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JPRS: 5020

14 July 1960

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BIOLOGY

SECTION K - FORESTRY

Book No. 1, 1959

Abstracts 1433 thru 1513

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SELECTED TRANSLATIONS OF
ABSTRACTS IN REFERATIVNIY ZHURNAL - BIOLOGIYA, No. 1, 1959

This report consists of complete translations of the Russian-language abstracts of articles, which were originally published in the Sino-Soviet bloc and in Yugoslavia.

The Soviet subject classification system used in the original Russian language abstracts has been followed in this publication.

JOURNAL : Poland
CATEGORY : Forestry. General Problems.
ABS. JOUR. : Ref Zhurh-Biologiya, No. 1, 1959, No. 1437
AUTHOR : Żabko-Potopowicz, Antoni
INST. : Not given
TITLE : Forests and Forestry in Polish Lands in the
First Half of the XIXth Century.
ORIG. PUB. : Sylwan, 1956, 100, No.7, 58-87
ABSTRACT : No abstract

CARD: 1/1

COUNTRY : Poland K
CATEGORY : Forestry. General Problems.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1438
AUTHOR : Wiecko, Edward
INST. : Not given
TITLE : Forests and Forestry in Polish Lands in the
Second Half of the XIXth Century.
ORIG. PUB. : Sylwan, 1956, 100, No.7, 88-135
ABSTRACT : No abstract

CARD: 1/1

COUNTRY : Poland
CATEGORY : Forestry. General Problems.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1439
AUTHOR : Krysik, Franciszek
INST. : Not given
TITLE : Forests of Carpathia and their Importance for
the National Economy.
ORIG. PUB. : Sylwan, 1956, 100, No.10, 5-26
ABSTRACT : No abstract

CARD: 1/1

COUNTRY : Poland
CATEGORY : Forestry. Dendrology.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1441
AUTHOR : Maciejowski, Kazimierz
INST. : --
TITLE : Larch in the Forests of Poland.
ORIG. PUB. : Sylwan, 1956, 100, No.11, 6-50
ABSTRACT : No abstract

CARD: 1/1

COULDA : USSR
 CATEGORY : