratified	Feb-May	SE, MS, MA	To 1 m	Deciduous, shrubby, maple shape leaf, shade or sun	Thickets or open areas
Marsh elder (Iva frutescens)[1]	Transplants	Oct-April	B&B or potted in nursery	Feb-May	NE, MA, SE, FL, MS, SP	To 4 m	Deciduous, many branched, serrated leaves, full sun	Prefers sandy, moist areas, occurs on coastal islands, dunes and marshes
Mountain blackberry (Rubus allegheniensis)	Seeds, rootstock	June-July (seeds) Year-round (rootstock)	Cleaned and replanted (seeds), in soil beds (root stock)	Sept-Nov (seeds) Feb-May (rootstock)	NE, MA, GL, MRV	To 3.5 m	Deciduous, hardy, very robust, prolific fruiting, full sun, spiny	Pest plant in pastures, occurs and thrives almost anywhere
Multiflora rose (Rosa multiflora)[1,3]	Transplants	Sept-March	B&B or potted in nursery	Feb-June	Entire U. S. except NP	To 4 m	Deciduous, arching, thorny, showy flowers, full sun	Pest plant in unkept pastures and fields, cultivated for windbreaks and cover
Myrtle oak (Quercus myrtifolia)	Transplants	Oct-March	B&B or potted in nursery	Oct-Mar	FL	To 15 m	Evergreen, leathery, full sun	Prefers sandy coastal soils, tolerates salt spray
Northern bayberry (Myrica pensylvanica)[1]	Transplants	Oct-Mar	B&B or potted in nursery	Feb-June	NE, MA	To 15 m	Evergreen, pubescent, dense, dark green, full sun	Prefers sandy coastal soils, tolerates salt spray
Oleander (Nerium oleander)[1,2,3]	Transplants	Oct-Mar	B&B or potted in nursery	Feb-April	SW, FL, MS	To 10 m	Evergreen, dense, upright stems, showy flowers, full sun	Prefers dry sandy soils, tolerates salt spray and drought, not freeze tolerant
Pacific bayberry (Myrica californica)	Transplants	Sept-Mar	B&B or potted in nursery	Mar-June	PNW, CA	To 9 m	Evergreen, shrubby, dense foliage, full sun	Prefers sandy sites, occurs in coastal areas, tolerates salt spray
Pacific dogwood (Cornus nuttallii)[1]	Transplants	Sept-Mar	B&B or potted in nursery	Feb-June	PNW, CA	To 3 m	Deciduous, shrubby, erect, bushy, full sun and shade	Prefers well-drained areas
Pacific wax myrtle (Myrica californica)	Transplants	Oct-Feb	B&B or potted in nursery	Feb-May	PNW, CA, coasts	To 11 m	Evergreen, thick shrubs, ascending branches, full sun	Prefers moist areas, occurs in marshes, gullies, sand dunes, islands
Pacific willow (Salix lasiandra)[1]	Cuttings, transplants	Year-round (cut.) Sept-Mar (trans.)	In rooting medium (cut.), B&B or in pots (trans.)	Feb-May	PNW, CA	To 4 m	Deciduous, shrubby, fast growing, full sun	Prefers moist areas
Poison ivy (Rhus radicans)[1]	Transplants	Sept-Mar	B&B or in pots in nursery	Feb-June	Entire U. S.	To 5 m	Deciduous, fast growing, full sun	Prefers moist areas, vine form not recommended for planting
Possumhaw (Ilex decidua)[1,3]	Seeds	Sept-Dec	Cleaned and stratified	Mar-June	GL, SP, MP, MRV, SE, MS, MA, FL	To 10 m	Deciduous, red berries, very showy, shade or sun	Prefers moist areas, cultivated as ornamental
Possumhaw viburnum (Viburnum nudum)	Seeds	Aug-Oct	Cleaned and stratified	Mar-June	SE, MS, MA, FL	To 8 m	Deciduous, large leaves, shade or sun	Occurs in moist soils, in woods or in open
Purple osier willow (Salix purpurea)	Transplants, cuttings	Sept-March	In rooting medium, B&B or potted	Mar-June	MA, MRV, NE	To 4 m	Deciduous, purple stems, slender, full sun	Cultivated as an ornamental, prefers moist places, used in bank stabilization
Pussy willow (Salix discolor)[3]	Transplants, cuttings	Sept-March	B&B or potted in nursery	March-June	NE, NP, GL	To 8 m	Deciduous, shrubby, full sun	Prefers moist soils, widely used as an ornamental

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Shrubs and Small Trees (Continued)								
Quail brush (Atriplex lentiformis)	Seeds	July-Oct	Dry, cool area	Mar-May	SW	To 1 m	Deciduous, shrubby, pale green, full sun	Prefers dry, sandy soils tolerates salinity
Red alder (Alnus rubra)[1]	Transplants, cuttings	Year-round (cut.) Sept-Mar (trans.)	In rooting medium (cut.), B&B or in pots (trans.)	Feb-May	PNW, CA	To 15 m	Deciduous, shrubby, upright branches, full sun	Occurs on most soils, on cutover forest land, beaches, streams
Red buckeye (Aesculus pavia)	Transplants, seeds	Aug-Oct (seeds) Sept-Mar (trans.)	Stratified (seeds), B&B or in pots	Feb-May	SE, MS, SP	To 8 m	Deciduous, shrubby, shade or sun	Large fruit is inedible, occurs in most soils
Red osier dogwood (Cornus stolonifera)[1,3]	Cuttings, transplants	Aug-April (cut.) Sept-April (trans.)	In rooting medium B&B or potted	April-June	NE, MRV, GL, NP, SW, PNW, MW	To 2.3 m	Deciduous, shrubby, stoloniferous, full to partial sun	Occurs in moist soils, prefers moist poorly drained areas
Riverflat hawthorn (Crateagus opaca)	Seeds	April-June	Cleaned and stratified	March-May	SE, MA, MS	To 5 m	Deciduous, leathery, thorny, shade or sun	Prefers dry soils, in woods or in open, red fruit
Rough-leafed dogwood (Cornus drummondii)[1]	Transplants	Sept-March	B&B or potted	Feb-May	SE, MA, MS, SP, NP, MP	To 5 m	Deciduous, showy flowers, fast growing, sun or shade	Prefers moist areas, occurs in most soils
Russian olive (Eleagnus angustifolius)[1,2,3]	Seeds, transplants	Sept-Oct (seeds) Sept-March (trans.)	Cleaned and stratified (seeds), B&B or potted (trans.)	March-June	Entire U. S.	To 7 m	Evergreen, shrubby, spiny, irregular crown, full sun	Occurs in most soils, cultivated for wind break, roadside, ornamental
Rusty blackhaw (Viburnum rufidulum)	Seeds	July-Oct	Cleaned and stratified	Feb-April	SE, MS, MA, FL	To 3 m	Deciduous, leathery, shiny green, shade	Prefers dry areas, in woods, but occurs in thickets and open areas
Salal (Gaultheria shallon)[1,3]	Transplants, root stock	Sept-March	B&B or potted in nursery	Feb-June	PNW, CA	To 2 m	Evergreen, dark shiny leaves, shade	Prefers moist areas, cultivated for florist industry
Salmonberry (Rubus spectabilis)[1]	Seeds	June-Aug	Cleaned and in dry cool area	March-June	PNW	To 5 m	Deciduous, branching, leafy, shrubby, showy flowers, large fruit, shade	Occurs in moist areas, in woods and thickets
Saltbush (Atriplex polycarpa)[1]	Seeds	July-Oct	Dry, cool area	Feb-May	SW	To 1 m	Deciduous, shrubby, pale green, full sun	Prefers dry, sandy soils, tolerates drought and salinity
Saltcedar (Tamarisk parviflora)[1,3]	Transplants	Oct-March	B&B or potted in nursery	Feb-May	MA, SW, SP, MS, FL	To 5 m	Evergreen, small foliage, irregular crown, full sun	Prefers dry, sandy soils, tolerates drought and salinity
Sandbar willow (Salix interior)[1,3]	Transplants cuttings	Sept-March	B&B or potted in nursery	March-June	NE, MRV, GL, MP, SP, MW	To 9 m	Deciduous, shrubby, dense, full sun	Prefers moist soils, riverbanks
Sand blackberry (Rubus cuneifolius)[1]	Seeds	May-July	Cleaned and stratified	Feb-June	MA, SE, FL	To 1 m	Deciduous, arching, erect, spiny, robust, full sun	Prefers dry, sandy areas
Sand pine (Pinus clausa)[1,2,3]	Transplants, seedlings	Oct-March	B&B or potted in nursery	Feb-May	FL, MS	To 6 m	Narrowleaf evergreen, shrubby, full sun	Grows in poor soils, tolerates droughty, sandy conditions, occurs on coasts
Sawtooth oak (Quercus acutissima)[1,2,3]	Transplants	Sept-March	B&B or potted in nursery	Feb-May	SE, MS, FL, SP	To 10 m	Deciduous, irregular growth, full sun	Cultivated for wildlife food, occurs on most soils
Scotch broom (Cytisus scoparius)[1,3]	Transplants	Sept-March	B&B or potted in nursery	Feb-May	PNW		Evergreen showy flowers, dense growth, full sun	Pest plant in some areas, cultivated as ornamental elsewhere
Sharp-toothed blackberry (Rubus argutus)[1]	Rootstock, seeds	Year-round (root.) June-July (seeds)	In soil beds (root.) cleaned and stratified (seeds)	Sept-Nov (seeds) Feb-May (rootstock)	SE, MA, FL, MS, MRV	To 2 m	Deciduous, hardy, very robust, prolific fruiting, full sun, spiny	Pest plant in pastures, occurs and thrives almost anywhere

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Shrubs and Small Trees (Continued)								
Shining sumac (Rhus copallina)[1]	Seeds, rootstock	Sept-Nov Sept-March	Cleaned and stratified (seeds), in soil beds (rootstock)	Feb-June	Eastern and mid-U. S.	To 4 m	Deciduous, little branching, lateral spreading roots, forms thickets, full sun	Occurs in moist soils, in open areas
Shore pine (Pinus contorta)[1,3]	Transplants, cuttings	Sept-March	B&B or potted in nursery	Feb-May	PNW, CA	To 12 m	Narrowleaf evergreen, spreading, full sun	Coastal dunes plant, very hardy, can be grown from seeds
Shrub verbena (Lantana camara)[1,3]	Seeds, transplants	May-Sept (seeds) Sept-Mar (trans.)	Dry, cool area (seeds) B&B or potted (trans.)	Jan-April	FL, SE, MS, SP	To 1 m	Deciduous, tropical, showy flowers, full sun	Cultivated as ornamental, prefers moist, sandy soils
Silky dogwood (Cornus amomum)[1]	Transplants	Sept-March	B&B or potted	Feb-June	Eastern and mid-U. S.	To 3.3 m	Deciduous, purplish stems, full sun	Prefers moist soils, in woods, and in open
Silky willow (Salix sericea)[1]	Transplants, cuttings	Year-round (cut.) Sept-Mar (trans.)	In rooting medium, B&B or potted (trans.)	March-June	NE, MA, GL, MRV	To 4 m	Deciduous, purplish stems, pubescent, full sun	Prefers wet to moist soils, in open areas
Sitka alder (Alnus sinuata)[1]	Transplants, cuttings	Year-round (cut.) Sept-Mar (trans.)	In rooting medium, B&B or potted (trans.)	Feb-May	PNW	To 10 m	Deciduous, shrubby, multistemmed, full sun	Prefers moist soils, in open areas
Smooth sumac (Rhus glabra)[1]	Seeds	Sept-Feb	Cleaned and stratified	Feb-June	Entire U. S.	To 2 m	Deciduous, shrubby, few branches, forms thickets from roots, full sun	Occurs in most soils, in open areas
Southern bayberry (Myrica cerifera)[1]	Transplants	Sept-Mar	B&B or potted	Feb-May	SE, MA, FL, MS, SP	To 5 m	Evergreen, dense, upright branches, full sun	Prefers moist, sandy areas, occurs on seacoasts and islands
Southern dewberry (Rubus trivialis)[1]	Seeds, transplants	April-May (seeds) Year-round (trans.)	Cleaned and stratified (seeds), B&B or potted (trans.)	Jan-March	SE, MS, FL, SP	To 1 m	Deciduous, persistent, large fruit, full sun	Occurs in most soils, excellent wildlife food
Sparkleberry (Vaccinium arboreum)	Seeds	May-July	Cleaned and stratified	Jan-May	SE, MA, SP, MS	To 10 m	Deciduous in north, evergreen in south, sprawling, shrubby, shade or full sun	Occurs in dry soils, in woods or open thickets
Squaw huckleberry (Vaccinium stamineum)	Seeds	May-June	Cleaned and stratified	Feb-June	Eastern and mid-U. S.	To 5 m	Deciduous, leathery, shrubby shade or sun	Occurs in dry woods or open thickets, edges of woods
Staghorn sumac (Rhus typhina)[1]	Seeds	Oct-Dec	Cleaned and stratified	Feb-May	Eastern and mid-U. S.	To 4 m	Deciduous, few branches, showy fruit, full sun	Forms thicket, occurs in dry soils
Summersweet (Clethra alnifolia)	Seeds	Sept-Nov	Cleaned and stratified	Feb-May	SE, MS	To 1.5 m	Deciduous, ascending stems, pubescent, shade or sun	Occurs in most soils, in woods and open areas, cultivated as ornamental
Swamp privet (Forestiera acuminata)[1]	Transplants	Sept-March	B&B or potted	Feb-May	SE, MS	To 8 m	Deciduous, many branches, shrubby, shade or sun	Prefers moist, bottomland type soils (silt, clay)
Swamp rose (Rosa palustris)[1]	Transplants	Sept-March	B&B or potted	Feb-June	MA, SE, MS	To 1 m	Deciduous, arching branches, full sun	Prefers moist soils
Tag alder (Alnus serrulata)[1]	Transplants, cuttings	Year-round (cut.) Sept-Mar (trans.)	In rooting medium, B&B or potted	Feb-May	NE, MA, MS, SP, MRV	To 5 m	Deciduous, rusty, pubescent, shade or sun	Occurs in moist soils, in woods or in open areas
Tartarian honeysuckle (Lonicera tartarica)[1]	Transplants, rootstock	Sept-March	B&B, potted or in soil beds	Feb-June	Entire U. S.	To 2 m	Deciduous, showy flowers, full sun	Cultivated as ornamental shrub
Texas huisache (Acacia smallii)[1]	Seeds	Aug-Oct	Dry, cool area	Jan-April	SP, MS, SW	To 5 m	Deciduous, large seed pods, full sun	Prefers dry, sandy soils, tolerates drought and salinity

(Continued)

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Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Shrubs and Small Trees (Continued)								
Thorny eleagnus (*Eleagnus pungens*)[1,3]	Transplants, cuttings	Sept-April	B&B or potted in nursery	March-June	Entire U. S.	To 4 m	Evergreen, robust, thorny, spreading, arching, full sun	Cultivated as ornamental, tolerates poor soil and salt spray
Toothache tree (*Zanthoxylum clavaherculis*)[1]	Transplants	Sept-March	B&B or potted in nursery	Feb-May	SE, FL, MS, SP	To 12 m	Deciduous, fast growing, spiny, full or partial sun	Prefers well-drained soils, occurs on dredged material in Texas and North Carolina
Turkey oak (*Quercus laevis*)[1]	Transplants, cuttings	Sept-March	B&B or potted in nursery	Feb-May	SE, MA, FL	To 10 m	Deciduous, large leathery leaves, full sun	Prefers sandy coastal areas
Wax myrtle (*Myrica cerifera*)[1,3]	Transplants	Oct-March	B&B or potted in nursery	March-June	SE, FL, MS, MA, SP	To 3.3 m	Evergreen, dense, shrubby, ascending branches, full sun	Prefers moist areas, does well on poor, sandy coastal sites
Western blackberry (*Rubus vitifolius*)	Transplants	Sept-March	B&B or potted	Feb-June	PNW, CA	To 1 m	Arching, deciduous, full sun	Occurs in dry soils, pest plant in pastures
Western chokecherry (*Prunus virginiana* var. *digissa*)	Seeds	Aug-Sept	Cleaned and stratified	Feb-May	CA, PNW	To 8 m	Deciduous, bushy, full sun	Occurs in most soils, smells bad
Western dogwood (*Cornus occidentalis*)	Transplants	Sept-March	B&B or potted	Feb-May	PNW, CA	To 5 m	Deciduous, irregular branches, shade or sun	Occurs most soils, in woods or in open areas
Western huckleberry (*Vaccinium ovatum*)	Transplants	Sept-March	B&B or potted in nursery	Feb-June	PNW, CA	To 2.5 m	Evergreen, erect, slow growth, shade to sun	Occurs in dry woods
Wild apple (*Malus pumila*)	Seeds, transplants	Aug-Oct (seeds) Sept-Mar (trans.)	Cleaned and stratified B&B or potted	Feb-May	Entire U. S.	To 7 m	Deciduous, thorny, showy flowers, large fruit, full sun	Occurs in most soils, parent stock of all commercial apple trees
Wild black currant (*Ribes americanum*)[1]	Transplants	Sept-March	B&B or potted	Feb-June	Northern U. S.	To 1 m	Deciduous, arching, erect branches shade	Occurs in most soils
Wild cherry (*Prunus emarginata*)	Seeds	Aug-Sept	Cleaned and stratified	Feb-June	PNW, CA, SW	To 10 m	Deciduous, bitter fruit, full sun	Occurs in most soils
Wild indigo (*Baptisia leucophaea*)[1]	Seeds, transplants	Sept-Oct	Dry, cool area (seeds) B&B or potted (trans.)	Jan-March	SP, MS, SE	To 1 m	Deciduous, tumbles, seed-pods rattle, full sun	Occurs in dry soils, prefers sand or silt, tolerant of salt spray
Wild rose (*Rosa rugosa*)[1,3]	Transplants, cuttings	Sept-March	B&B or potted in nursery (trans.), in rooting medium (cuttings)	Feb-June	MA, SE, MS, SP, FL	To 5 m	Deciduous, arching branches, thorns, profuse flowers, full sun	Prefers moist soils, fast growing, tolerant of wide range of soil conditions
Wingscale (*Atriplex canescens*)	Seeds	Nov-Dec	Dry, cool place	Jan-May	MW, SW, CA	To 2.5 m	Evergreen, shrubby, much branched, full sun	Tolerates drought and wide range of soil conditions, prefers dry sandy soil
Winterberry (*Ilex verticillata*)[3]	Transplants	Sept-March	B&B or potted in nursery	March-June	SE, MS	To 5 m	Deciduous, arching, rounded crown, full sun or shade	Wide range of soil conditions, prefers moist soils
Witch hazel (*Hamamelis virginiana*)	Transplants	Sept-March	B&B or potted in nursery	Feb-May	NE, MA, SE, MS, MP, GL, MRV	To 10 m	Deciduous, shrubby, partial sun to full shade	Prefers moist soils
Yaupon (*Ilex vomitora*)[1,3]	Transplants	Oct-March	B&B or potted in nursery	Jan-April	SE, MA, MS, SP, FL	To 6 m	Evergreen, forms dense thickets, has ornamental dwarf form, full sun	Prefers sandy soils, grows on coast, tolerates salt spray
Yellow paloverde (*Cercidium microphyllum*)[3]	Transplants	Oct-March	B&B or potted in nursery	Jan-April	SW, CA	To 7 m	Deciduous, legume, shrubby, full sun	Tolerates extreme drought and some salinity, prefers sandy soil

(Continued)

(Sheet 19 of 22)

Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Large Trees								
American beech (*Fagus grandifolia*)[1,3]	Transplants	Sept-March	B&B or potted in nursery	Mar-June	NE, MA, SE, MS, GL, MRV, SP	To 30 m	Deciduous, with shallow root system, full sun	Best in moist conditions, poorly drained soils
American sycamore (*Platanus occidentalis*)[1,3]	Transplants	Sept-March	B&B or potted in nursery	Mar-June	NE, MA, SE, MS, SP, MP, NP, GL, MRV	To 30 m	Deciduous, wide spreading crown, full sun	Best in moist soils, but grows under a variety of conditions
Australian pine (*Casuarina equisetifolia*)[1,3]	Transplants	Oct-Feb	B&B or potted in nursery	Dec-April	FL, CA	To 45 m	Narrowleaf evergreen, drooping branches, full sun	Grows well in sandy soils, exotic naturalized in U. S.
Black cherry (*Prunus serotina*)[1,3]	Transplants	Aug-Oct	B&B or potted in nursery	March-June	NE, MA, SE, FL, MS, SP, MP, NP, GL	To 18 m	Deciduous, upright crown, full sun	Can be grown from seed, wood highly prized for furniture
Black cottonwood (*Populus trichocarpa*)[1,3]	Transplants, cuttings	Sept-March	B&B or potted in nursery (trans.), layered in rooting medium (cuttings)	March-June	PNW, SW, CA	To 38 m	Deciduous, fast growing, large full sun	Used for paper products, prefers moist soils, used for windbreaks and shade
Black gum (*Nyssa sylvatica*)[1,3]	Transplants	Sept-March	B&B or potted in nursery	March-June	NE, MA, SE, FL, MS, SP, MP, NP, MRV, GL	To 27 m	Deciduous, upright crown slow growing, full sun	Prefers moist soil
Black locust (*Robinia pseudo-acacia*)[1,3]	Transplants	Sept-March	B&B or potted in nursery	Mar-June	MS, MA, MP	To 25 m	Deciduous, fragrant flowers spiny, full sun	Tolerates drought and poor soil conditions, a legume
Black walnut (*Juglans nigra*)[1,3]	Seeds, seedlings	Sept-Nov (seeds) Sept-Mar (seedlings)	Stratified (seeds), B&B or potted (trans.)	Mar-June	MA, SE, MS, SP, NP, MRV	To 30 m	Deciduous, edible, upright crown, sun to shade	Varied soil conditions, good foodplant, excellent furniture wood, grows slowly
Black willow (*Salix nigra*)[1]	Transplants, cuttings	Oct-March	B&B or potted in nursery (trans.), layered in rooting medium	Feb-July	SE, MS, MA, SP, FL	To 12 m	Deciduous, shrubby, full sun	Very fast-growing, prefers moist and flooded soils
Cow oak (*Quercus michauxii*)[3]	Seeds, transplants	Sept-Nov (seeds) Oct-March (trans.)	Stratified at 5°C, B&B or potted in nursery	March-June	MA, SE, FL, MS, SP	To 24 m	Deciduous, large edible seed, full sun to part shade	Prefers moist soils, fast growing
Eastern cottonwood (*Populus deltoides*)[1,3]	Transplants, cuttings	Sept-March	B&B or potted in nursery (trans.), layered in rooting medium (cut.)	March-June	MA, SE, GL, MRV, NP, MP, SP, MS	To 30 m	Deciduous, very fast growing full sun	Used for paper products, shade, prefers moist soil
Eastern red cedar (*Juniperus virginiana*)[1,3]	Transplants, seeds	Sept-Mar (trans.) Sept-Nov (seeds)	B&B, potted in nursery, (trans.), stratified at 5°C (seeds)	Feb-June	SE, MS, SP, MRV	To 12 m	Narrowleaf evergreen, drought tolerant, full sun	Produce commercially by tree nurseries, tolerates alkaline soil, has shrub form under stressed conditions
Eastern white pine (*Pinus strobus*)[3]	Transplants	Sept-March	B&B or potted in nursery	March-June	NE, GL, MA	To 30 m	Narrowleaf evergreen, pyramidal crown, full sun	Prefers moist sandy soil
Green ash (*Fraxinus pennysylvanica*)[1]	Transplants	Sept-March	B&B or potted in nursery	March-June	Eastern and mid U. S.	To 24 m	Deciduous, full or partial shade	Prefers moist soils, tolerates poor soil conditions
Hackberry (*Celtis occidentalis*)[1,3]	Transplants	Sept-March	B&B or potted in nursery	Feb-June	SE, MS, SP, MRV, MP	To 30 m	Deciduous, large spreading crown, full sun	Tolerates alkaline and sandy soils

(Continued)

(Sheet 20 of 22)

Table 2 (Continued)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Large Trees (Continued)								
Honeylocust (Gleditsia triacanthos)[1,3]	Transplants	Sept-March	B&B or potted in nursery	March-June	SE, MA, GL, MRV, SP, MP, MS	To 24 m	Deciduous legume, spiny, full or partial sun	Prefers moist fertile soils
Laurel oak (Quercus laurifolia)[1,3]	Transplants	Sept-March	B&B or potted in nursery	Jan-March	SE, SP, MS	To 30 m	Flat topped crown, broad-leaf evergreen, full sun	Prefers moist soils, occurs on coasts
Live oak (Quercus virginiana)[1,3]	Transplants	Sept-March	B&B or potted in nursery	Jan-May	SE, SP, MS, MA	To 15 m	Evergreen, large spreading crown, full sun	Prefers sandy moist soils, and occurs on coasts, tolerates salt spray
Loblolly pine (Pinus taeda)[1,3]	Transplants, seedlings	Sept-March	B&B or potted in nursery	Feb-June	SE, SP, MS, MA	To 21 m	Narrowleaf evergreen, large crown, full sun	Coastal and interior plant, on sandy and silt soils, (poorly drained)
Longleaf pine (Pinus palustris)[1,3]	Transplants, seedlings	Sept-March	B&B or potted in nursery	Feb-May	MA, SE, MS, FL, SP	To 37 m	Narrowleaf evergreen, tall open crown, full sun	Prefers sandy conditions, but occurs in other soils, occurs on coast
Mockernut hickory (Carya tomentosa)[3]	Transplants, seedlings	Sept-March	B&B or potted in nursery	Feb-May	NE, MA, SE, FL, MS, MRV, SP, MP	To 25 m	Deciduous, arching branches, full or partial sun	Prefers drier soils, edible nuts, hardy, common
Paper mulberry (Broussonetia papyrifera)	Transplants	Sept-March	B&B or potted in nursery	March-June	Eastern U. S.	To 15 m	Deciduous, arching branches, full or partial sun	Exotic, naturalized in U. S., fast growing, forms thickets
Peachleaf willow (Salix amygdaloides)[1]	Transplants, cuttings	Sept-March	B&B or potted in nursery (trans.), layered in rooting medium (cuttings)	March-June	GL, NP, MP, MW	To 18 m	Deciduous, drooping branches, full sun	Prefers moist soils, grows on dredged material islands
Pecan (Carya illinoensis)[3]	Transplants, seedlings	Sept-March	B&B or potted in nursery	Feb-May	SE, MS, SP, MP	To 43 m	Deciduous, irregular crown, full sun	Prefers moist soils, but grows in wide range of soil conditions, edible nuts
Persimmon (Diospyros virginiana)[1]	Rootstock	Sept-March	In soil beds in nursery	Feb-June	MA, SE, FL, MS, SP, MP, MRV	To 18 m	Deciduous, drooping branches, full sun	Prefers moist, rich soils, but tolerates wide range of soil conditions, edible fruit
Pignut hickory (Carya glabra)	Transplants, seedlings	Sept-March	B&B or potted in nursery	Feb-May	NE, MA, SE, FL, MS, MRV, SP, MP	To 23 m	Deciduous, open crown, full sun	Prefers drier soils than other hickories
Redbay (Persea borbonia)[1]	Transplants	Oct-March	B&B or potted in nursery	Feb-May	MA, FL, SE, MS, SP	To 18 m	Evergreen, upright branches, full or partial sun	Often occurs in dense woods, prefers moist soils
Red maple (Acer rubrum)[1,3]	Transplants	Sept-March	B&B or potted in nursery	Feb-June	Entire eastern U. S.	To 25 m	Deciduous, upright branches, full or partial sun	Prefers moist soils, widely used as an ornamental
Red mulberry (Morus rubra)[1,3]	Transplants	Sept-March	B&B or potted in nursery	March-June	Entire eastern U. S.	To 22 m	Deciduous, rounded dense crown, full or partial shade	Prefers moist, fertile soils, edible fruit
River birch (Betula nigra)[1,3]	Transplants	Sept-March	B&B or potted in nursery	Feb-June	MA, SE, MS, SP, MP, MRV	To 25 m	Deciduous, irregular, multistemmed, full or partial sun	Prefers moist soils, used as ornamental, common in South
Sassafras (Sassafras albidum)[1,3]	Transplants	Oct-March	B&B or potted in nursery	Feb-May	NE, MA, SE, MS, SP, MP, NP, GL, MRV	To 27 m	Deciduous, spreading branches, full or partial sun	Prefers upland soils but occurs over wide range of soil conditions, forms dense thicket

(Continued)

(Sheet 21 of 22)

Table 2 (Concluded)

Species (Alphabetized by Common Name)	Best Propagule Type	Collection Periods	Temporary Storage Requirements	Planting Periods	Range	Mature Height	Growth Habits	Remarks
Large Trees (Continued)								
Slash pine (Pinus elliottii)[1,3]	Transplants, seedlings	Oct-March	B&B or potted in nursery	Feb-May	SE, FL, MS	To 30 m	Narrowleaf evergreen, dense, rounded crown, full sun	Grows rapidly, commercial forest tree, occurs on coast
Southern red oak (Quercus falcata)[3]	Transplants, seedlings	Oct-March	B&B or potted in nursery	Feb-May	MA, SE, MS, SP	To 25 m	Deciduous, rounded crown, full sun	Prefers poor upland soil, used as an ornamental
Sugarberry (Celtis laevigata)[1,3]	Transplants	Oct-March	B&B or potted in nursery	March-June	SE, FL, MS, SP, MP	To 12 m	Deciduous, spiny, irregular crown, full sun	Prefers alkaline, well-drained soils
Sugar maple (Acer saccharum)[1,3]	Transplants	Sept-March	B&B or potted in nursery	March-June	GL, NE, MRV, NP, MP, MA	To 30 m	Deciduous, rounded crown, full sun	Prefers moist soils, used for wood, furniture, as an ornamental, and for syrup
Sweetbay (Magnolia virginiana)[1]	Transplants	Oct-March	B&B or potted in nursery	Feb-May	MA, SE, FL, MS	To 18 m	Evergreen, shrub in north, tree in south, full sun to partial shade	Prefers moist soils, deciduous in north
Sweetgum (Liquidambar styraciflua)[1]	Transplants, seedlings	Sept-March	B&B or potted in nursery	Feb-June	MA, SE, FL, MS, SP, MRV	To 37 m	Deciduous, spreading crown, fast growing, full sun	Prefers well-drained soil tolerates many soil conditions, used for furniture
Tulip poplar (Liriodendron tulipifera)[1,3]	Transplants	Sept-March	B&B or potted in nursery	Feb-June	NE, MA, SE, MS, MRV, GL	To 46 m	Deciduous, fast growing, full sun	Prefers moist soil
Water oak (Quercus nigra)[1,3]	Transplants, seedlings	Oct-March	B&B or potted in nursery	Feb-May	SE, MA, FL, MS, SP	To 21 m	Deciduous, rounded crown, full sun	Prefers moist soil, fast-growing, produces abundant, small, bitter acorns
White ash (Fraxinus americana)[1,3]	Transplants	Sept-March	B&B or potted in nursery	March-June	Eastern and mid-U. S.	To 24 m	Deciduous, upright crown, full sun	Prefers upland well-drained areas, fast-growing
White oak (Quercus alba)[3]	Transplants, seedlings	Sept-March	B&B or potted in nursery	Feb-June	NE, MA, SE, MS, GL, MRV, SP, MP, NP	To 30 m	Deciduous, spreading rounded crown, full sun	Tolerates wide range of soil and climatic conditions, edible acorns
White poplar (Populus alba)[3]	Transplants, cuttings	Sept-March	B&B or potted in nursery	Feb-June	Entire U. S.	To 24 m	Deciduous, multi-trunked, full sun	Fast-growing, exotic, naturalized over much of U. S.

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Table 3

Matrix of Upland Plant Species*

Common Name	Region**													Soil Conditions											Wildlife Value			Esthetics Value	Soil Stabilization and Other Soil Benefits
														pH				Salinity		Moisture			Texture						
	SE	MS	SP	NP	MP	NE	MA	PNW	SW	FL	GL	MRV	CA	MW	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Wet	Moist	Dry	Fine	Coarse	Food	Cover	Nesting/ Breeding		
Grasses																														
American beachgrass						✓	✓				✓					✓	✓		✓	✓			✓		✓		✓	✓		✓
American dunegrass						✓		✓										✓	✓			✓	✓		✓		✓	✓		✓
Bahia grass	✓	✓					✓			✓						✓		✓				✓		✓	✓	✓	✓	?		✓
Barley	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓				✓		✓	✓	✓	✓	?		✓
Barnyard grass	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓				✓		✓	?	✓	✓	?		
Beach panic grass	✓	✓					✓			✓						✓	✓		✓	✓		✓	✓		✓		✓	✓		✓
Beaked panic grass	✓	✓	✓	✓			✓			✓		✓				✓	✓		✓			✓		?	✓	✓	✓	?		
Big bluestem	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓		✓			✓			✓	✓	✓	✓	✓	✓	?		
Bromegrass				✓	✓	✓	✓	✓	✓		✓	✓	✓	✓			✓	✓				✓	✓	✓	✓	✓	✓	?		
Broomsedge	✓	✓	✓			✓	✓			✓	✓	✓	✓	✓	✓			✓				✓	✓	✓	✓		✓	✓		
Browntop millet	✓	✓					✓			✓					✓	✓		✓			✓	✓		✓	?	✓	✓			✓
Bull paspalum	✓	✓					✓			✓						✓		✓				✓		✓	✓	✓	✓			
Bushy beardgrass	✓	✓	✓			✓	✓		✓	✓			✓				✓	✓				✓		✓	✓		✓	?		
Calley Bermuda grass	✓	✓	✓							✓					✓	✓		✓				✓		✓	✓	✓	✓			✓
Coastal Bermuda grass	✓	✓	✓				✓			✓					✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓			✓
Common Bermuda grass	✓	✓	✓	✓			✓		✓	✓	✓	✓	✓		✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	?	✓	✓
Common reed	✓	✓	✓			✓	✓			✓	✓				✓	✓	✓	✓	✓		✓			✓	✓		✓	✓		✓
Corn	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓				✓		✓	?	✓	✓			✓
Dallis grass	✓	✓	✓				✓		✓	✓					✓	✓		✓				✓		✓	✓	✓	✓	?		✓
Deertongue	✓	✓	✓		✓	✓	✓					✓			✓	✓		✓				✓		✓	✓		✓			
European beachgrass								✓					✓						✓	✓		✓	✓		✓		✓	✓		✓
Fall panic grass	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓		✓	✓		
Foxtail millet	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓			✓		✓				✓		✓	?	✓	✓	?		✓
Goose grass	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓			
Green bristle grass	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓			✓
Italian ryegrass	✓	✓	✓		✓	✓	✓	✓		✓		✓	✓		✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	?	✓	✓
Japanese millet	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓		✓	✓			✓
Johnson grass	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	?		✓
Jungle rice	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓			✓	✓		✓	✓	✓	✓			
Large crabgrass	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓			
Little hairgrass							✓	✓					✓			✓	✓	✓	✓			✓	✓		✓		✓			
Oats	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓			✓
Orchardgrass	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	?		✓
Panic grass	✓	✓	✓	✓	✓	✓	✓	✓			✓					✓	✓	✓				✓			✓	?	✓			✓

(Continued)

* Table is coordinated with Table 2.

** SE = southeast; MS = midsouth; SP = south plains; MP = mid plains; NP = north plains; NE = northeast; MA = mid Atlantic; PNW = northeast; SW = southwest; FL = Florida; GL = Great Lakes; MRV = Mississippi River Valley; CA = California; MW = Midwest.

(Sheet 1 of 11)

Table 3 (Continued)

Common Name	Region**													Soil Conditions											Wildlife Value			Esthetics Value	Soil Stabilization and Other Soil Benefits
														pH			Salinity			Moisture			Texture				Nesting/		
	SE	NS	SP	NP	RP	RE	MA	PNW	SW	PL	GL	NRV	CA	NW	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Wet	Moist	Dry	Fine	Coarse	Food	Cover	Breeding		
Grasses (Continued)																														
Pearl millet	✓		✓				✓		✓						✓	✓	✓	✓				✓	✓	✓	✓	✓	✓			
Perennial ryegrass	✓	✓	✓							✓					✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	?		✓
Prairie cordgrass			✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓		✓	✓		✓			✓	✓	✓	✓	?		✓
Proso millet			✓											✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓			✓
Quackgrass	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓			
Red fescue				✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓	?	✓	✓
Redtop	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	?	✓	✓
Reed canary grass	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓	✓	✓
Rescue grass	✓	✓							✓				✓		✓	✓		✓				✓		✓		✓	✓			✓
Rice cutgrass	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓		✓
Rye	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓		✓	✓
Saltgrass	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓		✓		✓			✓	✓	✓	✓	✓		✓
Saltmeadow cordgrass	✓	✓	✓			✓	✓			✓					✓	✓	✓		✓		✓	✓		✓	✓	✓	✓	✓		✓
Sand dropseed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓		✓	?	✓			✓
Sea oats	✓	✓					✓			✓					✓	✓	✓		✓	✓		✓	✓		✓	✓	✓	✓		✓	✓
Seashore bluegrass								✓					✓		✓	✓	✓		✓			✓	✓		✓		✓		✓	✓
Seashore paspalum	✓	✓								✓					✓	✓	✓		✓	✓	✓				✓	?	✓	✓		✓
Shoredune panic grass		✓	✓			✓	✓			✓					✓	✓	✓		✓			✓	✓		✓	?	✓	✓		✓
Sixweeks fescue	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓			✓
Smooth crabgrass	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	?	✓			
Sorghum	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓			✓
Sudan grass	✓	✓	✓	✓			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓	?		✓
Switchgrass	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	?		✓
Tall fescue	✓	✓	✓			✓	✓			✓		✓			✓	✓	✓	✓				✓		✓	✓	✓	✓	✓		✓
Texas millet	✓	✓	✓				✓			✓					✓	✓	✓	✓				✓		✓	✓	✓	✓			✓
Timothy	✓			✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓				✓		✓	✓	✓	✓	?	✓	✓
Torpedo grass		✓	✓							✓					✓	✓	✓	✓	✓		✓			✓	✓	✓	✓			✓
Vasey grass	✓	✓	✓				✓			✓			✓		✓	✓	✓	✓			✓	✓		✓	✓	✓	✓			✓
Virginia dropseed		✓					✓			✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	?		✓
Walter's millet	✓	✓	✓			✓	✓			✓		✓			✓	✓	✓	✓			✓			✓	✓	✓	✓			✓
Wheat	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓			✓
Wild rye	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓		✓	✓	✓	✓			✓
Woolly panic grass	✓	✓					✓			✓					✓	✓	✓	✓				✓		✓	✓		✓			
Yellow bristlegrass	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓				✓	✓	✓	✓		✓	?		✓

(Continued)

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Table 3 (Continued)

Common Name	Region**														Soil Conditions											Wildlife Value				Soil Stabilization and Other Soil Benefits
															pH			Salinity			Moisture			Texture					Esthetics Value	
	ISE	IMS	ISP	IMP	INP	IKE	IMA	IPRW	ISW	IFL	IGL	IMRV	ICA	IMW	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Wet	Moist	Dry	Fine	Coarse	Food	Cover	Nesting/ Breeding		
Herbs																														
Alfalfa	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓				✓		✓	✓	✓	✓	?		✓
Alsike clover	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓				✓	✓	✓			✓	?	✓	✓
Arrow-leaf tearthumb	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓				✓		✓	✓		✓	?		✓
Beach pea	✓	✓	✓			✓	✓	✓		✓			✓		✓	✓	✓	✓	✓			✓			✓	?	✓	?		✓
Beach strawberry								✓	✓						✓	✓		✓	✓			✓			✓	✓	✓			
Big filaree													✓		✓	✓	✓	✓				✓		✓	✓		✓			
Bird's foot trefoil						✓	✓								✓	✓	✓	✓				✓		✓	✓	?	✓			
Bittersweet nightshade					✓	✓	✓								✓	✓		✓				✓		✓	✓	✓				
Black medic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓		✓	✓
Black nightshade	✓	✓	✓			✓	✓			✓		✓			✓	✓	✓	✓				✓		✓	✓	✓				
Blackseed plantain	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓			✓	✓		✓	✓	✓	✓			
Bottlebrush	✓	✓	✓			✓	✓			✓		✓			✓	✓	✓	✓					✓	✓	✓		✓			
Bracted plantain	✓	✓	✓			✓	✓			✓		✓			✓	✓	✓	✓				✓		✓	✓		✓			
Broadleaf plantain	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓		✓			
Buckthorn plantain	✓	✓	✓			✓	✓			✓		✓			✓	✓	✓	✓				✓		✓	✓		✓			
Bush lupine								✓					✓			✓	✓	✓					✓	✓	✓	?	✓	?		✓
Calandrinia													✓			✓	✓	✓	✓				✓		✓		✓			✓
Camphorweed	✓	✓	✓	✓			✓		✓	✓					✓	✓	✓	✓					✓		✓		✓	✓		✓
Chufa	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓		✓		✓	✓	?		✓
Coast deervetch								✓					✓			✓	✓	✓					✓	✓	✓	✓	✓	?		✓
Common chickweed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓		✓			✓
Common filaree	✓		✓			✓	✓	✓			✓		✓		✓	✓	✓	✓				✓	✓	✓	✓		✓	?		
Common lambsquarters	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓		✓	✓		✓
Common mullein	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	?	✓		✓	?		✓
Common purslane	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	?	✓		✓			✓
Common ragweed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓		✓
Common spikerush	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓		✓	✓	✓	✓			✓
Common threesquare	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓		✓	✓	✓	✓	✓		✓
Cow pea	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓	?		✓
Crimson clover	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓		✓	?	✓	✓
Croton									✓				✓		✓	✓	✓	✓				✓	✓	✓	✓	✓	✓			✓
Curley dock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	?	✓			✓
Deerweed													✓			✓	✓	✓					✓	✓	✓	?	✓			✓
Dwarf spikerush	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓			✓
Filaree								✓					✓		✓	✓	✓	✓				✓		✓	✓		✓			

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AD-A068 459 ARMY ENGINEER WATERWAYS EXPERIMENT STATION VICKSBURG MISS F/G 13/3
ANNOTATED TABLES OF VEGETATION GROWING ON DREDGED MATERIAL THRO--ETC(U)
DEC 78 M C LANDIN
UNCLASSIFIED WES-MP-D-78-7 NL

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Table 3 (Continued)

Common Name	Region**														Soil Conditions											Wildlife Value			Esthetics Value	Soil Stabilization and Other Soil Benefits
															pH			Salinity			Moisture			Texture							
	SE	NE	SP	NP	MP	MR	MA	PNW	SW	PL	GL	NRV	CA	NW	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Wet	Moist	Dry	Fine	Coarse	Food	Cover	Nesting/ Breeding		
Herbs (Continued)																															
Flat pea						✓	✓	✓			✓	✓			✓	✓	✓	✓				✓		✓	✓	?	✓				✓
Flowering spurge	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓					✓	✓	✓		✓				✓
Giant ragweed	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	?			✓
Goosefoot	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓		✓				
Hardstem bulrush	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓		✓	✓	✓	✓	?			✓
Hairy vetch	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	?	✓				✓
Hemp sesbania	✓	✓	✓				✓		✓	✓					✓	✓	✓	✓				✓		✓	✓		✓				✓
Hop clover	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓		✓				✓
Horse nettle	✓	✓	✓			✓	✓			✓	✓	✓			✓	✓		✓				✓	✓	✓	✓	✓					
Horseweed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓			✓
Japanese clover	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	?			✓
Jerusalem artichoke	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓				✓		✓	✓	✓					
Korean clover	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓				✓
Ladino clover	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓				✓
Ladysthumb	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓		✓	✓	✓	✓				
Lespedeza	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓			✓
Lupine								✓	✓				✓			✓	✓	✓					✓	?	✓		✓	?			✓
Malta starthistle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	?	✓				
Maple leaf goosefoot	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓				✓	✓	✓	✓		✓				
Marsh pea	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓			✓
Marsh pepper	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	?			
Maximillian's sunflower	✓	✓	✓	✓	✓		✓	✓							✓	✓	✓	✓				✓		✓	✓		✓	?	✓		✓
Mexican tea	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	?	✓	✓			
Musk filaree													✓		✓	✓	✓	✓					✓	✓	✓		✓				
Narrowleaf vetch	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓				✓
Nodding smartweed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓			✓
Nutsedge			✓	✓	✓					✓					✓	✓	✓	✓					✓	✓	✓	?	✓				
Olney threesquare	✓	✓	✓			✓	✓			✓			✓		✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓			✓
Orache	✓	✓	✓			✓	✓			✓			✓		✓	✓	✓		✓	✓		✓		✓	✓	?	✓				
Partridge pea	✓	✓	✓			✓	✓			✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓		✓		✓
Pennsylvania smartweed	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓			
Pickleweed						✓		✓	✓				✓		✓	✓	✓	✓			✓			✓	✓		✓				
Pokeberry	✓	✓	✓	✓		✓	✓			✓	✓	✓	✓		✓	✓	✓	✓				✓		✓	✓	✓	✓				
Prostrate knotweed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓		✓				✓
Prostrate pigweed					✓	✓					✓	✓			✓	✓	✓	✓				✓		✓	✓		✓				

(Continued)

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Table 3 (Continued)

Common Name	Region**														Soil Conditions											Wildlife Value			Esthetics Value	Soil Stabilization and Other Soil Benefits
															pH			Salinity			Moisture			Texture							
	NE	NB	Ch	Ga	Ka	MI	MN	MO	NH	NJ	OH	PA	VA	WV	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Wet	Moist	Dry	Fine	Coarse	Food	Cover	Nesting/ Breeding		
Herbs (Continued)																															
Prostrate spurge	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓		✓				
Purple nutsedge	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓				
Purple vetch	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓	✓	✓	✓	
Red clover	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓				✓		✓	✓	✓	✓		✓		
Redroot pigweed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓			✓	?	✓				
Reseeding soybean	✓	✓													✓	✓	✓	✓				✓		✓	✓	✓	✓				
River bulrush	✓					✓	✓						✓		✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓			
Saltmarsh bulrush		✓	✓					✓					✓		✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	?			✓
Saltwort	✓					✓	✓			✓					✓	✓	✓	✓	✓			✓		✓	✓		✓				✓
Sea blite	✓	✓	✓			✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓		✓	?			✓
Sea ox-eye	✓	✓	✓				✓			✓					✓	✓	✓		✓	✓	✓	✓		✓	✓		✓	✓			✓
Seashore lupine								✓					✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	?	✓				✓
Seaside dock			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓			✓		?	✓	✓	✓				
Seaside goldenrod	✓	✓	✓				✓			✓					✓	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓			
Seaside plantain	✓	✓	✓			✓	✓	✓		✓			✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓				
Sericea lespedza	✓	✓	✓	✓			✓			✓		✓			✓	✓	✓	✓				✓		✓	✓	✓	✓	?	✓		✓
Sheep sorrel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓				✓		✓	✓		✓				✓
Showy tick-trefoil	✓	✓			✓	✓				✓	✓	✓			✓	✓	✓	✓				✓		✓	✓	✓	✓				
Silverleaf croton	✓	✓								✓					✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓				
Southern bulrush	✓	✓								✓			✓		✓	✓		✓	✓		✓	✓		✓	✓	✓	✓	?			✓
Southern ragweed	✓	✓	✓												✓	✓	✓	✓				✓	✓	✓	✓		✓	?			
Soybean	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓				✓
Spotted burclover	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓		✓				✓
Spotted spurge	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓		✓				
Squarestem spikerush	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓				
Sunflower	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓				✓		✓	✓		✓		✓		
Schweinitz's nutsedge				✓	✓	✓					✓	✓			✓	✓	✓	✓			✓	✓		✓	✓	✓	✓				
Tansy mustard	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓		✓	✓			
Tropic croton	✓	✓	✓				✓			✓		✓			✓	✓	✓	✓				✓		✓	✓	✓	✓				
Tumbleweed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓		✓				
Virginia pepperweed	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓				✓	✓	✓	✓		✓	✓			
Western ragweed			✓	✓	✓	✓			✓		✓		✓	✓	✓	✓	✓	✓				✓	✓	✓	✓		✓	?			
White clover	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓				✓		✓	✓	✓	✓	?	✓		✓
White sweetclover	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓	?			✓
Wild bean	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓	✓			✓	✓	✓	✓		✓				✓
Wild buckwheat	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓				✓		✓	✓		✓				

(Continued)

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Table 3 (Continued)

Common Name	Region**														Soil Conditions											Wildlife Value				Soil Stabilization and Other Soil Benefits
															pH			Salinity			Moisture			Texture						
	ISE	INS	ISP	INP	IRP	IRE	INA	IPNW	ISW	IPL	ICL	INRV	ICA	INW	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Wet	Moist	Dry	Fine	Coarse	Food	Cover	Nesting/ Breeding	Esthetics Value	
Herbs (Continued)																														
Wild sensitive pea	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓				✓	✓	✓	✓	✓	✓		✓	✓
Wild strawberry	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓					✓	✓	✓	✓	✓				
Woolly croton	✓	✓	✓	✓			✓					✓			✓	✓	✓	✓				✓		✓	✓	✓	✓	?		
Woolly indianwheat			✓	✓	✓									✓		✓	✓	✓					✓	✓	✓		✓			
Yellow starthistle							✓	✓				✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓			
Yellow sweetclover	✓	✓				✓	✓			✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	✓				✓
Vines																														
American bittersweet			✓			✓	✓				✓	✓		✓	✓	✓	✓	✓				✓		✓	✓	✓				
Bamboo vine	✓	✓	✓				✓			✓					✓	✓	✓	✓				✓		✓	✓	✓				
Beach morning glory	✓	✓	✓			✓	✓			✓	✓	✓			✓	✓	✓		✓	✓			✓		✓		✓		✓	✓
Common greenbrier	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓			
Crossvine	✓	✓								✓		✓			✓	✓	✓	✓				✓		✓	✓		✓			
Fox grape	✓					✓	✓					✓			✓	✓	✓	✓				✓		✓	✓	✓	✓			
Fringed catbrier	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓				✓		✓	✓		✓			
Frost grape	✓					✓	✓							✓	✓	✓	✓	✓				✓		✓	✓	✓	✓			✓
Japanese honeysuckle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓			✓
Kudzu	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓			✓
Lanceleaf greenbrier	✓	✓	✓							✓					✓	✓	✓	✓				✓	✓	✓	✓		✓			
Muscadine grape	✓	✓	✓	✓			✓			✓					✓	✓	✓	✓				✓		✓		✓	✓			
Peppervine	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓		✓			
Sawbrier	✓	✓	✓		✓	✓				✓	✓	✓			✓	✓	✓	✓				✓	✓		✓		✓			
Summer grape	✓	✓								✓					✓	✓	✓	✓				✓	✓	✓	✓	✓	✓			
Supplejack	✓	✓	✓							✓					✓	✓	✓	✓				✓		✓	✓		✓			
Virginia creeper		✓	✓	✓	✓	✓	✓					✓			✓	✓	✓	✓				✓	✓	✓	✓		✓			
Wild bamboo	✓	✓								✓					✓	✓	✓	✓				✓		✓	✓		✓			
Shrubs and Small Trees																														
American elderberry	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	?	✓	
American hornbeam	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	?	✓	?		
American plum	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓		✓	
Arrowwood viburnum	✓	✓													✓	✓	✓	✓				✓		✓	✓	✓	✓			
Autumn olive	✓	✓	✓				✓			✓					✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bayberry						✓	✓								✓	✓	✓	✓	✓			✓	✓	?	✓		✓	✓	✓	✓
Beach plum						✓	✓								✓	✓	✓	✓	✓			✓	✓	?	✓	✓	✓			✓
Bearberry					✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓					✓	?	✓	✓	✓			✓
Beautyberry	✓	✓					✓			✓					✓	✓	✓	✓				✓		✓	✓	✓	✓		✓	
Bicolor lespedeza	✓		✓				✓			✓					✓	✓	✓	✓				✓	✓	✓	✓	✓	✓			✓

(Continued)

Table 3 (Continued)

Common Name	Region**												Soil Conditions: pH			Salinity			Moisture			Texture		Wildlife Value			Esthetics Value	Soil Stabilization and Other Soil Benefits
	ISE	INS	ISP	INP	INP	INE	INA	IPNW	ISW	IFL	IGL	INRV	ICA	INW	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Wet	Moist	Dry	Fine	Coarse	Food	Cover	Nesting/ Breeding
Shrubs and Small Trees (Continued)																												
Black raspberry	✓		✓	✓		✓	✓								✓	✓	✓	✓				✓		✓	✓	✓	✓	?
Blue brush								✓					✓		✓	✓	✓	✓					✓		✓	✓	✓	
Blue elderberry								✓	✓				✓		✓	✓	✓	✓				✓		✓	✓	✓	✓	
Brazilian peppertree										✓					✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓
Brewer saltbrush													✓	✓	✓	✓	✓		✓	✓			✓	✓	✓		✓	✓
Buffaloberry					✓	✓	✓		✓		✓				✓	✓	✓	✓				✓		✓	✓	✓	✓	?
Bush lupine								✓					✓		✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	?
California blackberry								✓					✓		✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	?
California buckthorn								✓					✓		✓	✓	✓	✓					✓	✓	✓		✓	✓
Canadian serviceberry	✓					✓	✓								✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	?
Carolina ash	✓	✓	✓	✓			✓			✓					✓	✓	✓	✓			✓	✓		✓	✓		✓	?
Carolina rose	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓
Cascara buckthorn								✓					✓		✓	✓	✓	✓				✓		✓	✓		✓	?
Cherry laurel	✓	✓					✓								✓	✓	✓	✓				✓		✓	✓		✓	?
Chickasaw plum	✓	✓	✓				✓								✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓
Common buckthorn	✓	✓	✓							✓					✓	✓	✓	✓				✓		✓	✓		✓	
Common chokecherry		✓		✓				✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓		✓	?
Common deerberry	✓	✓				✓	✓			✓	✓	✓			✓	✓	✓	✓					✓	✓	✓	✓	✓	
Common juniper	✓	✓								✓	✓					✓	✓	✓				✓		✓	✓	✓	✓	✓
Common sweetleaf	✓	✓					✓								✓	✓	✓	✓				✓		✓	✓	✓	✓	
Crabapple	✓	✓					✓			✓					✓	✓	✓	✓				✓		✓	✓	✓	✓	✓
Dahoon	✓	✓								✓					✓	✓	✓	✓	✓			✓	✓		✓		✓	✓
Downy serviceberry	✓	✓													✓	✓	✓	✓					✓	✓	✓	✓	✓	
Eastern hophornbeam	✓	✓	✓	✓		✓	✓			✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓		✓	✓
Elderberry (glauca)								✓	✓				✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	
Elderberry (callicarpa)								✓					✓		✓	✓	✓	✓					✓	✓	✓	✓	✓	
Evergreen blackberry	✓	✓				✓	✓			✓	✓	✓			✓	✓	✓	✓				✓		✓	✓	✓	✓	✓
Firethorn	✓	✓	✓				✓			✓					✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
Flowering dogwood	✓	✓	✓			✓	✓			✓	✓	✓			✓	✓		✓				✓	✓	✓	✓	✓	✓	
Gallberry	✓	✓				✓	✓			✓					✓	✓	✓	✓				✓		✓	✓	✓	✓	
Gray dogwood	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓		✓				✓		✓	✓	✓	✓	
Ground blueberry	✓	✓					✓								✓	✓	✓	✓				✓		✓	✓	✓	✓	
Groundsel tree	✓	✓	✓			✓	✓								✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓
Halberd-leaved willow	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓		✓	✓
Hibiscus	✓	✓	✓			✓	✓			✓					✓	✓	✓	✓	✓		✓	✓		✓	✓		✓	

(Continued)

(Sheet 7 of 11)

Table 3 (Continued)

Common Name	Region[ee]														Soil Conditions											Wildlife Value			Esthetics Value	Soil Stabilization and Other Soil Benefits
															pH			Salinity			Moisture			Texture						
	NSE	NNS	NSP	NMP	NMP	NNE	NWA	NPNW	NSW	NPL	NCL	NNRV	NCA	NNV	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Wet	Moist	Dry	Fine	Coarse	Food	Cover	Nesting/ Breeding		
Shrubs and Small Trees (Continued)																														
Highland blueberry	✓	✓				✓	✓			✓					✓	✓		✓				✓		✓	✓	✓	✓			
Hollyleaf cherry													✓		✓	✓	✓	✓					✓		✓		✓			✓
Honey mesquite			✓						✓						✓	✓	✓	✓	✓				✓	✓	✓		✓	✓		✓
Hooker's willow								✓					✓		✓	✓	✓	✓			✓	✓		✓	✓		✓	?		✓
Japanese lespedeza	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓		✓	✓
Low blueberry	✓	✓					✓								✓	✓		✓				✓		✓	✓	✓	✓			
Maleleaf viburnum	✓	✓					✓								✓	✓	✓	✓				✓		✓	✓	✓	✓	?		
Marsh elder	✓	✓	✓			✓	✓			✓					✓	✓	✓	✓	✓		✓	✓			✓		✓	✓		✓
Mountain blackberry						✓	✓				✓	✓			✓	✓	✓	✓				✓		✓	✓	✓	✓	✓		✓
Multiflora rose	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓	✓	✓	✓
Myrtle oak										✓					✓	✓	✓	✓	✓			✓		✓	✓	?	✓	✓	✓	
Northern bayberry						✓	✓								✓	✓	✓	✓	✓			✓			✓		✓	✓	✓	✓
Oleander		✓							✓	✓					✓	✓	✓	✓	✓			✓	✓		✓		✓	✓	✓	✓
Pacific bayberry								✓					✓		✓	✓	✓	✓	✓			✓	✓	✓	✓		✓	?		
Pacific dogwood								✓					✓		✓	✓		✓				✓		✓	✓	✓	✓			
Pacific wax myrtle								✓					✓		✓	✓	✓	✓	✓			✓		✓	✓		✓			✓
Pacific willow								✓					✓		✓	✓		✓			✓	✓		✓	✓		✓	✓		✓
Poison ivy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓	✓		
Possumhaw	✓	✓	✓	✓			✓			✓	✓	✓			✓	✓	✓	✓				✓		✓	✓	✓	✓	✓	✓	
Possumhaw viburnum	✓	✓					✓			✓					✓	✓	✓	✓				✓		✓	✓		✓	?		
Purple osier willow						✓	✓					✓			✓	✓	✓	✓			✓	✓		✓	✓		✓		✓	✓
Pussy willow					✓	✓					✓				✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	?	✓	✓
Quail brush									✓						✓	✓	✓	✓	✓				✓		✓		✓	✓		✓
Red alder								✓					✓		✓	✓	✓	✓				✓		✓	✓		✓	?		✓
Red buckeye	✓	✓	✓												✓	✓	✓	✓				✓		✓	✓	✓	✓	✓		
Red osier dogwood					✓	✓		✓	✓		✓	✓		✓	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓	✓	✓
Riverflat hawthorn	✓	✓					✓								✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	?		✓
Rough-leafed dogwood	✓	✓	✓	✓	✓		✓								✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓	✓	✓
Russian olive	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓		✓	✓	✓	✓
Rusty blackhaw	✓	✓					✓			✓					✓	✓	✓	✓				✓	✓	✓	✓	✓	✓			
Salal								✓					✓		✓	✓		✓				✓		✓	✓		✓	?	✓	
Salmonberry								✓							✓	✓	✓	✓				✓		✓	✓	✓	✓		✓	✓
Saltbush														✓	✓	✓	✓	✓	✓				✓		✓		✓			
Saltcedar		✓	✓				✓			✓				✓	✓	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓	✓	✓
Sandbar willow			✓	✓		✓					✓	✓		✓	✓	✓	✓	✓			✓	✓		✓	✓		✓	✓		✓

(Continued)

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Table 3 (Continued)

Common Name	Region**														Soil Conditions											Wildlife Value			Esthetics Value	Soil Stabilization and Other Soil Benefits
															pH				Salinity		Moisture			Texture						
	NE	MD	SP	MP	NP	RE	MA	PNW	SW	FL	GL	NRV	CA	NM	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Wet	Moist	Dry	Fine	Coarse	Food	Cover	Nesting/ Breeding		
Shrubs and Small Trees (Continued)																														
Sand blackberry	✓						✓			✓					✓	✓	✓	✓					✓		✓	✓	✓	?		✓
Sand pine		✓								✓					✓	✓	✓	✓	✓			✓	✓		✓		✓	?		✓
Sawtooth oak	✓	✓	✓							✓					✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓		✓
Scotch broom								✓							✓	✓	✓	✓				✓		✓	✓		✓	✓	✓	✓
Sharp-tooth blackberry	✓	✓					✓			✓		✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓		✓
Shining sumac	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓				✓		✓	✓		✓	?		✓
Shore pine								✓					✓		✓	✓	✓	✓				✓	✓	✓	✓		✓	✓	✓	✓
Shrub verbena	✓	✓	✓							✓					✓	✓		✓	✓			✓		✓	✓	✓	✓			
Silky dogwood	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓		✓			✓	✓		✓	✓		✓	✓		✓
Silky willow						✓	✓				✓	✓			✓	✓	✓	✓				✓		✓	✓		✓	✓		✓
Sitka alder								✓							✓	✓	✓	✓				✓		✓	✓	✓	✓	?		
Smooth sumac	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓		✓	✓		✓
Southern bayberry	✓	✓	✓				✓			✓					✓	✓	✓	✓	✓			✓		✓	✓	✓	✓	?		✓
Southern dewberry	✓	✓	✓							✓					✓	✓	✓	✓					✓	✓	✓	✓	✓			
Sparkleberry	✓	✓	✓				✓								✓	✓	✓	✓					✓	✓	✓	✓	✓			
Squaw huckleberry	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓					✓	✓	✓	✓	✓	?		✓
Staghorn sumac	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓					✓	✓	✓		✓		✓	
Sumacweed	✓	✓													✓	✓	✓	✓			✓	✓		✓		✓	✓	✓		✓
Swamp privet	✓	✓													✓	✓	✓	✓				✓		✓	✓		✓		✓	
Swamp rose	✓	✓					✓								✓	✓	✓	✓				✓		✓	✓		✓	?		✓
Tag alder		✓	✓			✓	✓					✓			✓	✓	✓	✓				✓		✓	✓		✓		✓	✓
Tartarian honeysuckle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓		✓		✓	✓		✓
Texas huisache		✓	✓						✓						✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Thorny elaeagnus	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓		✓	✓		
Toothache tree	✓	✓	✓							✓					✓	✓	✓	✓							✓					
Turkey oak	✓	✓								✓					✓	✓		✓				✓	✓		✓	✓	✓	?	✓	✓
Wax myrtle	✓	✓	✓				✓			✓					✓	✓		✓	✓			✓	✓	✓	✓		✓	✓		✓
Western blackberry								✓					✓		✓	✓	✓	✓				✓		✓	✓	✓	✓	?		
Western chokeberry								✓					✓		✓	✓	✓	✓				✓		✓	✓	✓	✓	?		
Western dogwood								✓					✓		✓	✓	✓	✓				✓	✓	✓	✓		✓		✓	
Western huckleberry								✓					✓		✓	✓	✓	✓				✓		✓	✓	✓	✓	?	✓	
Wild apple	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓			
Wild black currant					✓	✓					✓	✓			✓	✓	✓	✓				✓		✓	✓	✓	✓	?		
Wild cherry								✓	✓				✓		✓	✓	✓	✓				✓	✓	✓	✓		✓	✓		
Wild indigo	✓	✓	✓												✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Wild rose	✓	✓	✓				✓			✓					✓	✓	✓	✓												

(Continued)

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Table 3 (Continued)

Common Name	Region**													Soil Conditions												Wildlife Value			Esthetics Value	Soil Stabilization and Other Soil Benefits
														pH			Salinity			Moisture			Texture							
	1SE	1MD	1SP	1NP	1RP	1RE	1MA	1PRN	1SN	1FL	1GL	1MRV	1CA	1NV	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Wet	Moist	Dry	Fine	Coarse	Food	Cover	Nesting/ Breeding		
Shrubs and Small Trees (Continued)																														
Wingscale									✓				✓	✓	✓	✓	✓	✓					✓		✓	✓				✓
Winterberry	✓	✓													✓	✓	✓	✓				✓		✓	✓	✓	✓			
Witch hazel	✓	✓		✓		✓	✓				✓	✓			✓	✓	✓	✓				✓		✓	✓	✓	✓			
Yaupon	✓	✓	✓				✓			✓					✓	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓	✓	
Yellow paloverde									✓				✓		✓	✓	✓	✓	✓				✓		✓		✓	?	✓	✓
Large Trees																														
American beech	✓	✓	✓			✓	✓				✓	✓			✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓	✓	✓
American sycamore	✓	✓	✓	✓	✓	✓	✓				✓	✓			✓	✓	✓	✓			✓	✓		✓	✓		✓	✓	✓	✓
Australian pine										✓			✓		✓	✓	✓	✓				✓			✓		✓	✓	✓	✓
Black cherry	✓	✓	✓	✓	✓	✓	✓			✓	✓				✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	
Black cottonwood								✓	✓				✓		✓	✓	✓	✓			✓	✓		✓	✓		✓	✓	✓	✓
Black gum	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓		✓	✓		
Black locust		✓		✓			✓								✓	✓	✓	✓				✓		✓	✓	✓	✓	✓	✓	✓
Black walnut	✓	✓	✓		✓		✓					✓			✓	✓	✓	✓				✓		✓	✓	✓	✓	✓	✓	
Black willow	✓	✓	✓				✓			✓					✓	✓	✓	✓			✓			✓	✓	✓	✓	✓		✓
Cow oak	✓	✓	✓				✓			✓					✓	✓	✓	✓				✓		✓	✓	✓	✓			
Eastern cottonwood	✓	✓	✓	✓	✓		✓				✓	✓			✓	✓	✓	✓			✓	✓		✓	✓		✓	✓	✓	✓
Eastern red cedar	✓	✓	✓									✓			✓	✓	✓	✓				✓		✓	✓	✓	✓	✓	✓	
Eastern white pine						✓	✓				✓				✓	✓	✓	✓				✓		✓	✓	?	✓	?		
Green ash	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓			✓	✓		✓	✓		✓	✓		✓
Hackberry	✓	✓	✓	✓								✓			✓	✓	✓	✓				✓		✓	✓	✓	✓	✓	✓	
Honeylocust	✓	✓	✓	✓			✓				✓	✓			✓	✓	✓	✓				✓		✓	✓	?	✓	?	✓	✓
Laurel oak	✓	✓	✓												✓	✓	✓	✓				✓	✓	✓	✓		✓	?		
Live oak	✓	✓	✓				✓								✓	✓	✓	✓	✓			✓		✓	✓	✓	✓	✓	✓	
Loblolly pine	✓	✓	✓				✓								✓	✓		✓			✓	✓		✓	✓	✓	✓	✓	✓	✓
Longleaf pine	✓	✓	✓				✓			✓					✓	✓		✓				✓		✓	✓		✓	✓	✓	✓
Mockernut hickory	✓	✓	✓	✓		✓	✓			✓		✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓		
Paper mulberry	✓	✓				✓	✓			✓	✓	✓			✓	✓	✓	✓				✓		✓	✓		✓	?	✓	
Peachleaf willow	✓			✓	✓						✓			✓	✓	✓	✓	✓			✓	✓		✓	✓		✓	✓		✓
Pecan	✓	✓	✓	✓											✓	✓	✓	✓				✓		✓	✓	✓	✓	✓	✓	
Persimmon	✓	✓	✓	✓			✓			✓		✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	
Pignut hickory	✓	✓	✓	✓		✓	✓			✓		✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	
Redbay	✓	✓	✓				✓			✓					✓	✓	✓	✓				✓		✓	✓		✓			
Red maple	✓	✓				✓	✓			✓	✓	✓			✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓	✓	✓
Red mulberry	✓	✓				✓	✓			✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	✓			✓	
River birch	✓	✓	✓	✓			✓					✓			✓	✓	✓	✓			✓	✓		✓	✓		✓		✓	✓

(Continued)

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Table 3 (Concluded)

Common Name	Region**													Soil Conditions											Wildlife Value				Soil Stabilization and Other Soil Benefits
														pH			Salinity			Moisture			Texture				Nesting/	Esthetics	
	ISE	IND	ISP	INP	IMP	IME	IMA	IPRM	ISN	IFL	IGL	INRV	ICA	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Wet	Moist	Dry	Fine	Coarse	Food	Cover	Breeding	Value	
Large Trees (Continued)																													
Sassafras	✓	✓	✓	✓	✓	✓	✓				✓	✓		✓	✓	✓	✓				✓	✓	✓	✓		✓	✓	✓	✓
Slash pine	✓	✓								✓				✓	✓	✓	✓				✓		✓	✓	✓	✓	✓	✓	✓
Southern red oak	✓	✓	✓				✓							✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	
Sugarberry	✓	✓	✓	✓						✓				✓	✓	✓	✓				✓		✓	✓	✓	✓	✓	✓	
Sugar maple				✓	✓	✓	✓				✓	✓		✓	✓	✓	✓				✓		✓	✓	✓	✓			
Sweetbay	✓	✓					✓			✓				✓	✓	✓	✓				✓		✓	✓	✓	✓			
Sweetgum	✓	✓	✓				✓			✓		✓		✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	
Tulip poplar	✓	✓				✓	✓				✓	✓		✓	✓	✓	✓			✓	✓		✓	✓		✓		✓	
Water oak	✓	✓	✓				✓			✓				✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓	✓	✓
White ash	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓		✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓
White oak	✓	✓	✓	✓	✓	✓	✓				✓	✓		✓	✓	✓	✓				✓		✓	✓		✓	✓	✓	
White poplar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓					

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Table 4

Recommended Propagules and Techniques for Selected Marsh Species

Species	Recommended propagules	General collection, handling, and planting techniques	Remarks
Alkali bulrush	Transplants[1], tubers	Dig plants; divide; replant on site at same depth or pot for holding in nursery or greenhouse.	Seeds frequently eaten by waterfowl and other birds; used for soil stabilization; prefers fine soils.
Arrow arum[2]	Transplants, seeds	Dig plants; separate; replant at same depth on the site or pot for holding. Gather seeds when mature; store in freshwater at 1-3°C; broadcast on site and rake into soil.	Primarily a good soil stabilizer, although seeds are infrequently eaten by waterfowl and muskrats use it for lodge material. Potential pest plant.
Beak rush[2]	Seeds	Gather seeds when mature (July to September); store in freshwater at 5°C; broadcast on site and rake into soil.	Seeds eaten by waterfowl primarily.
Beggar's ticks[2]	Seeds	Gather seeds when mature (July to September); store dry at 5°C; broadcast on site and rake into soil.	Good food source for songbirds, game birds, and chicks. Potential pest.
Big cordgrass[2]	Transplants, seedlings	Dig young plants from natural stands; separate; replant on site at same depth or pot for holding. Germinate seeds and grow seedlings until ready for planting (3-6 months).	Excellent soil stabilizer in low, brackish marshes. Salinity prevents this species from competing with smooth cordgrass. Seeds eaten by all kinds of birds; rodents eat young tender foliage. Potential pest
Bigelow's glasswort[2]	Cuttings, rootstock	Collect 5-15 cm cuttings of top shoots and broadcast in wet area on the site. If must be stored, cuttings must remain moist. Dig rootstock; replant on site at same depth.	Low tidal area soil stabilizer. Tolerates fairly high salinities. Easily propagated. Poor source of wildlife foods. Occasionally used by nesting colonial seabirds.
Black mangrove[2]	Seeds, seedlings	Collect seed pods when mature (summer and fall); plant whole pod upright in soil with stem end up and out of the soil. Dig seedlings from natural stand or grow from seed pods.	Excellent soil stabilizer in south Florida. Frequently occurs on dredged material islands and used by colonial nesting wading bird species. Tolerates to 40 ppt salinity.
Black needlerush[2]	Transplants	Dig clumps; divide into sections with a cutting device; replant on site at same depth or pot for holding.	Good high marsh soil stabilizer. Will not tolerate extended inundation and naturally occurs on tidal creek banks and high spots in the marsh. Seeds eaten by birds and small animals.
Bladderworts	Cuttings	Collect quantities of cuttings in buckets of water by scooping plants out of natural stands (in water); transfer to standing water on site.	Good waterfowl food source, especially for dabbling ducks. Potential pest plant in reservoirs.
Broadleaf arrowhead[2]	Transplants	Dig clumps; separate individuals; replant on site or pot for holding.	Good waterfowl food source; good cover for wildlife; muskrat food.
Bulrushes[2]	Transplants, tubers	Dig plants; divide; replant on site or pot for holding. Dig tubers; separate; cut off top shoots if present; replant on site or pot for holding.	Excellent waterfowl and songbird food (seeds); foliage eaten by muskrats; used for cover and breeding and nesting by many species.
Burreed[2]	Transplants	Dig plants; divide; replant on site or pot for holding.	Seeds infrequent source of wildlife food.
Buttercups	Cuttings	Collect quantities of cuttings in buckets of water by scooping plants out of natural stand(in water); transfer to standing water on site.	Good waterfowl food source. Potential pest plant in reservoirs.
Buttonbush[2]	Transplants, seeds	Dig small plants (large seedlings); transplant to site or pot for holding. Collect seeds in August-September; store seeds in freshwater at 5°C.	Seeds good source of food for waterfowl and other birds, insects, beavers, and muskrats. Provides cover and nesting habitat for birds
Chufa[2,3]	Tubers	Dig tubers when mature (July-Sept.); separate from other plant material; store moist but not wet at 5°C; broadcast on site and rake into soil. Tubers as very small and may be treated as seeds.	Excellent food source for waterfowl, turkeys, deer, wild boar, songbirds; highly productive plants may produce hundreds of tubers per plant. Seeds, tubers, foliage all relished.
Common reed[2]	Transplants, rootstock	Dig plants; divide; replant on site or pot for holding. Dig rootstock; separate into sections with at least one growth point, plant on site.	Used for nesting by songbirds, marsh birds, and waterbirds. Stabilizes soil; rapid growth with tall rank form. Definite pest plant.
Common threesquare[2]	Transplants, tubers	Dig plants, divide,replant on site at same depth or pot for holding. Dig tubers; divide; cut off top shoots if present; replant on site.	Good source of food for waterfowl, muskrats, and nutria. Used for soil stabilization.
Delta duckpotato[2,3]	Transplants	Dig plants, separate individuals; replant on site at same depth or pot for holding.	Excellent waterfowl food source; good soil stabilizer; only grows well on fine textured soils.
Dock[2]	Seeds	Collect seeds when mature (May to July); store dry at room temperature or less; plant broadcast on site and rake into soil.	Good food source for songbirds(seeds). Hardy species that is good soil stabilizer.
Dotted smartweed[2]	Seeds, cuttings	Collect seeds; store dry at room temperature or less; broadcast on site and rake into soil. Take cuttings from natural stand; broadcast on wet area on site (not standing water).	Good soil stabilizer; good cover for ducklings; seeds eaten by waterfowl, muskrats, and deer.

(Continued)

1 Transplants include plugs, groups of individuals, very large seedlings, and large whole plants.
2 Known to occur on dredged material. 3 Commercially available.

(Sheet 1 of 5)

Table 4 (Continued)

Species	Recommended propagules	General collection, handling, and planting techniques	Remarks
Duckpotato [2]	Transplants	Dig plants; separate individuals; replant on site or pot for holding.	Excellent food source for waterfowl.
Duckweeds[2]	Whole plants	Collect buckets of plants from natural stand in water; place whole plants in standing permanent water on site.	Excellent food source for waterfowl, especially wood ducks. Good cover. In deep south can be pest in standing water that should be kept open.
Eel grass[2]	Transplants	Dig clumps with coring devices;replant in shallow seawater with a minimum of current and wave action.	Good soil stabilizer; food source for diving ducks; provides cover for marine organisms.
European glasswort[2]	Cuttings, rootstock	Take 5-15 cm cuttings from top shoots; broadcast on wet area of site. Dig rootstock; divide into clumps; replant on site at same depth.	Used primarily for soil stabilization. Poor wildlife food use; occasionally used by nesting colonial seabirds.
Fimbristylis[2]	Transplants, seeds	Dig plants; separate individuals; replant on site at same depth or pot for holding. Collect seeds when mature (July-Sept.); store dry; broadcast on site and rake into soil.	Fair food source for songbirds and occasionally for waterfowl.
Foxtail grasses [2]	Sprigs, seeds	Dig young plants; replant as sprigs on site at same depth or pot for holding as transplants. Collect seeds when mature (June-Oct,depending upon species); store dry at 5°C; broadcast on site.	Good source of food for most birds, browsers and grazers, rodents. Cover for many wildlife species.
Frankenia	Transplants	Dig plants; separate individuals; replant on site at same depth or pot for holding.	Soil stabilizer; poor source of food but some use as cover by wildlife.
Frog bit [2]	Seeds	Collect seeds when mature (July-Sept); store dry at room temperatures or less; broadcast on site and rake into soil.	Good seed source for songbirds; cover for small animals and birds; some use for stabilization.
Giant reed [2]	Seeds, transplants	Collect seeds when mature; store dry at room temperatures or less; broadcast on site and rake into soil. Dig plants; divide; replant on site or pot for holding.	Hardy plant; good seed source for wildlife; used for soil stabilization.
Groundsel tree [2]	Seedlings	Dig seedlings in natural stands; at least 0.3-0.5 m is minimum height for best survival; replant on site at same depth or pot for holding.	Excellent cover and nesting/breeding species; used frequently by colonial nesting wading birds on dredged material islands. Poor food source.
Hardstem bulrush [2]	Transplants, tubers	Dig plants; divide; replant on site or pot for holding. Dig tubers, divide from other plant material; cut off top shoots if present; plant on site at same depth.	Excellent seed source for birds; hardy species; used by muskrats and for soil stabilization.
Horned pondweed	Cuttings, rootstock	Gather plant material from standing water; place on site in permanent standing water areas. Dig rootstock from shallow water areas where possible; plant intact on site.	Fair food source for waterfowl, especially dabbling ducks; good sediment stabilizer.
Horsetails [2]	Transplants	Dig plants; separate individuals; replant on site or pot for holding.	Poor food source; only use is soil stabilization.
Japanese millet [2,3]	Seeds	Buy seeds from commercial seed source.	Excellent upland and marsh bird food; relished by waterfowl; eaten by turkeys, raccoons and other small animals, deer; Used in game management as food plot source.
Ladysthumb [2]	Cuttings, seeds	Take cuttings 5-15 cm from top shoots; broadcast on wet area of site; rake into soil. Collect seeds when mature; store in fresh water; broadcast on site and rake into soil.	Excellent source of food for waterfowl and upland game and songbirds.
Lizard's tail [2]	Transplants, seeds	Dig plants; separate individuals; replant on site or pot for holding. Collect seeds when mature (June-Aug.); store in fresh water; broadcast on site and rake into soil.	Fair food source; used for stabilization in intermittent pond areas.
Lobelia	Transplants	Dig plants; separate individuals; replant on site or pot for holding.	Fair food source; possibly used for stabilization.
Lotus	Seeds, rootstock	Collect seeds when mature (Aug-Oct.); remove from pods; store in fresh water at 5°C; broadcast in shallow water on site. Dig rootstock when water is very low (late summer, fall); plant in shallow water on site.	Fair food source for waterfowl; relished by wild boar (roots); excellent cover for ducklings; potential pest in standing water and shallow reservoirs.
Lyngbye's sedge [2]	Transplants, seeds	Dig plants, separate individuals; replant on site or pot for holding. Collect seeds when mature (July-Sept.); store dry at room temperature; broadcast on site.	Good food source for waterfowl and other birds; good cover for many species.
Manna grass [2] (G. scutiflora)	Seeds, sprigs	Collect seeds when mature; store dry at room temperature or less; broadcast on site. Dig young plants for sprigs; replant on site or pot for holding as transplants.	Excellent seed source for many bird species; foliage eaten by small and large animals; good cover.
Manna grass [2] (G. fluitans)	Seeds, sprigs	Same procedures as above.	Excellent seed source for many bird species and other wildlife, good cover. Grows in wetter areas than above species.

(Continued)

(Sheet 2 of 5)

Table 4 (Continued)

Species	Recommended propagules	General collection, handling, and planting techniques	Remarks
Marsh elder [2]	Seedlings	Dig seedlings in natural stands near parent plants; separate individuals; replant on site or pot for holding. Seedlings should be 0.3 m tall minumum.	Excellent cover species for birds and small animals; used by colonial nesting wading birds for nesting substrate. Potential pest plant.
Marsh hibiscus [2]	Seeds, tranplants	Collect seeds when mature (Aug-Oct); store dry at 5°C; plant on site at least 3-5 cm deep. Dig plants, replant on site or pot for holding.	Good cover for birds, sunning turtles; grows on banks of streams and ponds, in ditches; good soil stabilizer.
Marsh pepper [2]	Cuttings, rootstock	Take 5-15 cm cuttings from top shoots; broadcast on wet area of site; rake into soil. Dig rootstock; divide into sections; plant in wet area of site.	Excellent seed source for waterfowl and other birds; foliage bitter to browsers; good cover and soil stabilizer.
Marsh smartweed [2]	Cuttings, seeds	Cuttings: same as above. Collect seeds when mature (June-Sept); store or plant immediately on site; rake in soil.	Excellent seed source for waterfowl and other birds; good cover for many wildlife species.
Mud plantain [2]	Cuttings	Take 5-15 cm sections from top shoots; replant in mud and wet areas on site taking care to bury portions of cuttings in soil.	Good soil stabilizer in intermittent ponds and streams.
Nodding smartweed [2]	Seeds	Collect seeds when mature (June-Sept); store in fresh water at 5°C; broadcast on site; rake into soil.	Abundant seed source for upland and waterfowl birds; grows in drier soils than most smartweeds; potential pest.
Nutsedges [2]	Tubers, rootstock	Dig tubers in late summer and fall; divide; plant on site or pot for using as transplants. Dig rootstock; divide into sections; plant on site, same depth.	Excellent food source for most wildlife, especially chufa and red-rooted sedge; commercially available; potential pest in agronomic areas.
Olney's threesquare [2]	Transplants, tubers	Dig plants, separate individuals; plant on site or pot for holding. Dig tubers; separate; plant on site at same depth.	Excellent food source for waterfowl, muskrats, nutria, small animals. Good soil stabilizer.
Orache [2]	Seeds	Collect seeds when mature; store dry at room temperature or less; broadcast on site; rake into soil.	Good source of seeds for birds and rodents; good soil stabilizer.
Pacific cordgrass [2]	Transplants, sprigs	Dig young plants from edge of marsh; plant at same depth immediately as sprigs, or grow in pots and transplants into site as larger plants. Growing from seeds not recommended as seeds have very low viability rate.	Only low marsh soil stabilizer on west coast that tolerates both high salinities and strong tidal action. Good soil stabilizer; good cover; very slow growth.
Red mangrove [2]	Seeds, seedlings	Collect seed pods when mature; plant whole pod upright in soil with stem end up and out of the soil. Dig seedlings from natural stand or grow from seed pods.	Excellent soil stabilizer in south Florida. Frequently occurs on dredged material islands and used by colonial nesting wading birds for nesting. Tolerates sea-strength salinities.
Reed canary grass [2,3]	Seeds	Buy seeds from commercial seed source.	Excellent soil stabilizer; seeds good wildlife food source; used to dewater and filter waste water.
Reed grass [2]	Seeds, sprigs	Collect seeds when mature(July-Sept); store dry at 5°C; broadcast on site. Dig young plants to use for sprigs; separate individuals; plant on site or pot for growing as transplants.	Excellent seed source for birds; grazed heavily by mammals and rodents. Good soil stabilizer.
Reed manna grass [2]	Seeds, sprigs	Same procedures as above.	Same value as shown above.
Rice cutgrass [2]	Seeds, sprigs	Collect seeds when mature(May-July); store in fresh water at 5°C; broadcast on site and rake into soil(in wet areas). Dig young plants; separate individuals; plant on site at same depth in wet areas.	Good seed and foliage food source for many wildlife species, especially waterfowl and marsh birds. Good soil stabilizer of banks.
River bulrush [2]	Rootstock, transplants	Dig rootstock, divide into sections; plant at same depth on site. Dig plants; separate individuals; transplant to site or pot for holding.	Used frequently by nesting waterfowl and marsh birds; seed good food source for many wildlife species. Good soil stabilizer.
Rushes [2]	Transplants, rootstock, seeds	Dig plants; separate individuals; transplant to site or pot for holding. Dig rootstock; divide into sections; plant at same depth on site. Collect seeds when mature (July-Oct.); store in fresh water at 5°C; broadcast on site; rake into soil.	This group of plant species excellent for waterfowl, small animal, other birds' food; used as nesting substrate by waterfowl and marsh birds; good soil stabilizers; hardy plants.
Saltgrass [2]	Sprigs, rhizomes	Dig young plants; divide into sections; plant on site or pot for holding. Dig roots; divide rhizomes into small sections; plant on site; rake into soil.	Excellent soil stabilizer; grows well in high brackish marshes; used as lodge material by muskrats; seeds fair food source, but foliage poor source.
Saltmarsh aster [2]	Seeds	Collect seeds when mature (July-Sept); store dry at room temperature or less; broadcast on site; rake into soil.	Good soil stabilizer in high coastal marshes.
Saltmarsh bulrush [2]	Transplants, tubers	Dig plants; divide; plant on site at same depth or pot for holding; Dig tubers; separate tubers; cut off top shoots if present; plant on site at same depth.	Excellent food source for waterfowl and muskrats, nutria, other small animals. Good cover; good soil stabilizer; used by muskrats for lodge material.

(Continued)

(Sheet 3 of 5)

Table 4 (Continued)

Species	Recommended propagules	General collection, handling, and planting techniques	Remarks
Saltmarsh cattail [2]	Transplants, rootstock	Dig plants; separate individuals; plant on site at same depth. Dig roots; separate; cut off top shoots if present; plant on site.	Good soil stabilizer in brackish soils. Occurs in ditches, intermittent ponds, primarily on coasts. Low food value; fair cover.
Saltmarsh jaumea	Transplants	Dig plants, separate individuals; plant on site at same depth or pot for holding.	Fair soil stabilizer on west coast in high brackish marshes.
Saltmeadow cordgrass [2]	Transplants, sprigs	Dig plants; divide into clumps; plant on site at same depth or pot for holding. Dig young plants; separate; plant on site at same depth.	Excellent soil stabilizer in brackish marshes; also used in dune stabilization on Atlantic coast. Seed production often poor; low food value; some cover value.
Saw grass [2]	Sprigs, seeds	Dig young plants; separate individuals; plant on site or pot for holding. Collect seeds when mature (July-Sept); store in fresh water at 5°C; broadcast on site; rake into soil.	Species very site specific; occurs only in south Florida. Will not tolerate high nutrient levels. Good soil stabilizer; good cover; seeds eaten by some wildlife.
Sea lavender [2] (L. carolinianum)	Seeds	Collect seeds when mature (July-Aug); store dry at 5°C; broadcast on site; rake into soil.	Fair soil stabilizer; cover. Low food value. Some nesting substrate value.
Sea lavender [2] (L. vulgare)	Seeds	Same procedures as above.	Same values as above.
Sea ox-eye [2]	Transplants, seeds	Dig plants; separate indivuduals; plant on site at same depth or pot for holding. Collect seed heads when mature (July-Oct); store seeds in fresh water at 5°C; plant on site; rake into soil.	Excellent soil stabilizer; grows in high brackish marshes and on shores. Low food value; some cover and nesting value.
Sea purslane [2]	Seeds	Collect seeds when mature: store dry at room temperature or less; plant on site; rake into soil.	Fair soil stabilization value; low food value; some seed value as food. Some cover use.
Seaside arrowgrass [2]	Transplants	Dig plants, divide into individuals or clumps; plant on site at same depth or pot for holding.	Excellent soil stabilizer in brackish tidal marshes in Pacific northwest; some cover value; low food value.
Sedges [2]	Transplants, seeds	Dig plants; separate into clumps or individuals; plant on site or pot for holding. Collect seeds when mature (June-Sept); store dry at 5°C; broadcast on site; rake into soil.	This group of species far-ranging and widely varied. Usually excellent seed value for wildlife; also good cover. Prolific plants.
Shoal grass [2]	Transplants	Dig plugs with coring device in water at low tide; plant at site immediately at same depth.	Propagules must be stabilized to prevent tidal scour. Good cover value for marine organisms; good sediment stabilizer.
Slough grass [2]	Transplants, seeds	Dig plants; divide into clumps or individuals; plant at same depth on site or pot for holding. Collect seeds when mature (July-Sept); store in fresh water at 5°C; broadcast on wet site area.	Good food value for waterfowl and other seed-eating birds; foliage eaten by small animals. Good soil stabilizer.
Slough sedge [2]	Transplants, seeds	Dig plants; separate into clumps; plant on site at same depth or pot for holding; Collect seeds when mature (July-Oct); store in fresh water at 5°C; broadcast on wet site; rake into soil if necessary.	Excellent wildlife seed source; foliage also eaten. Good soil stabilizer.
Smartweeds [2]	Cuttings, seeds	Take 5-15 cm cuttings from top shoots; broadcast on site; rake into soil taking care to cover parts of cuttings (site should be wet). Collect seeds, store in fresh water or dry depending on species; broadcast on site; rake into soil.	Excellent group of plants for wildlife value; seeds readily consumed by waterfowl and many other birds and small animals. Good soil stabilizers.
Smooth cordgrass [2,3]	Sprigs, transplants	Dig young plants, separate individuals; plant as sprigs on site or pot to hold as transplants. Dig transplants from natural marsh or grow from seeds; plant on site taking care to cover all roots.	Best soil stabilizer of low salt marshes on east and gulf coasts. Used extensively for stabilization and marsh creation projects. good cover value; good food value. Tolerant of tidal inundation for long periods.
Soft rush [2]	Transplants	Dig clumps; divide into sections with cutting device; plant on site at same depth or pot for holding.	Persistent high marsh species; good cover value. Some seed value, but foliage inedible. Known pest in pastoral areas.
Softstem bulrush [2]	Rhizomes, transplants	Dig roots; divide rhizomes leaving at at least one growth point on each; plant on site 2-5 cm deep. Dig plants; divide into sections; plant on site or pot for holding.	Excellent soil stabilizer of fresh water coastal and interior marshes. Good seed value for wildlife. Used as cover and nesting material by waterfowl and other wildlife.
Southern bulrush	Rhizomes, transplants	Same procedures as above.	Same values as above, except that this species does not occur as extensively as softstem bulrush, and grows much larger and robust.
Southern smartweed [2]	Cuttings, seeds	Take 5-15 cm cuttings from top shoots; broadcast in wet area on site; rake or place cuttings into soil. Collect seeds when mature (July-Oct); store in fresh water at 5°C; broadcast on site; rake into soil.	Excellent food source for waterfowl and marsh birds. Prolific growth habits; forms dense tall stands. Good cover value.
Southern cutgrass [2]	Seeds, sprigs	Collect seeds when mature (May-July); store in fresh water at 5°C; broadcast on wet site, rake into soil if necessary.	Excellent seed value for waterfowl and other birds; foliage eaten by small animals and grazers when tender and young. Good soil stab.

(Continued)

(Sheet 4 of 5)

Table 4 (Concluded)

Species	Recommended propagules	General collection, handling, and planting techniques	Remarks
Spatterdock[2]	Transplants	Dig plants; separate individuals; plant on site at same depth or pot for holding.	Good waterfowl food; good soil stabilizer.
Spikerushes[2]	Transplants	Dig plants; divide into clumps; plant on site at same depth or pot for holding.	Excellent soil stabilizer; fair waterfowl food.
Spirodella[2]	Whole plants	Scoop buckets of plants from standing water; transfer to standing water on site.	Good waterfowl food, especially wood ducks.
Sprangletop[2]	Seeds, sprigs	Collect seeds when mature(summer,fall); store dry at room temperature or less; broadcast on site; rake into soil. Dig young plants; plant on site as sprigs.	Excellent seed source for wildlife; good soil stabilizer; used for cover.
Sweet flag	Transplants	Dig plants; divide individuals; plant on site in high marsh at same depth.	Good soil stabilizer; fair wildlife value; potential pest plant.
Tufted hairgrass[2]	Transplants, sprigs	Dig plants; divide individuals; plant on site or pot for holding. Dig young plants; plant as sprigs on site.	Excellent low marsh species for Pacific northwest; prolific growth; good cover and fair food wildlife value. Good soil stabilizer.
Turtle grass[2]	Transplants	Dig clumps with coring device from water at low tide; take care to be sure that at least one growth point is in each clump or will not reproduce: plant on site in the water.	Excellent cover and wildlife value; good cover for marine organisms. Species susceptible to enviromental changes by man; rare in some areas.
Walter's millet[2,3]	Seeds	Buy from commercial seed source.	Excellent food value for waterfowl and other wildlife such as raccoons, turkey, deer, muskrats. Good temporary soil stabilizer.
Water hemp[2]	Seeds	Collect seeds when mature; store in fresh water at 5°C; broadcast in wet area on site; rake into soil if nec.	Good seed source for wildlife; fair soil stabilizer.
Water hyssop	Cuttings, sprigs	Take 5-15 cm cuttings from top shoots; plant in mud on site. Dig young plants; divide, plant on site in wet area.	Good soil stabilizer; fair wildlife food.
Water lilies[2,3]	Rootstock	Dig rootstock in late summer and fall when water levels are low; transplant to shallow water on site.	Good cover for ducklings; some food value. Excellent sediment stabilizer; potential pest.
Watermilfoils	Cuttings	Remove buckets of segments of plants from standing water; transfer to standing water on site.	Excellent dabbling duck food; good cover. Potential pest in standing water and reservoirs.
Water nymphs	Cuttings	Same procedures as above.	Same value as above.
Water plantain[2]	Transplants	Dig plants; divide individuals; plant on site at same depth.	Good food source for wildlife; fair soil stabilizer.
Water shield	Rootstock	Dig roots in shallow water in late summer and fall; transfer to standing shallow water on site.	Good cover value, good sediment stabilizer.
Water smartweed[2]	Cuttings, seeds	Take 5-15 cm cuttings from top shoots; plant on site in wet area taking care to bury part of cutting. Collect seeds when mature(July-Sept); store in fresh water at 5°C; broadcast on wet site.	Excellent waterfowl food; good cover Excellent sediment and soil stabilizer.
Water willow	Transplants	Dig plants; divide individuals; plant on site at same depth.	Fair soil stabilizer; low wildlife value.
White mangrove[2]	Seeds, seedlings	Collect seeds when mature; plant immediately on site. Dig seedlings from natural stand; plant on site.	Excellent soil stabilizer; good cover; low food value; used by nesting birds.
Widgeongrass[2]	Cuttings	Remove buckets of segments of plants from standing water; transfer to standing water on site.	Excellent waterfowl food; grown by waterfowl managers for attracting waterfowl.
Wild celery	Whole plants	Remove whole plants from standing water; transfer to standing water on site.	Excellent cover value; harbors many invertebrates fed on by wildlife. Shades out aquatic plants; pest in Florida and deep south in some areas.
Wild rice[2]	Sprigs, seeds	Dig young plants, divide individuals; plant in shallow water on site. Collect seeds when mature; plant on wet site.	Low tolerance for pollution; must have fine-textured soils in slow-moving water. Excellent wildlife food, good soil stabilizer.
Willows[2]	Cuttings	Take 10-30 cm cuttings from dormant trees (winter months, early spring); plant on site with butt end 2/3 in soil.	Excellent soil stabilizer of stream and pond banks. Good cover and food value for songbirds. Very fast growing, potential pest.
Wolffias	Whole plants	Remove buckets of plants from standing water; transfer to standing water on site.	Excellent waterfowl food; good cover value.
Yellow flag	Transplants, rhizomes	Dig plants; divide individuals; plant in high marsh on site. Dig rhizomes; divide keeping one growth point on each rhizome; plant shallowly on site.	Good soil stabilizer, low wildlife value: showy flowers.

(Concluded)

Sources of information used in the preparation of this table and Table 5 came from unpublished data by the author (Landin) and the following references: Adams (1963), Harbour and Davis (1970), Britton and Brown (1970), Brockman (1968), Broome et al. (1973), Burkhalter et al. (1974), Chabreck (1970), Correll and Johnston (1970), Duncan (1974), Eyles and Robertson (1963), Fassett (1960), Harris and Marshall (1960), Hitchcock (1950), Hotchkiss (1967), Hotchkiss (1970), Kadlec and Wentz (1974), Long and Lakela (1971), Martin et al. (1951), Mason (1969), Palmisano (1972), Radford et al. (1968), Salyer (1949), Seneca (1972), and Woodhouse et al. (1972).

(Sheet 5 of 5)

Table 5

Selected Marsh Species and Their General Growth Requirements and Characteristics

Species	Region*						Soil Conditions									Marsh Moisture Conditions						Wildlife Value			Morphology		Potential Nuisance	Soil Stabilization
								pH			Salinity			Texture		Standing Water	Tidal		Interior									
	SA	NA	FF	GC	WC	I	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Fine	Coarse		Low	High	Low Fresh	High Fresh	Brackish	Food	Cover	Nesting/ Breeding	Perennial	Annual		
Alkali bulrush (Scirpus paludosus)		✓			✓	✓		✓	✓	✓	✓		✓	✓			✓		✓	✓				✓			✓
Arrow arum (Peltandra virginica)	✓	✓	✓	✓		✓	✓	✓	✓	✓			✓								✓	✓	✓	✓		✓	✓
Beak rush (Rynchospora tracyi)	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓			✓		✓		✓	✓		✓			✓
Beggar's ticks (Bidens spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			✓		✓		✓	✓		✓	✓	✓	✓
Big cordgrass (Spartina cynosuroides)	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓	✓		✓	✓				✓	✓	✓	✓		✓	✓
[illegible]ow's glasswort (Salicornia bigelovii)	✓	✓	✓	✓			✓	✓	✓		✓	✓	✓	✓		✓	✓					✓		✓			✓
Black mangrove (Avicennia nitida)			✓	✓			✓	✓	✓		✓	✓	✓	✓		✓						✓	✓	✓			✓
Black needlerush (Juncus roemerianus)	✓		✓	✓			✓	✓	✓	✓	✓		✓	✓			✓					✓		✓		✓	✓
Bladderworts (Utricularia spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓			✓	✓		✓		✓	
Broadleaf arrowhead (Sagittaria latifolia)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓			✓	✓		✓	✓	✓	✓			✓
Broadleaf cattail (Typha latifolia)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓			✓	✓	✓	✓		✓	✓
Bulrushes (Scirpus spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Burreed (Sparganium americanum)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓					✓		✓	✓		✓			✓
Buttercups (Ranunculus spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓				✓		✓		✓	
Buttonbush (Cephalanthus occidentalis)	✓		✓	✓		✓	✓	✓	✓	✓			✓	✓	✓			✓	✓		✓	✓	✓	✓			✓
Chufa (Cyperus esculentus)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓						✓		✓	✓		✓			✓
Common reed (Phragmites australis)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			✓		✓	✓		✓	✓	✓		✓	✓
Common threesquare (Scirpus americanus)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓			✓	✓	✓	✓	✓			✓
Delta duckpotato (Sagittaria platyphylla)			✓	✓			✓	✓	✓	✓			✓	✓				✓	✓		✓	✓		✓			✓
Dock (Rumex spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓					✓		✓	✓		✓		✓	✓
Dotted smartweed (Polygonum punctatum)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓					✓		✓	✓		✓	✓		✓
Duckpotato (Sagittaria cuneata)		✓			✓	✓	✓	✓	✓	✓			✓					✓	✓		✓	✓		✓			✓
Duckweeds (Lemna spp.)	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓		✓						✓	✓		✓		✓	
Eel grass (Zostera marina)	✓	✓			✓		✓	✓	✓		✓	✓	✓	✓	✓	✓					✓	✓		✓			✓

(Continued)

* SA = south Atlantic; NA = north Atlantic; FF = peninsula Florida; GC = gulf coasts; WC = west coast; I = interior.

(Sheet 1 of 5)

Table 5 (Continued)

Species	Region*						Soil Conditions								Marsh Moisture Conditions						Wildlife Value			Morphology		Potential Nuisance	Soil Stabilization
							pH			Salinity			Texture		Standing Water	Tidal		Interior									
							Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Fine	Coarse		Low	High	Low Fresh	High Fresh	Brackish	Food	Cover	Nesting/ Breeding	Perennial	Annual		
European glasswort (Salicornia europaea)	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓		✓						✓	✓	✓			✓
Fimbristylis (Fimbristylis castanea)	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓	✓			✓		✓	✓	✓	✓		✓			✓
Foxtail grasses (Setaria spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓					✓		✓	✓	✓	✓	✓	✓	✓
Frankenia (Frankenia grandifolia)					✓		✓	✓	✓		✓		✓	✓		✓	✓					✓		✓			
Frog bit (Limnobium spongia)	✓	✓	✓	✓		✓	✓	✓	✓	✓			✓	✓				✓	✓		✓	✓		✓	✓		✓
Giant reed (Arundo donax)	✓		✓	✓		✓	✓	✓	✓	✓			✓	✓				✓	✓		✓	✓	✓	✓			✓
Groundsel tree (Baccharis halimifolia)	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓	✓			✓					✓	✓	✓			✓
Hardstem bulrush (Scirpus acutus)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			✓	✓	✓	✓	✓	✓		✓			✓
Horned pondweed (Zannichellia palustris)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓		✓	✓	✓		✓			✓
Horsetails (Equisetum spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			✓	✓	✓	✓		✓	✓	✓		✓	✓
Japanese millet (Echinochloa crus-galli)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓					✓		✓	✓			✓		✓
Ladysthumb (Polygonum persicaria)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓					✓			✓		✓			✓
Lizard's tail (Saururus cernuus)	✓	✓	✓	✓		✓	✓	✓		✓			✓					✓	✓		✓	✓		✓			✓
Lobelia (Lobelia d rtmanna)		✓			✓	✓	✓	✓	✓	✓			✓	✓					✓			✓					
Lotus (Nelumbo lutea)	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓	✓			✓			✓	✓		✓		✓	✓
Lyngbye's sedge (Carex lyngbyei)					✓		✓	✓		✓			✓	✓					✓		✓	✓		✓			✓
Manna grass (Glyceria acutiflora)	✓	✓		✓		✓	✓	✓	✓	✓			✓	✓	✓			✓			✓	✓	✓	✓			✓
Manna grass (Glyceria fluitans)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓				✓	✓		✓	✓	✓	✓			✓
Marsh elder (Iva frutescens)	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓	✓			✓					✓	✓	✓			✓
Marsh hibiscus (Hibiscus moscheutos)	✓		✓	✓			✓	✓		✓			✓	✓				✓	✓		✓	✓	✓	✓			✓
Marsh pepper (Polygonum hydropiper)	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓				✓	✓		✓	✓		✓	✓	✓	✓
Marsh smartweed (Polygonum hydropiperoides)	✓	✓	✓	✓		✓	✓	✓		✓			✓	✓				✓	✓		✓	✓		✓		✓	✓
Mud plantain (Heteranthera reniformis)	✓	✓	✓	✓		✓	✓	✓		✓			✓						✓			✓		✓			✓
Nodding smartweed (Polygonum lapathifolium)	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓				✓	✓		✓	✓	✓	✓		✓	✓
Nutsedges (Cyperus spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓				✓	✓		✓	✓	✓	✓		✓	✓

(Continued)

(Sheet 2 of 5)

Table 5 (Continued)

Species	Region*						Soil Conditions								Marsh Moisture Conditions						Wildlife Value			Morphology		Potential Nuisance	Soil Stabilization
							pH			Salinity			Texture		Standing Water	Tidal		Interior									
	SA	SA	PP	OC	NC	I	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Fine	Coarse		Low	High	Low Fresh	High Fresh	Brackish	Food	Cover	Nesting/Breeding	Perennial	Annual		
Olney's threesquare (Scirpus olneyi)	✓			✓	✓		✓	✓		✓	✓		✓				✓			✓	✓	✓		✓			✓
Orache (Atriplex patula)	✓	✓		✓			✓	✓	✓	✓	✓			✓			✓			✓		✓		✓			✓
Pacific cordgrass (Spartina foliosa)					✓		✓	✓			✓	✓	✓	✓		✓					✓	✓		✓			✓
Pacific glasswort (Salicornia pacifica)					✓		✓	✓	✓		✓	✓	✓	✓		✓	✓					✓		✓			✓
Pacific sedge (Carex obnupta)					✓		✓	✓		✓	✓		✓	✓			✓				✓	✓	✓	✓			✓
Panic grasses (Panicum spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Paspalum grasses (Paspalum spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			✓		✓	✓	✓	✓	✓	✓	✓		✓
Pennsylvania smartweed (Polygonum pensylvanicum)	✓	✓	✓	✓		✓	✓	✓		✓			✓	✓				✓	✓		✓			✓			✓
Pennywarts (Hydrocotyle spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓		✓	✓	✓	✓		✓	✓	✓			✓
Pickerelweed (Pontederia cordata)	✓	✓	✓	✓		✓	✓	✓		✓			✓					✓			✓	✓	✓	✓			✓
Pondweeds (Potamogeton spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓												
Prairie cordgrass (Spartina pectinata)	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓		✓	✓			✓	✓	✓	✓	✓			✓
Red mangrove (Rhizophora mangle)			✓				✓	✓	✓			✓	✓	✓	✓	✓						✓	✓	✓			✓
Reed canary grass (Phalaris arundinacea)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓					✓		✓	✓	✓	✓			✓
Reed grass (Calamagrostis canadensis)	✓			✓	✓	✓	✓	✓	✓	✓			✓	✓					✓		✓	✓	✓	✓			✓
Reed manna grass (Glyceria grandis)	✓	✓		✓	✓	✓	✓	✓	✓	✓			✓	✓							✓	✓		✓			✓
Rice cutgrass (Leersia oryzoides)	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓	✓			✓			✓	✓		✓			✓
River bulrush (Scirpus fluviatilis)		✓		✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓		✓	✓	✓	✓			✓
Rushes (Juncus spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			✓		✓	✓		✓		✓			✓
Saltgrass (Distichlis spicata)	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓		✓	✓				✓	✓	✓	✓			✓
Saltmarsh aster (Aster tenuifolius	✓	✓	✓	✓			✓	✓	✓		✓		✓	✓			✓					✓		✓			✓
Saltmarsh bulrush (Scirpus robustus)	✓	✓	✓	✓			✓	✓	✓		✓	✓	✓				✓			✓	✓	✓	✓	✓			✓
Saltmarsh cattail (Typha angustifolia	✓	✓	✓	✓			✓	✓		✓	✓		✓	✓			✓		✓	✓		✓		✓			✓
Saltmarsh jaumea (Jaumea carnosa)					✓		✓	✓					✓	✓			✓					✓		✓			✓
Saltmeadow cordgrass (Spartina patens)	✓	✓	✓	✓			✓	✓	✓		✓		✓	✓			✓				✓	✓	✓	✓			✓

(Continued)

(Sheet 3 of 5)

Table 5 (Continued)

Species	Region*						Soil Conditions								Marsh Moisture Conditions						Wildlife Value			Morphology		Potential Nuisance	Soil Stabilization
							pH			Salinity			Texture		Standing Water	Tidal		Interior					Nesting/ Breeding				
	ISA	NM	PR	GC	MC	I	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Fine	Coarse		Low	High	Low Fresh	High Fresh	Brackish	Food	Cover		Perennial	Annual		
Saw grass (Cladium jamaicense)			✓				✓	✓	✓	✓			✓	✓	✓			✓	✓		✓	✓	✓	✓			✓
Sea lavender (Limonium carolinianum)	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓	✓			✓					✓		✓			✓
Sea lavender (Limonium vulgare)	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓			✓					✓	✓	✓			✓
Sea ox-eye (Borrichia frutescens)	✓		✓	✓			✓	✓	✓			✓	✓	✓		✓	✓					✓	✓	✓			✓
Sea purslane (Sesuvium portulacastrum)	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓	✓			✓					✓	✓	✓			✓
Seaside arrowgrass (Triglochin maritime		✓			✓			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓		✓			✓
Sedges (Carex spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			✓	✓	✓	✓	✓	✓	✓	✓			✓
Shoal grass (Halodule wrightii)	✓		✓	✓				✓	✓			✓	✓	✓	✓						✓	✓		✓			✓
Slough grass (Beckmannia syzigachne)		✓		✓	✓		✓	✓		✓			✓	✓					✓			✓		✓			✓
Slough sedge (Carex trichocarpa)		✓			✓	✓	✓	✓		✓			✓	✓				✓	✓		✓	✓	✓	✓			✓
Smartweeds (Polygonum spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓		✓	✓	✓	✓		✓	✓
Smooth cordgrass (Spartina alterniflora)	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓		✓					✓	✓	✓	✓			✓
Soft rush (Juncus effusus)	✓		✓	✓		✓	✓	✓			✓		✓						✓		✓	✓	✓	✓		✓	✓
Softstem bulrush (Scirpus validus)	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓					✓	✓		✓	✓	✓	✓			✓
Southern bulrush (Scirpus californicus)	✓		✓	✓	✓	✓	✓	✓			✓		✓	✓				✓	✓		✓	✓	✓	✓			✓
Southern smartweed (Polygonum densiflorum)	✓		✓	✓		✓	✓	✓			✓		✓	✓				✓	✓		✓	✓		✓			✓
Southern cutgrass (Zizaniopsis miliacea)	✓		✓	✓		✓	✓	✓	✓		✓		✓					✓			✓	✓	✓	✓			✓
Spatterdock (Nuphar luteum)	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓					✓	✓		✓	✓		✓			✓
Spikerushes (Eleocharis spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			✓	✓	✓	✓	✓	✓		✓			✓
Spirodella (Spirodella polyrhiza)	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓		✓						✓	✓		✓		✓	✓
Sprangletop (Leptochloa fascicularis)	✓			✓			✓	✓		✓			✓	✓					✓		✓	✓	✓	✓			✓
Sweet flag (Acorus calamus)	✓					✓	✓	✓		✓			✓						✓			✓		✓			✓
Tufted hairgrass (Deschampsia caespitosa)		✓			✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓			✓	✓	✓			✓
Turtle grass (Thalassia testudinum)	✓		✓		✓			✓	✓			✓	✓	✓	✓						✓	✓		✓			✓
Walter's millet (Echinochloa walteri)	✓	✓	✓	✓		✓	✓	✓	✓	✓			✓	✓					✓		✓	✓			✓		✓

(Continued)

(Sheet 4 of 5)

Table 5 (Concluded)

Species	Region[a]						Soil Conditions								Marsh Moisture Conditions						Wildlife Value			Morphology		Potential Nuisance	Soil Stabilization
							pH			Salinity			Texture		Standing Water	Tidal		Interior									
	NW	NE	MP	SOC	SW	W	Acid	Neutral	Alkaline	Fresh	Brackish	Saline	Fine	Coarse		Low	High	Low Fresh	High Fresh	Brackish	Food	Cover	Nesting/ Breeding	Perennial	Annual		
Water hemp (Acnida cannabina)	✓	✓	✓				✓	✓		✓			✓	✓				✓	✓		✓	✓		✓			✓
Water hyssop (Bacopa caroliniana)	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓			✓		✓			
Water lilies (Nymphaea spp.)	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓	✓							✓		✓		✓	
Watermilfoils (Myriophyllum spp.)	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓	✓						✓	✓		✓		✓	
Water nymphs (Najas spp.)	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓	✓	✓							✓		✓		✓	
Water plantain (Alisma plantago-aquatica)	✓	✓		✓		✓	✓	✓		✓			✓	✓				✓	✓		✓	✓		✓			✓
Water shield (Brasenia schreberi)	✓		✓				✓	✓			✓		✓	✓	✓							✓		✓		✓	
Water smartweed (Polygonum amphibium)	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓	✓			✓	✓		✓	✓		✓		✓	✓
Water willow (Decodon verticillatus)	✓	✓	✓	✓			✓	✓		✓			✓	✓					✓			✓		✓			✓
White mangrove (Laguncularia racemosa)			✓				✓	✓	✓		✓	✓	✓	✓	✓	✓						✓	✓	✓			
Widgeongrass (Ruppia maritima)	✓	✓	✓	✓	✓	✓		✓	✓		✓		✓	✓	✓	✓	✓				✓	✓		✓			
Wild celery (Vallisneria americana)	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓			✓			✓	✓		✓		✓	
Wild rice (Zizania aquatica)	✓	✓	✓	✓		✓	✓	✓		✓			✓	✓				✓	✓		✓	✓		✓			✓
Willows (Salix spp.)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓			✓	✓		✓	✓	✓	✓		✓	✓
Wolffias (Wolffia spp.)	✓	✓	✓	✓		✓	✓	✓	✓	✓			✓		✓						✓	✓		✓			
Yellow flag (Iris versicolor)			✓			✓	✓	✓		✓			✓	✓					✓			✓		✓			✓

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Table 6

Plant Species Identified and/or
Collected on Dredged Material Islands and Sites by
Scientific Name, Authority, and Common Name

FERNS AND THEIR ALLIES

Athyrium filix - femina (L.) Roth
lady fern
Athyrium thelypteroides (Michx.) Desv.
silvery fern
Botrychium neglectum Wood
grape fern
Botrychium virginianum (L.) Scv.
rattlesnake fern
Dennstaedtia punctilobula (Michx.) Moore
hay-scented fern
Dryopteris austriaca (Jacq.) Woynar
mountain wood fern
Dryopteris thelypteris A. Gray
marsh shield fern
Equisetum arvense L.
field horsetail
Equisetum hyemale L.
scouring rush
Equisetum palustre L.
marsh horsetail
Eurhynchium oreganum (Sull.) Jaeq. and Sauerb.
feather moss
Hylocomium splendens (Hedw.) B.S.G.
stairstep moss
Lorinseria areolata Presl.
net-veined chain fern
Onoclea sensibilis L.
sensitive fern
Polypodium glycyrrhiza D. C. Eat.
licorice fern
Polypodium polypodioides (L.) A. S. Hitchcock
resurrection fern
Polypodium vulgare L.
maiden hair fern
Polystichum acrostichoides (Michx.) Schott
Christmas fern
Polystichum juniperinum (Hedw.)
juniper haircap moss
Polystichum munitum (Kaulf.) Presl.
sword fern

(sheet 1 of 46)

Pteridium aquilinum (L.) Kuhn
bracken fern
Rhytidiadelphus loreus (Hedw.) Warnst.
little shaggy moss

GRASSES

Agropyron dasystachyum (Hook.) Vasey
thickspike wheatgrass
Agropyron intermedium (Host) Beauv.
wheatgrass
Agropyron repens (L.) Beauv.
quackgrass
Agropyron trachycaulum Vasey
slender wheatgrass
Agrostis alba L.
redtop bentgrass
Agrostis exarata Trin.
spike bentgrass
Agrostis gigantea Roth.
redtop
Agrostis hyemalis (Walt.) BSP
ticklegrass
Agrostis perennans (Walt.) Tuckerman
autumn bentgrass
Agrostis scalera Willd.
hairgrass
Agrostis stolonifera L.
running bentgrass
Agrostis tenius Sibth.
Rhode Island bentgrass
Aira caryophylla L.
silver hairgrass
Aira elegans Willd.
hairgrass
Aira praecox L.
hairgrass
Ammophila arenaria L.
European beach grass
Ammophila breviligulata Fernald.
American beach grass
Andropogon gerardi Vitm.
big bluestem
Andropogon glomeratus (Walt.) BSP
bushy beardgrass
Andropogon scoparius Michx.
little bluestem
Andropogon ternarius Michx.
splitbeard bluestem

(sheet 2 of 46)

Andropogon virginicus L.
broomsedge
Aristida intermedia Schribn. & Ball.
prairie three-awn
Aristida longespica Poir.
three-awn
Aristida oligantha Michx.
prairie three-awn
Arundo donax L.
giant reed
Brachiaria platyphylla (Gris.) Nash.
coast arm-grass
Bromus catharticus L.
rescue grass
Bromus inermus Leyss
brome grass
Bromus japonicus Thunb.
Japanese chess
Bromus kalmii A. Gray
wild chess
Bromus mollis L.
soft chess
Bromus secalinus L.
ryebrome
Bromus tectorum L.
cheat grass
Bromus unioloides(Willd.) HBK
Schrader's rescue grass
Bothriochloa ischaemum (L.) Keng. var. songaricus Fisch. & Mey.
King Ranch bluestem
Bothriochloa saccharoides (Sw.) Rybd.
silver bluestem
Calamagrostis canadensis (Michx.) Beauv.
bluejoint reedgrass
Calamagrostis inexpansa Gray var. brevior (Vasey) Steb.
reed bentgrass
Cenchrus ciliaris L.
buffelgrass
Cenchrus echinatus L.
sandspur
Cenchrus incertus M. A. Curtis
coast sandspur
Cenchrus longispinus (Hach.) Fern.
sandbur
Cenchrus pauciflorus Benth.
field sandspur
Cenchrus tribuloides L.
dune sandspur
Chloris cucullata Bisch.
hooded windmill grass

(sheet 3 of 46)

Chloris glauca (Chapm.) Wood
fingergrass
Chloris latisquamea Nash.
Nash windmill grass
Chloris petraea Sw.
fingergrass
Cynodon dactylon (L.) Pers.
common Bermuda grass
Dactylis glomerata L.
orchard grass
Dactyloctenium aegyptium (L.) Richt.
crowfoot grass
Deschampsia caespitosa (L.) Beauv.
tufted hairgrass
Digitaria ischaemum (Schreb.) Muhl.
smooth crabgrass
Digitaria sanguinalis (L.) Scopoli
large crabgrass
Digitaria texana Hitchc.
Texas crabgrass
Distichlis spicata (L.) Greene
saltgrass
Enchinochloa colonum (L.) Link
jungle rice
Enchinochloa crusgalli (L.) Beauv.
barnyard grass
Enchinochloa muricata (Beauv.) Fern.
barnyard grass
Enchinochloa walteri (Pursh) Heller
Walter's millet
Elusine indica (L.) Gaertner
goose grass
Elymus canadensis L.
Canadian wild rye
Elymus mollis Trin.
American dune grass
Elymus virginicus L.
wild rye
Eragrostis barrelieri Daveau.
Mediterranean love grass
Eragrostis capillaris (L.) Nees
lacegrass
Eragrostis ciliaris (L.) R. Br.
lovegrass
Eragrostis frankii C. A. Mey.
Frank's lovegrass
Eragrostis hypnoides (Lam.) BSP
smooth creeping lovegrass
Eragrostis oxylepis (Torr.) Torr.
red lovegrass

(sheet 4 of 46)

Eragrostis pectinacea (Michx.) Nees.
purple lovegrass
Eragrostis sessilispica Buckl.
tumble lovegrass
Eragrostis spectabilis (Pursh.) Steud.
purple lovegrass
Eragrostis trichodes (Nutt.) Nash
lovegrass
Festuca arundinacea Schreb.
tall fescue
Festuca bromoides L.
fescue
Festuca myuros L.
rattail fescue
Festuca octoflora Walt.
fescue
Festuca rubra L.
red fescue
Glyceria grandis S. Wats.
American mannagrass
Holcus lanatus L.
common velvetgrass
Hordeum brachyantherum Nevski
meadow barley
Hordeum jubatum L.
foxtail barley
Hordeum pusillum Nutt.
little barley
Hordeum vulgare L.
barley
Hystrix patula (L.) Millsp.
bottlebrush
Leersia lenticularis Michx.
catchfly grass
Leersia oryzoides (L.) Sw.
rice cutgrass
Leersia virginica Willd.
cutgrass
Leptochloa virgata (L.) Beauv.
tropic sprangletop
Leptoloma cognatum (Schult.) Chase
fall witchgrass
Lolium multiflorum Lam.
Italian ryegrass
Lolium perenne L.
perennial ryegrass
Melica mutica Walt.
melic grass
Microstegium vimineum (Trin.) A. Camus.

(sheet 5 of 46)

Monanthochloe littoralis Engelm.
shoregrass
Muhlenbergia capillaris (Lam.) Trin.
coast muhly
Muhlenbergia frondosa (Poir.) Fern.
dropseed
Muhlenbergia racemosa (Michx.) BSP
wild timothy
Muhlenbergia rigens (Benth.) Hitchc.
deertongue
Oplismenus setarius (Lam.) R. & S.

Panicum amarulum Hitchc. & Chase
shoredune panic grass
Panicum amarum Ell.
beach panic grass
Panicum anceps Michx.
beaked panic grass
Panicum angustifolium Ell.
narrowleaf panic grass
Panicum capillare L.
witchgrass
Panicum clandestinum L.
panic grass
Panicum dichotomiflorum Michx.
spreading witchgrass
Panicum lanuginosum Ell.
wooly panic grass
Panicum oligosanthes Schultes
few-flowered panic grass
Panicum ovinum Schribn. & Sm.
sheep panic grass
Panicum paludivagum Hitchc.
water panic grass
Panicum repens L.
torpedo grass
Panicum spaerocarpon Ell.
roundseed panic grass
Panicum virgatum L.
switchgrass
Parapholis incurva (L.) C. E. Hubb.
sicklegrass
Paspalum boscianum Fluegge.
bull paspalum
Paspalum ciliatifolium var. stramineum (Hash) Fern.
ciliate paspalum
Paspalum distichum L.
knotgrass
Paspalum ditatatum Poir.
dallis grass

(sheet 6 of 46)

Paspalum monostachyum Vasey
gulfdune paspalum
Paspalum notatum Flugge
bahia grass
Paspalum plicatulum Michx.
brownseed paspalum
Paspalum setaceum Michx.
coast paspalum
Paspalum urvillei Steud.
Vasey grass
Paspalum vaginatum Sw.
seashore paspalum
Phalaris arundinacea L.
reed canary grass
Phalaris caroliniana Walt.
Carolina canary grass
Phleum pratense L.
timothy
Phragmites australis (Cav.) Trin. ex Steud.
common reed
Poa annua L.
bluegrass
Poa compressa L.
Canada bluegrass
Poa macantha Vasey
seashore bluegrass
Poa palustris L.
fowl meadowgrass
Poa pratensis L.
Kentucky bluegrass
Polypogon monspeliensis (L.) Desf.
rabbitfoot polypogon
Rhynchelytrum repens (Willd.) C. E. Hubbard
natal grass
Rhynchelytrum roseum (Nees) Stapf. & Hubb.
pink natal grass
Setaria geniculata (Lam.) Beauv.
foxtail barley
Setaria glauca (L.) Beauv.
little foxtail grass
Setaria leucopila (Schribn. & Mey.) K. Schum.
plains bristlegrass
Setaria magna Gris.
giant foxtail grass
Setaria viridis (L.) Beauv.
green bristlegrass
Sorghastrum nutans (L.) Nash.
Indian grass
Sorghum halepense Pers.
Johnson grass

(sheet 7 of 46)

Spartina alterniflora Loisel.
smooth cordgrass
Spartina cynosuroides (L.) Roth
big cordgrass
Spartina foliosa Trin.
Pacific cordgrass
Spartina patens (Ait.) Muhl.
saltmeadow cordgrass
Spartina pectinata Link
prairie cordgrass
Spartina spartinae (Trin.) Hitchc.
gulf cordgrass
Sphenopholus intermedia Rydb.
wedgescale
Sphenopholus obtusata (Michx.) Scribn.
prairie wedgescale
Sporobolus asper (Michx.) Kunth
tall dropseed
Sporobolus cryptandrus (Torr.) Gray
sand dropseed
Sporobolus domingensis (Trin.) Kunth
Florida dropseed
Sporobolus indicus (L.) R. Brown
tropic dropseed
Sporobolus poiretii (R. & S.) Hitchc.
smutgrass
Sporobolus pyramidatus (Lam.) Hitchc.
whorled dropseed
Sporobolus virginicus (L.) Kunth
Virginia dropseed
Stenotaphrum secundatum (Walt.) Kuntze
St. Augustine grass
Tridens albescens (Vasey) Woot. & Standl.
white tridens
Triplasis purpurea (Walt.) Chapm.
sand grass
Uniola paniculata L.
sea oats
Zea mays L.
corn

AQUATICS AND LOW MARSH (mostly herbaceous, and not listed elsewhere)

Alisma plantago - aquatica L.
water plantain
Alisma subcordatum Raf.
water plantain
Alternanthera philoxeroides (Martius) Gris.
alligator weed

(sheet 8 of 46)

Alisma plantago-aquatica L.
water plantain
Alisma subcordatum Raf.
water plantain
Aneilema keisak Hass.
marsh dayflower
Bacopa monnieri (L.) Wettst.
water hyssop
Batis maritima L.
saltwort
Boltonia asteroides (L.) L'Her.
marsh boltonia
Callitriche fassettii L.
water starwort
Callitriche heterophylla Pursh.
water starwort
Carex albolutescens Schwein.
greenish-white sedge
Carex annectans (Bickn.) Bickn.
yellow-fruited sedge
Carex brevior (Dewey) Mackenzie
sedge
Carex cristatella Britton
crested sedge
Carex emoryi Dewey
water sedge
Carex hystericina Muhl.
porcupine sedge
Carex laeviconica Dewey
hairy-fruited sedge
Carex lanuginosa Michx.
woolly sedge
Carex lyngbyei Hornem.
Lyngby's sedge
Carex macrocephala
large-headed sedge
Carex muhlenbergii Schk.
Muhlenberg's sedge
Carex muskingumensis Schwein.
muskingum sedge
Carex obnupta Bailey
Pacific sedge
Carex phyllomanica W. Boott.
coastal sedge
Carex scoparia Schnk.
pointed sedge
Carex siccata Dewey
dry-spiked sedge
Carex stipata Muhl.
awl fruited sedge

(sheet 9 of 46)

Carex tenera Dewey
straw sedge
Carex tribuloides Wahl.
blunt sedge
Carex trichocarpa Muhl.
slough sedge
Carex typhina Michx.
cattail sedge
Carex vulpinoidea Michx.
fox sedge
Cladium jamaicensis Crantz
saw grass
Cyperus aristatus Boeckl.
awned nutsedge
Cyperus articulatus L.
nutsedge
Cyperus compressus L.
flat nutsedge
Cyperus dentatus Torr.
toothed cyperus
Cyperus erythrorhizos Muhl.
red-rooted sedge
Cyperus esculentus L.
chufa
Cyperus filicinis Vahl.
Nuttall's cyperus
Cyperus inflexus Muhl.
awned cyperus
Cyperus iria L.
yellow cyperus
Cyperus lingularis L.
nutsedge
Cyperus lupulinus L.
slender-stemmed cyperus
Cyperus odoratus L.
coarse cyperus
Cyperus ovularis (Michx.) Torr.
globe nutsedge
Cyperus planifolius L.
nutsedge
Cyperus polystachyos var. texanis (Torrey) Fernald
flat nutsedge
Cyperus rotundus L.
purple nutsedge
Cyperus schweinitzii Torr.
Schweinitz's cyperus
Cyperus strigosus L.
straw-colored cyperus
Cyperus uniflorus L.
oneflower nutsedge

(sheet 10 of 46)

Cyperus virens Michx.
nutsedge
Cyperus vivularis Kunth.
shinging cyperus
Dichromena colorata (L.) Hitchcock
white-topped umbrella grass
Eleocharis acicularis (L.) R & S
least spike rush
Eleocharis baldwinii (Torrey) Chap.
Baldwin spike rush
Eleocharis calva Torrey
spike rush
Eleocharis halophila Fern. & Brackett
spike rush
Eleocharis montevidensis Kunth
sand spike rush
Eleocharis obtusa (Willd.) Schultes
blunt spike rush
Eleocharis palustris (L.) R. & S.
creeping spike rush
Eleocharis parvala (R. & S.) Link.
dwarf spike rush
Fimbristylis castanea (Michx.) Vahl.
fimbry
Fimbristylis spadicea (L.) Vahl.
fimbristylis
Hydrocotyle bonariensis Lam.
water pennywort
Hydrocotyle verticillata Thunberg
pennywort
Jaumea carnosa (Less.) Gray
jaumea
Juncus balticus Willd.
Baltic rush
Juncus bufonis L.
toad rush
Juncus coriaceus Mackenzie
rush
Juncus dudleyi Wiegand
Dudley's rush
Juncus effusus L.
soft rush
Juncus gerardi Lois
black rush
Juncus marginatus Rostk.
grassleaf rush
Juncus nodosus L.
knotted rush
Juncus roemerianus Scheele
black needlerush

(sheet 11 of 46)

Juncus tenius Willd.
slender rush
Jussiaea repens L.
water primrose
Lilaeopsis occidentalis Coult. & Rose
lilaeopsis
Limonium carolinianum (Walt.) Britton
sea lavender
Limonium nashii Small
sea lavender
Limonium vulgare Miller
sea lavender
Lycopus americanus Muhl.
water horehound
Lycopus rubellus Moench.
water horehound
Najas gracillima (A. Br.) Magnus
naiad
Peltandra virginica (L.) Kunth.
arrow arum
Polygonum amphibium Michx.
water smartweed
Polygonum argyrocoleon Steudel ex Kunze
smartweed
Polygonum aviculare L.
prostrate knotweed
Polygonum coccineum Muhl. ex Willd.
marsh smartweed
Polygonum densiflorum Meisn.
southern smartweed
Polygonum erectum L.
erect smartweed
Polygonum hydropiper (L.) Opiz
marsh pepper
Polygonum lapathifolium L.
nodding smartweed
Polygonum paranychia Cham. & Schlect.
black smartweed
Polygonum persicaria L.
lady's thumb
Polygonum pennsylvanicum L.
Pennsylvania smartweed
Polygonum punctatum Ell.
dotted smartweed
Polygonum ramosissimum Michx.
bushy knotweed
Polygonum scandens L.
climbing false buckwheat
Pontederia cordata L.
pickerelweed

(sheet 12 of 46)

Ptilimnium capillaceum (Michx.) Raf.
water ptilimnium
Rorippa islandica var. hispida (Desv.) B. & A.
marsh cress
Ruppia maritima L.
widgeongrass
Sabatia stellaris Pursh.
sabatia
Sagittaria latifolia Willd.
broadleaf arrowhead
Sagittaria rigida Pursh.
narrowleaf arrowhead
Sagittaria spatulata (J. G. Smith) Buch.
arrowhead
Salicornia bigelowii Torr.
Bigelow's glasswort
Salicornia europaea L.
European glasswort
Salicornia virginica L.
woody glasswort
Salsola kali L.
saltwort
Scirpus acutus Muhl.
handstem bulrush
Scirpus americanus Britt.
common threesquare
Scirpus atrovirens Muhl.
dark green bulrush
Scirpus californicus (C. A. Meyer) Britton
southern bulrush
Scirpus cyperinus (L.) Kunth
wool grass
Scirpus fluviatilis (Torr.) A. Gray
river bulrush
Scirpus maritimus L.
saltmarsh bulrush
Scirpus olneyi Gray
Olney's threesquare
Scirpus robustus Pursh.
saltmarsh bulrush
Scirpus validus Vahl.
softstem bulrush
Sium suave Walt.
water parsnip
Syringodium filiforme Kuetz
manatee grass
Triglochin maritima L.
seaside arrowgrass
Triglochin striata R. & P.
southern arrowgrass

(sheet 13 of 46)

Typha angustifolia L.
narrowleaf cattail
Typha domingensis Persoon
tule cattail
Typha latifolia L.
broadleaf cattail
Ulva lactuca L.
sea lettuce
Zostera marina L.
eel grass

HERBS

Abronia latifolia Esch.
yellow abronia
Abrus precatorious L.
crab's eye
Abutilon theosprasti Medic
velvetleaf
Acalypha radians Torr.
round copperleaf
Acalypha rhombiodea Raf.
three-seeded mercury
Achillia millefolium L.
yarrow
Acnida altissima Riddell
water hemp
Acnida tomariscina (Nutt.) Wood
water hemp
Agalinis fasciculata (Ell.) Raf.
fascicled agalinis
Agalinis heterophylla (Nutt.) Small
prairie agalinis
Agalinis maritima (Raf.) Raf.
seaside agalinis
Agalinis purpurea (L.) Pennell.
purple agalinis
Agoseris heteroplylla (Nutt.) Greene
false dandelion
Aloe vera (L.) Webb.
true aloe
Alyssum alyssoides L.
alyssum
Amaranthus berlandieri (Moq.) Uline. & Bray.
Berlandier amaranth
Amaranthus cannabinis (L.) J. D. Sauer
water amaranth
Amaranthus hybridus L.
common pigweed

(sheet 14 of 46)

Amaranthus palmeri Wats.
Palmer amaranth
Amaranthus retroflexus L.
green pigweed
Amaranthus spinosus L.
spiny pigweed
Amaranthus tamariscinus Nutt.
water amaranth
Amaranthus tuberculatus (Moq.) Sauer
water amaranth
Amaranthus viridis Desf.
slender amaranth
Ambrosia artemisiifolia L.
common ragweed
Ambrosia bidentata Michx.
southern ragweed
Ambrosia chamissonis (Less.) Greene
silver bursage
Ambrosia psilostachya DC.
western ragweed
Ambrosia trifida L.
giant ragweed
Amorpha fruticosa L.
false indigo
Amorpha herbacea Walt.
lead plant
Anagallis arvensis L.
scarlet pimpernel
Anaphalis margaritacea (L.) B.& H.
pearly everlasting
Anemone canadensis L.
anemone
Angelica lucida L.
sea-watch
Anthemis cotula L.
mayweed
Aphanostephus kidderi Blake
kidder daisy
Aphanostephus okirrhobosis (DC.) Trel.
lazy daisy
Apios americana Medic
groundnut
Apium leptophyllm (Pers.) F. V. Muell.
slimlobe celery
Apocynum cannabinum L.
Indian hemp
Aquilegia canadeneis L.
wild columbine
Arctrium minus Schk.
common burdock

(sheet 15 of 46)

Arenaria peploides L.
seabeach purslane
Arisaema dracontium (L.) Schott.
green dragon
Artemisia absinthium L.
common wormwood
Artemisia biennis Willd.
wormwood
Artemisia caudata Michx.
tall wormwood
Artemisia ludoviciana Nutt.
western mugwort
Artemisia serrata Nutt.
wormwood
Asclepias incarnata L.
swamp milkweed
Asclepias lanceolata Walt.
coast milkweed
Asclepias oenotheroides Cham. & Schlecht
milkweed
Asclepias syriaca L.
common milkweed
Asclepias verticillata L.
whorled milkweed
Asparagus officinalis L.
garden asparagus
Asplenium platyneuron (L.) D. C. Eat.
ebony spleenwort
Aster ericoides L.
white heath aster
Aster novae-angliae L.
New England aster
Aster ontarionsis Wieg.
aster
Aster pilosus Willd.
frost aster
Aster simplex Willd.
aster
Aster spinosus Benth.
Mexican aster
Aster sublatus Michx.
annual saltmarsh aster
Aster subspicatus Nees
Douglas's aster
Aster subulatus Michx.
aster
Aster tenuifolius L.
saltmarsh aster
Aster vimineus Lam.
aster

(sheet 16 of 46)

Astragulus canadensis L.
milk vetch
Astragulus leptocarpus T. & G.
slimpod milk vetch
Atriplex arenaria Nutt.
beach orache
Atriplex patula L.
shore orache
Barbarea vulgaris R. Br.
common wintercress
Bassia hirsuta L.
European bassia
Berteroa incana (L.) DC.
hoary alyssum
Bidens arnua L.
nodding beggartick
Bidens comosa (Gray) Wieg.
leafy-tracted tickseed
Bidens connata Muhl.
swamp beggartick
Bidens frondosa L.
beggartick
Bidens pilosa L.
beggartick
Bidens vulgata Greene
tall beggartick
Boehmeria cylindrica (L.) Swartz
bog-hemp
Boerhaavia coccinea Mill.
red spiderling
Boerhaavia diffusa L.
spiderling
Borrichia frutescens (L.) DC.
sea ox-eye
Brassica juncea (L.) Cosson
Chinese mustard
Brassica nigra (L.) Koch
black mustard
Buchnera floridana Gand.
Florida bluehearts
Caesalpinia crista L.
gray nicker bean
Cakile endentula (Bigel.) Hook
American sea rocket
Cakile fusiformis Greene
sea rocket
Cakile harperi Small
sea rocket
Cakile maritima Scop.
European sea rocket

(sheet 17 of 46)

Callirhoe involucrata (Torr.) Gray
low peppermallow
Caltha biflora DC.
marsh marigold
Calylophus australis Towner & Raven

Campanula americana L.
tall bellflower
Campanula rotundifolia L.
harebell
Canavalia maritima (Aubl.) Thouars.
June bean
Canavalia rosea L.
bay bean
Cannabis sativa L.
wild hemp
Capsella bursa-pastoris (L.) Medic
pickpocket
Capsicum annuum L.
bird pepper
Cardimine pennsylvanica Muhl.
bitter cress
Cardionema racesissima (Weinm.) Nels.
sandmat
Carduus lanceolatus L.
bull thistle
Carduus smallii (Britt.) Ahles
thistle
Cardures nutans L.
musk thistle
Cassia fasciculata Michx.
partridge pea
Cassia occidentalis L.
coffee senna
Catharanthus roseus (L.) G. Don.
Madacascar periwinkle
Celastrus scandens L.
bittersweet
Centaurea americana Nutt.
thornless thistle
Centaurea maculosa Lam.
spotted star-thistle
Cerastium brachypodium (Engelm.) Robins.
mouse ear
Cerastium vulgatum L.
mouse-ear chickweed
Chamaesyce blodgetti (Engelm. ex Hitchc.) Small
spurge
Chamaesyce hirta (L.) Mill.
spurge

(sheet 18 of 46)

Chenopodium albescens Small
pale goosefoot
Chenopodium album L.
lambsquarters
Chenopodium ambrosioides L.
Mexican tea
Cichorium intybus L.
common chicory
Circuta bulbifera L.
water hemlock
Cirsium arvense (L.) Scop.
Canada thistle
Cirsium vulgare (Savi) Tenore
bull thistle
Clitoria ternatea L.
blue pea
Cnidoscalus stimulosus (Michx.) Engelm. & Gray
tread softly
Commelina communis L.
Asian dayflower
Commelina diffusa Burm.
dayflower
Commelina erecta L.
dayflower
Commelina virginica L.
Virginia dayflower
Conioselinum pacificum (Wats.) Coult. & Rose
hemlock parsley
Conyza canadensis (L.) Cronq.
horseweed
Coreopsis cardaminaefolia (DC.) Nutt.
Manzanilla coreopsis
Coreopsis lanceolata L.
coreopsis
Coreopsis tinctoria Nutt.
plains coreopsis
Corydalis micrantha (Engelm.) Gray
scambled eggs
Cotula coronopifolia L.
brass button
Crepsis capillaris (L.) Walls.
hawksbeard
Crinum americanum L.
string lily
Croptilon divaricatum (Nutt.) Raf.
slender goldenweed
Crotalaria mucronata Desv.
rattlebox
Croton capitatus Michx.
woolly croton

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Croton glandulosus L.
glandular croton
Croton punctatus Jacq.
croton
Cryptotaenia canadensis (L.) DC.
honewort
Crysanthemum leucanthemum L.
field daisy
Cycloloma atriplicifolium (Spreng.) Coult.
winged pigweed
Cynanchum angustifolium Pers.
swallow wort
Dahbergia ecastophyllum (L.) Benth.
dahlbergia
Dalea emarginata (T. & G.) Shinners
dalea
Dalea nana Torr.
dwarf dalea
Daubentonia punicea (Cav.) DC.
pea
Daucus carota L.
Queen Anne's lace
Desmanthus illinoensis (Michx.) MacM.
Illinois bundleflower
Desmanthus obtusus Wats.
bluntpod bundleflower
Desmanthus virgatus (L.) Willd.
bundleflower
Desmodium glabellum (Michx.) DC.
tick trefoil
Dichondra carolinensis Michx.
false pennywort
Digitalis purpurea L.
fox glove
Diodia teres Walt.
poor joe
Dioscorea bulbifera L.
air jam
Dondonaea viscosa (L.) Jacq.
varnish leaf
Dyssodia tenuiloba (DC.) Robins
bristleleaf dogweed
Echinocactus texansis Hopffer
horse crippler cactus
Echinocystis lobata (Michx.) T. & G.
wild cucumber
Eclipta alba (L.) Hass.
yerba
Elephantopus coelestinum L.
elephant's foot

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Elephantopus nudatus Gray
elephant's foot
Epilobium angustifolium L.
great willow-herb
Epilobium glandulosum Lehm.
willow-herb
Epilobium watsonii Barbey
Watson's willow-herb
Erechtites hieracifolia L. Raf.
fireweed
Erigiron annuus L. Pers.
daisy fleabane
Erigeon canadensis L.
horseweed fleabane
Erigeron myrionactus Small
Corpus Christi fleabane
Erigeron philadelphicus L.
fleabane
Erigeron pusillus (Nutt.) Ahles
small fleabane
Erigeron quercifolius Lam.
daisy fleabane
Erigeron strigosus Muhl.
daisy fleabane
Erysemum cheiranthoides L.
wormseed mustard
Erythrina herbacea L.
coral bean
Eupatorium album L.
white thoroughwort
Eupatorium capillifolium (Lam.) Small
dog fennel
Eupatorium coelestinum L.
ageratum
Eupatorium compositifolium Walt.
dog fennel
Eupatorium hyssopifolium L.
thoroughwort
Eupatorium maculatum L.
joe-pye-weed
Eupatorium perfoliatum L.
boneset
Eupatorium rugosum Houtt.
white snakeroot
Eupatorium serotinum Michx.
late flowering thoroughwort
Euphorbia dentata Michx.
spurge
Euphorbia glyptosperma Engelm.
ridgeseed spurge

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Euphorbia maculata L.
spotted spurge
Euphorbia polygonifolia L.
spurge
Euphorbia serpens HBK
spurge
Euphorbia supina Raf.
milk purslane
Eustoma exaltatum (L.) G. Don.
tall prairie-gentian
Euthamia leptocephala (T. & G.) Greene

Flaveria floridana J. R. Johnston
Florida flaveria
Frageria virginiana Duchesne
broadpetal strawberry
Froelichia floridana (Nutt.) Moq.
frolichia
Gaillardia pulchella Foug.
Indian basket
Galactia macreei M. A. Curtis
galactia
Galinsoga ciliata (Raf.) Blake
galinsoga
Galium aparine L.
cleavers
Galium boreale L.
northern bedstraw
Galium hispidulum Michx.
coast bedstraw
Galium obtusum Bigel.
marsh bedstraw
Galium palustre L.
bedstraw
Galium tinctorium L.
marsh cleavers
Galium trifidum L.
small bedstraw
Gaura angustifolia Michx.
gaura
Gaura brachycarpa Small
plains gaura
Geranium carolinianum L.
Carolina geranium
Geranium robertianum L.
herb-robert
Geranium texanum (Trel.) Heller
Texas geranium
Gerardia maritima Raf.
seaside gerardia

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Gerardia tenuifolia Vahl.
Bessey's gerardia
Geum laciniatum Murr.
avens
Geum virginianum L.
rough avens
Glecoma hederacea L.
creeping charlie
Gnaphalium falcatum Lam.
cudweed
Gnaphalium obtusifolium L.
rabbit tobacco
Gnaphalium pensilvanicum Willd.
cudweed
Gnaphalium purpueum L.
purple cudweed
Gratiola neglecta Torrey
hedge hyssop
Grindelia integrifolia (Greene) Cronq.
resinweed
Habenaria dilatata (Pursh.) Hook.
white bog-orchard
Hackelia virginiana (L.) I. M. Johnston
stickweed
Hedeoma hispida Pursh.
mock pennyroyal
Hedyotis humifusa Gray.
mat bluets
Hedyotis nigricans (Lam.) Fosb.
prairie bluets
Hedyotis subviscosa (Gray) Shinners
nodding bluets
Helenium amarum (Raf.) Rock.
bitter sneezeweed
Helenium autumnale L.
sneezeweed
Helianthus annuus L.
common sunflower
Helianthus argophyllus T. & G.
silverleaf sunflower
Helianthus debilis Nutt.
sunflower
Heliopsis helianthoides L. Sweet
ox-eye
Heliotropium angiospermum Murray
heliotrope
Heliotropium curassavicum L.
seaside heliotrope
Heliotropium polyphyelum Lehmann
heliotrope

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Hemerocallis fulva L.
daylily
Hemicarpa micrantha (Vahl.) Pox

Hepatica acutiloba DC.
liverleaf
Heracleum lanatum Michx.
cow parsnip
Heracleum maximum Bartram
masterwort
Heterotheca pilosa (Nutt.) Shinners
soft aster
Heterotheca subaxillaris (Lam.) Britt. & Rusby
camphorweed
Hibiscus palustris L.
swamp rose mallow
Hieracium aurantiacum L.
orange hawkweed
Honkenya peploides (L.) Ehrb.
seabeach sandwort
Hudsonia tomentosa Nutt.
beach heather
Hymenocallis latifolia (Mill.) Roem.
spider lily
Hypochaeris radicata L.
spotted cats-ear
Ibervillea tripartita (Naud.) Greene
globe berry
Impatiens biflora Walt.
touch-me-not
Impatiens capensis Meerb.
spotted touch-me-not
Impatiens noli-tangere L.
touch-me-not
Indigofera minata Ort.
scarlet pea
Iresine celosia L.
Florida bloodleaf
Iresine rhizomatosa Stan.
bloodleaf
Iris pseudacorus L.
yellow flag
Iris virginica L.
blue flag
Kalenchoe pinnata Pers.
cathedral bells
Kostelatzkya virginica Presl. ex Gray
saltmarsh mallow
Lactuca biennis (Moench) Fern.
wild lettuce

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Lactuca canadensis L.
wild blue lettuce
Lactuca floridana (L.) Gaertner
wild lettuce
Lactuca graminifolia Michx.
wild lettuce
Lactuca hirsuta Muhl.
wild lettuce
Lactuca scariola L.
wild lettuce
Laportea canadensis (L.) Wedd.
wood nettle
Lathyrus japonicus Willd.
beach pea
Lechea maritima Leggett
maritime pinweed
Leonurus cardiaca L.
common motherwort
Lepidium austrinum Small
southern peppergrass
Lepidium campestre (L.) R. Br.
cow cress
Lepidium densiflorum Schrad.
peppergrass
Lepidium virginicum L.
Virginia peppergrass
Leucauna leucocephala (Lam.) de Wit.
popinac
Limnosciadium pumilum (Englm. & Gray) Math. & Const.

Linaria canadensis (L.) DuMont
toadflax
Linaria vulgaris Hill
butter and eggs
Lindernia dubia (L.) Pennell
flase pimpernel
Linum alatum (Small) Winkl.
flax
Lippia lanceolata Michx.
frogfruit
Lippia nodiflora (L.) Michx.
spatulate-leaved frogfruit
Lobelia cardinalis L.
cardinal flower
Lobelia siphilitica L.
great lobelia
Lotus corniculatus L.
birdsfoot trefoil
Lupinus littoralis Dougl.
seashore lupine

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Ludwigia palustris (L.) Ell.
false loosestrife
Lycharis alba Mill.
white campion
Lycopus americanus Muhl.
water horehound
Lycopus rubellus Moench.
water horehound
Lycopus virginicus L.
water horehound
Lycium carolinianum Walt.
Carolina wolfberry
Lygodesmia aphylla (Nutt.) DC.
flowering straws
Lysichitum americanum Hult. and St. John
skunk cabbage
Lysimachia ciliata L.
fringed loosestrife
Lysimachia hybrida Michx.
lance-leafed loosestrife
Lysimachia terrestris (L.) BSP
swamp loosestrife
Lythrum alatum Pursh.
loosestrife
Lythrum lanceolatum Ell.
loosestrife
Lythrum lineare L.
saltmarsh loosestrife
Lythrum salicaria L.
spiked loosestrife
Machaeranthera phyllocephala (DC.) Shinners
camphor daisy
Malvaviscus arboreus Cav.
mallow
Mammellaria gummifera Engel.
nipple head cactus
Matelea decipiens (Alex.) Woodson

Matricaria matricarioides (Less.) Porter
pineapple weed
Maurandya antirrhiniflora Willd.
snapdragon vine
Medicago lupulina L.
black medic
Medicago polymorpha L.
bur clover
Meliotus albus Lam.
white sweet clover
Meliotus indicus (L.) All.
sweet clover

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Meliotus officinalis (L.) Lam.
yellow sweet clover
Melothria pendula L.
creeping cucumber
Mentha arvensis L.
field mint
Mikania scandens (L.) Willd.
climbing hempweed
Mimulus guttatus DC.
marsh monkey flower
Mimulus ringens L.
monkey flower
Mirabilis nyctaginea (Michx.) MacM.
four o'clock
Modiola caroliniana (L.) G.Don.
Carolina mallow
Mollugo verticillata L.
carpetweed
Momordica charantia L.
wild balsam apple
Monarda punctata L.
horsemint
Montia sibirica (L.) Howell
candyflower
Myosoton aquaticum (L.) Moench.
giant chickweed
Mysotis laxa Lehm.
forget-me-not
Nepeta cataria L.
catnip
Neptunia lutea Leavenworth
neptunia
Neptunia pubescens Benth.
tropical neptunia
Nothoscordum bivalve (L.) Britton
crow poison
Oenanthe sarmentosa Presl.
Pacific water parsley
Oenothera biennis L.
evening primrose
Oenothera drummondii Hook.
beach evening primrose
Oenothera fruticosa L.
evening primrose
Oenothera hookeri T. & G.
Hooker's evening primrose
Oenothera humifusa Nutt.
seaside evening primrose
Oenothera laciniata Hill.
cut-leaved evening primrose

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Oenothera parviflora L.
evening primrose
Oenothera perennis L.
sundrops
Oenothera rhombipetata Nutt.
rhombic evening primrose
Oenothera speciosa Nutt.
showy primrose
Opuntia compressa (Salisbury) MacB.
east coast prickly pear cactus
Opuntia humifusa Raf.
prickly pear cactus
Opuntia leptocaulis DC.
desert Christmas cactus
Opuntia lindheimeri Engelm.
Texas prickly pear cactus
Opuntia stricta Haw.
Florida prickly pear cactus
Orthocarpus castillejoides Benth.
paintbrush owl-clover
Oxalis dillenii Jacq.
wood sorrel
Oxalis europaea Jord.
lady's sorrel
Oxalis stricta L.
yellow wood sorrel
Palafoxia texana DC.
Texas palafoxia
Parentucellia viscosa (L.) Car.
yellow parentucellia
Parietaria floridana Nutt.
Florida pellitory
Parietara pensylvanica Muhl.
hammerwort
Parietaria praetermissa Hinton
pellitory
Parkinsonia aculeata L.
retama
Passiflora lutea L.
passion flower
Pastinaca sativa L.
parsnip
Penthorum sediodes L.
ditch stonecrop
Philoxerus vermicularis (L.) R. Br.
saltweed
Phlox glabriflora (Brand.) Whiteh.
Rio Grande phlox
Phyllanthus carolinensis Walt.
Carolina phyllantus

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Phyllanthus polygonoides Spreng.
knotweed leafflower
Phylla incisa Small
Texas frogfruit
Physalis pubescens L.
downy ground cherry
Physalis viscosa (M.A. Curtis) Waterfall
beach ground cherry
Physostegia formosior Lunell
false dragonhead
Phytolacca americana L.
pokeberry
Pilea pumila (L.) Gray
clearweed
Plantago aristata Michx.
buckthorn plantain
Plantago hookeriana Fisch. & Mey.
tallow plantain
Plantago hybrida Bart.
plantain
Plantago lanceolata L.
English plantain
Plantago major L.
common plantain
Plantago maritima L.
sea plantain
Plantago rhodosperma Dcne.
red-seeded plantain
Plantago rugellia Dcne.
plantain
Pluchea camphorata (L.) DC.
marsh fleabane
Pluchea purpurascens (Sw.) DC.
canela
Polanisia dodecandra (L.) DC.
clammyweed
Polanisia graveolens Raf.
clammyweed
Polygala alba Nutt.
white milkwort
Polygonatum canaliculatum (Muhl.) Pursh.
Solomon's seal
Polygonella articulata (L.) Meisn.
jointweed
Polyaenia nuttallii DC.
prairie parsley
Portulaca mundula I.M. Johnston
chisme
Portulaca oleracea L.
purslane

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Portulaca pilosa L.
pink purslane
Potentilla anserina L.
silverweed
Potentilla argentea L.
silvery cinquefoil
Potentilla arguta Pursh.
tall cinquefoil
Potentilla norvegica L.
five-finger cinquefoil
Potentilla pacifica Howell
Pacific marsh cinquefoil
Psoralea rhombifolia T. & G.
roundleaf scurfpea
Pyrrhopappus carolinianus (Walt.) DC.
false dandelion
Ranunculus abortivus L.
kidnewleaf buttercup
Ranunculus pennsylvanicus L.
bristly crowfoot
Ranunculus repens L.
creeping buttercup
Ratibida penundularis (T. & G.) Barnh.
naked prairie-coneflower
Rhynchosia americana (Mill.) C. Metz.
American snoutbean
Rhynchosia texana T. &. G.
Texas snoutbean
Richardia brasiliensis (Moq.) Gomez
richardia
Ricinus communis L.
castor bean
Rivina humilis L.
rouge plant
Rorippa islandica (Desv.) B. & A.
marsh cress
Rorippa palustris (L.) Bass.
yellow cress
Rorippa teres (Michx.) Stuckey
yellow cress
Rudbeckia hirta L.
brown-eyed susan
Rumex acetosa L.
kitchen sorrel
Rumex actosella L.
sheep sorrel
Rumex crispus L.
curly dock
Rumex hastatulus Baldwin ex Ell.
sorrel

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Rumex mexicanus Meisn.
willow-leafed dock
Rumex orbiculatus Gray
water dock
Rumex patientia L.
patience dock
Rumex persicaroides L.
yellow dock
Rumex pulcher L.
fiddle dock
Rumex salicifolius Weinm.
willow dock
Rumex verticillatus L.
swamp dock
Sabatia arenicola Greenm.
sand rose-gentian
Sabatia campestris Nutt.
rose pink
Sabatia stellaris Pursh.
sabatia
Samolus ebractealus HBK
coast brookweed
Sanicula canadensis L.
snakeroot
Sanicula marilandica L.
snakeroot
Saponaria officinalis L.
bouncing betty
Scaevola plummieri (L.) Vahl.)

Schrankia lalidens (Small) K. Schum.
Karnes sensitivebriar
Schrankia microphylla (Small) Macbr.
sensitivebriar
Scrophularia californica Cham & Schlecht.
California figwort
Scrophularia marilandica L.
figwort
Scutellaria drummondii Benth.
drummond skullcap
Scutellaria epilobiifolia A. Hamilton
skullcap
Scutellaria galericulata L.
marsh skullcap
Scutellaria latiflora L.
mad-dog skullcap
Scutellaria muriculata Ept.
skullcap
Sedum sarmentosum Bunge
stonecrop

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Senecio glabellus Poir.
golden ragwort
Senecio imparipinnatus Klatt.
ragwort
Senecio jacobaea L.
tansy ragwort
Senecio vulgaris L.
old-man-in-the-spring
Sesbania drummondii (Rydb.) Cory
rattle bean
Sesbania exaltata (Raf.) Rydberg ex
sensitivebriar
Sesuvium maritimum (Walt.) BSP
sea purslane
Sesuvium portulacastrum L.
sea purslane
Sicyos angulatus L.
bur cucumber
Sida acuta Burm.
false mallow
Sida ciliaris L.
false mallow
Sida lindheimeri Engelm. & Gray
showy false mallow
Sida rhombifolia L.
arrowleaf false mallow
Sida spinosa L.
prickly false mallow
Silene antvirhina L.
sleepy catchfly
Silene cserei Baumg.
catchfly
Silene noctiflora L.
night-flowering catchfly
Sisymbrium altissumum L.
tumble mustard
Sisyrinchium biforme Bickn.
wiry blue-eye grass
Smilacina racemosa (L.) Desf.
false Solomon's seal
Smilacina stellata (L.) Desf.
false Solomon's seal
Solanum americanum Mill.
American nightshade
Solanum carolinense L.
horse nettle
Solanum dulcamara L.
nightshade
Solanum gracile Link
nightshade

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Solanum nigrum L.
black nightshade
Solanum triquetrum Cav.
Texas nightshade
Solidago altissima L.
tall goldenrod
Solidago canadensis L.
meadow goldenrod
Solidago gigantea Ait.
giant goldenrod
Solidago racemosa Greene
goldenrod
Solidago rugosa Mill.
goldenrod
Solidago sempervirens L.
seaside goldenrod
Solidago tenuifolia Pursh.
goldenrod
Sonchus arvensis L.
field sowthistle
Sonchus asper (L.) Hill
prickly sowthistle
Sonchus oleraceus L.
common sowthistle
Specularia perfoliata (L.) A. DC.
Venus' looking glass
Spergularia canadensis (Persh.) G. Don
Canadian sand spurry
Spergularia echinosperma Calak
sand spurry
Spergularia macrotheca (Hornem.) Heynh.
beach sand spurry
Spergularia marina (L.) Griseb.
saltmarsh sand spurry
Spergularia platensis (St.- Hill & A. Juss.)
sand spurry
Spilanthes americana (Walt.) A. H. Moore
ladies' tresses
Spilanthes ovalis Lindl.
lesser ladies' tresses
Spilanthes vernalis Engelm. & Gray
spring ladies' tresses
Stachys crenata Raf.
shade betony
Stachys hispida Pursh.
rough hedge nettle
Stachys tenuifolia Willd.
smooth hedge nettle
Stellaria calycantha (Ledeb.) Bong
northern silene

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Stellaria media (L.) Cyrillo
common chickweed
Stellaria prostrata Baldwin
prostrate starwort
Stemodia tomentosa (Mill.) Greenm. & Thomps.
woolly stemodia
Stipulicida setacea Michx.
pinweed
Strophostyles helvola (L.) Ell.
trailing wild bean
Stylosanthes viscosa Sw.
pencil flower
Suaeda linearis (Ell.) Moq.
sea blite
Suaeda maritima DuMont
sea blite
Tanacetum douglasii DC.
northern dune tansy
Taroxacum officinale Weber
common dandelion
Teucrium canadense L.
germander
Teucrium cubense Jacq.
small coast germander
Thelesperma filifolium (Hook.) Gray
green-thread
Thelypteris normalis (C.Chr.) Moxley

Thespesia populnea (L.) Sol. ex Correa.
seaside mahoe
Thlaspi arvense L.
field pennycress
Tillandsia usneoides L.
Spanish moss
Trandescantia hirsutiflora Bush
hairy flower spiderwort
Trandescantia ohiensis Raf.
spiderwort
Trepocarpus arethusae Nutt.
nuttall
Trichostema suffrutescens Kearney
blue curl
Trifolium agrarium L.
yellow clover
Trifolium hybridum L.
Alsike clover
Trifolium pratense L.
red clover
Trifolium repens L.
white clover

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Trifolium wormskjoldii Lehm.
springbark clover
Ulex europaeus L.
gorse
Urena lobata L.
Caesar weed
Urtica chamaedryoides Pursh.
heartleaf nettle
Urtica dioica L.
stinging nettle
Valerianella stenocarpa Mill.
corn salad
Verbascum thapsus L.
common mullein
Verbena bonaniensis L.
vervain
Verbena brasiliensis Vellozo
vervain
Verbena halei Small
Texas vervain
Verbena hastata L.
blue vervain
Verbena scabra Vahl.
vervain
Veronia altissima Nutt.
ironweed
Veronica americana Schwein.
American brooklime
Veronica peregrina L.
purslane speedwell
Vicia americana Muhl.
vetch
Vicia angustifolia Richard
vetch
Vicia gigantea Hook.
giant vetch
Vicia leavenworthii T. &.G.
Leavenworth vetch
Vicia ludoviciana Nutt.
deer pea vetch
Vicia sativa L.
common vetch
Vigna luteola (Jacq.) Benth.
cow pea
Viola sp.
violet
Vulpia octoflora (Walt.) Rhdb.
vulpia
Wedelia tribobata (L.) Hitchcock

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Xanthium strumarium L.
cocklebur

VINES

Ampelopis arborea (L.) Rusby
peppervine
Ampelopis cordata Michx.
simple-leaved peppervine
Berchemia scandens (Hill) Trelease
supplejack
Campsis radicans Seem.
trumpet creeper
Celastrus orbiculatus Thunb.
bittersweet
Cissus incisa (Nutt.) Des Maulins
marine vine
Convolvulus sepium L.
hedge bindweed
Convolvulus soldanella L.
Pacific morning glory
Cuscuta cuspidata Engelm.
cusp dodder
Cuscuta obtusiflora HBK.
common dodder
Cuscuta pentagona Engelm.
field dodder
Cynanchum palustre (Pursh.) Heller
climbing milkweed
Ficus aurea Nutt.
strangler fig
Ipomoea alba L.
vine milkweed
Ipomoea pes-caprae (L.) R. Br.
railroad vine
Ipomoea sagittata Lam.
saltmarsh morning glory
Ipomoea stolonifera (Cyr.) Gmel.
beach morning glory
Ipomoea trichocarpa Ell.
sharppod morning glory
Ipomoea trilobata L.
wild morning glory
Ipomoea tuba (Schlect.) G. Don
moonflower
Lonicera japonica Thung.
Japanese honeysuckle
Menispermum canadense L.
Canada moonseed
Menispermum carolinum L.
Carolina moonseed

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Parthenocissus inserta (Kern.) K. Fritsch.
woodbine
Parthenocissus quinquefolia (L.) Planchon
Virginia creeper
Rhus radicans L.
poison ivy
Smilax auriculata Walt.
wild bamboo
Smilax bona-nox L.
fringed catbriar
Smilax hispida Muhl.
catbriar
Smilax rotundifolia L.
common greenbriar
Vitus aestivalis Michx.
summer grape
Vitus labrusca L.
fox grape
Vitus riparia Michx.
riverbank grape
Vitus rotundifolia Michx.
muscadine
Vitus vulpina L.
frost grape

SHRUBS AND SMALL TREES

Acacia smallii Isely.
Texas huisache
Agave americana L.
century plant
Agave americana var. marginata Trel.
marginated century plant
Alnus rubra Borg.
red alder
Alnus serrulata (Ait.) Willd.
alder
Alnus sinuata (Reg.) Rydb.
alder
Amelanchier canadensis (L.) Medic.
serviceberry
Amelanchier laevis Wieg.
juneberry
Aralia spinosa L.
devil's walking stick
Arbutus menziesii Pursh.
arbutus
Atriplex polycarpa (Torr.) Wats.
shrub orache
Avicennia germinans (L.) Stern.
black mangrove

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Baccharis angustifolia Michx.
groundsel gree
Baccharis neglecta Britton
Roosevelt groundsel
Baptisia leucophaea Nutt.
wild indigo
Berberis thunbergii DC.
barberry
Betula occidentalis Hook.
water birch
Callicarpa americana L.
American beautyberry
Catalpa speciosa Warder
catalpa
Cephalanthus occidentalis L.
buttonbush
Chicocca alba (L.) Hitchcock
snowberry
Citrus sinensis (L.) Osbeck
citrus
Conocarpus erecta L.
buttonwood
Cornus amomum Mill.
swamp dogwood
Cornus drummondii C. A. Meyer
rough-leaved dogwood
Cornus florida (L.) Raf.
flowering dogwood
Cornus nuttallii Aud. ext. & G.
Pacific dogwood
Cornus obliqua Raf.
silky dogwood
Cornus racemosa Lam.
gray dogwood
Cornus rugosa Lam.
round-leaved dogwood
Cornus stolonifera Michx.
red osier dogwood
Crataegus fabellata (Bosc.) Koch.
hawthorn
Cytisus scoparius (L.) Link
Scotch broom
Eleagnus angustifolia L.
Russian olive
Eleagnus pungens Thunb.
thorny olive
Eleagnus umbellata Thunb.
autumn olive
Ficus carica L.
fig

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Forestiera acuminata (Michx.) Poir.
swamp privet
Forestiera angustifolia Torrey
desert olive
Forestiera segregata (Jacq.) Krug & Urban
Florida privet
Gaultheria shallon Pursh.
salal
Hibiscus moscheutos L.
marsh hibiscus
Hypericum drummondii (Grev. & Hook.) T. &. G.
nits and lice
Hypericum gentianoides BSP
orange grass
Hypericum hypericoides (L.) Crantz
St. John's wort
Hypericum mutilum L.
dwarf St. John's wort
Hypericum perforatum L.
common St. John's wort
Ilex cassine L.
dahoon
Ilex decidua Walt.
possumhaw
Ilex glabra (L.) A. Gray
gallberry
Ilex vomitoria Ait.
yaupon
Iva angustifolia DC.
narrowleaf marsh elder
Iva frutescens L.
marsh elder
Iva imbricata Walt.
seacoast marsh elder
Juniperus communis L.
common juniper
Juniperus horizontalis Moench.
creeping juniper
Laguncularis racemosa Gaertn.
white mangrove
Lantana camara L.
shrub verbena
Lantana horrida HBK
Texas lantana
Lantana involucrata L.
lantana
Lantana ovatifolia Britton
lantana
Lindera benzoin Blume
spicebush

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Lonicera x bella Zabel
honeysuckle
Lonicera involucrata (Richards) Banks
bearberry honeysuckle
Lonicera tartarica L.
Tartarian honeysuckle
Malus angustifolia Michx.
crabapple
Melia azedarach L.
chinaberry tree
Morus alba L.
white mulberry
Myrica cerifera L.
wax myrtle
Myrica pensylvanica Loisel.
bayberry
Myricanthes fragrans (Sw.) McVaugh
naked wood
Nerium oleander L.
oleander
Ostrya virginiana (Mill.) Koch
eastern hophornbeam
Phoradendron flavescens (Pursh.) Nutt.
American mistletoe
Physocarpus capitatus (Pursh.) Kuntze
Pacific nine-bark
Physocarpus opulifolius (L.) Maxim.
nine-bark
Pinus clausa (Chapm.) Vasey
sand pine
Pinus virginiana Mill.
shore pine
Poinsettia heterophylla (L.) Kl. & Garke.
painted leaf poinsettia
Prosopis glandulosa Torrey
honey mesquite
Prunus americana Marsh.
American plum
Prunus caroliniana Ait.
cherry laurel
Prunus maritima Wang.
beach plum
Prunus pumila L.
sand cherry
Prunus virginiana L.
common chokecherry
Psidium guajave L.
guava
Quercus acutissima Carruthers
sawtooth oak

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Quercus laevis Walt.
turkey oak
Rhamnus purshiana DC.
cascara buckthorn
Rhizophora mangle L.
red mangrove
Rhus copallina L.
shining sumac
Rhus glabra L.
smooth sumac
Rhus radicans L.
shrub poison ivy
Rhus typhina L.
staghorn sumac
Ribes americanum Mill.
wild black currant
Ribes lacustre (Pursh.) Poir.
swamp gooseberry
Ribes sanguineum Pursh.
red currant
Rosa acicularis Lindl.
prickly rose
Rosa blanda Ait.
meadow rose
Rosa bracteata Wendl.
Macartney rose
Rosa carolina L.
Carolina rose
Rosa gymnocarpa Nutt.
baldhip rose
Rosa multiflora Thunberg
multiflora rose
Rosa palustris Marsh.
swamp rose
Rosa rugosa Thunb.
wild rose
Rosa virginiana Mill.
wild Virginia rose
Rubus argutus Link
blackberry
Rubus bifrons Vest
blackberry
Rubus cuneifolius Pursh.
sand blackberry
Rubus discolor Weihe & Nees
Himalayan blackberry
Rubus flagellaris L.
northern dewberry
Rubus idaeus var. canadensis Richardson
raspberry

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Rubus laciniatus Willd.
evergreen blackberry
Rubus leucodermis Dougl.
black raspberry
Rubus occidentalis L.
black raspberry
Rubus spectabilis Pursh.
salmonberry
Rubus trivalis Michx.
southern dewberry
Rubus ursinus Cham.
Schlecht blackberry
Sabal palmetto (Walt.) Lodd. ex Schult.
cabbage palm
Salix alba L.
white willow
Salix amygdaloides Anders
peachleaf willow
Salix fragiles L.
crack willow
Salix hastata L.
halberd-leaved willow
Salix hookeriana Barratt
Hooker willow
Salix interior Rowlee
sandbar willow
Salix lasiandra Benth.
Pacific willow
Salix nigra (L.) Marsh.
black willow
Salix rigida Muhl.
willow
Salix scouleriana Barratt
Scouler willow
Sambucus callicarpa Greene
elderberry
Sambucus canadensis L.
American elderberry
Sambucus pubens Michx.
red elderberry
Sambucus racemosa L.
coast red elderberry
Sambucus simpsonii Rehd.
Florida elderberry
Sapium sebiferum (L.) Roxb.
Chinese tallow tree
Schinus terebinthifolius Reddi.
Brazilian peppertree
Shepheria canadensis (L.) Nutt.
buffaloberry

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Sophora tomentosa L.
yellow sophora
Sorbus americana Marsh.
American mountain-ash
Sorbus aucuparia L.
European mountain-ash
Sorbus sitchensis Roem.
Sitka mountain-ash
Spiraea tomentosa L.
spiraea
Symphoricarpos albus (L.) Blake
common snowberry
Tamarisk africana Poir.
athel
Tamarisk chinensis Lour.
Chinese tamarisk
Tamarisk gallica L.
tamarisk
Tamarisk parviflora
saltcedar
Terminalia catappa L.
Indian almond
Vaccineum corymbosum L.
highbush blueberry
Vaccinium myrsinites Lam.
ground blueberry
Viburnum edule (Michx.) Raf.
highbush cranberry
Yucca aloifolia L.
aloe
Yucca pendula Groenl.
yucca
Yucca treculeana Carr
Spanish dagger
Zanthoxylum clava-herculis L.
toothache tree

LARGE TREES

Acer negundo L.
boxelder
Acer rubrum L.
red maple
Acer saccharum Marsh.
sugar maple
Acer saccharinum L.
silver maple
Aitanthus altissima (Mill.) Swingle
tree of heaven
Betula nigra L.
river birch

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Carya cordiformis (Wang.) K. Koch
bitternut hickory
Casuarina equisetifolia Forst.
Australian pine
Celtis laevigata Willd.
hackberry
Celtis lindheimeri Engelm.
Lindheimer hackberry
Celtis occidentalis L.
sugarberry
Celtis pallida Torrey
desert hackberry
Chamaecyparis lawsoniana Parl.
Port Orford cedar
Diospyros virginiana L.
persimmon
Fagus grandifolia Ehrh.
American beech
Fraxinus americana L.
white ash
Fraxinus latifolia Benth.
Oregon ash
Fraxinus pennyslvanica Marsh.
green ash
Gleditsia tricanthos L.
honeylocust
Juglans nigra L.
black walnut
Juniperus silicicola (Small) Bailey
southern red cedar
Juniperus virginiana L.
eastern red cedar
Liquidambar styraciflua L.
sweetgum
Liriodendron tulipifera L.
tulip poplar
Morus rubra L.
red mulberry
Persea borbonia (L.) Sprengel
redbay
Phoenix canariensis Chap.
ornamental data palm
Phoenix dactylifera L.
data palm
Phoenix reclinata L.
reclinata palm
Picea sitchensis (Bong) Carr
Sitka spruce
Pinus contorta Dougl.
lodgepole pine

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Pinus elliottii Engelm.
slash pine
Pinus nigra
Austrian pine
Pinus palustris Mill.
longleaf pine
Pinus resinosa Ait.
red pine
Pinus taeda L.
loblolly pine
Platanus occidentalis L.
American sycamore
Populus balsamifera L.
balsam poplar
Populus deltoides Marsh.
eastern cottonwood
Populus grandidentata Michx.
bigtooth aspen
Populus tremuloides Michx.
quaking aspen
Populus trichocarpa T. &. G.
black cottonwood
Prunus serotina Ehrh.
black cherry
Pseudotsuga menziisii (Mirb.) Franco
Douglas fir
Quercus bicolor Willd.
swamp white oak
Quercus laurifolia Michx.
laurel oak
Quercus macrocarpa Michx.
bur oak
Quercus nigra L.
water oak
Quercus nuttallii Palmer
Nuttall oak
Quercus palustris DuRoi.
pin oak
Quercus phellos L.
willow oak
Quercus rubra L.
red oak
Quercus shumardii Buckl.
Shumard oak
Quercus velutina Lam.
black oak
Quercus virginiana Miller
live oak
Robinia pseudo-acacia L.
black locust

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Sassafras albidum Nutt.
sassafras
Tamarisk ramosissima Ledeb.
saltcedar
Taxodium distichum (L.) Richard
bald cypress
Thuja occidentalis L.
northern white cedar
Tilia americana L.
basswood
Tsuga heterophylla (Raf.) Sarg.
western hemlock
Ulmus americana L.
American elm
Ulmus rubra Muhl.
red elm
Washingtonia robusta Wendl.
Mexican windmill palm

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In accordance with letter from DAEN-RDC, DAEN-ASI dated 22 July 1977, Subject: Facsimile Catalog Cards for Laboratory Technical Publications, a facsimile catalog card in Library of Congress MARC format is reproduced below.

Landin, Mary C
Annotated tables of vegetation growing on dredged material throughout the United States / by Mary C. Landin. Vicksburg, Miss. : U. S. Waterways Experiment Station ; Springfield, Va. : available from National Technical Information Service, 1978.
155 p. : ill. ; 27 cm. (Miscellaneous paper - U. S. Army Engineer Waterways Experiment Station ; D-78-7)
Prepared for Office, Chief of Engineers, U. S. Army, Washington, D. C., under DMRP Work Unit No. 4F05.
References: p. 6-9.

1. Dredged material. 2. Plants (Botany). 3. Tables (Data). 4. Vegetation. 5. Vegetation establishment. 6. Waste disposal sites. I. United States. Army. Corps of Engineers. II. Series: United States. Waterways Experiment Station, Vicksburg, Miss. Miscellaneous paper ; D-78-7.
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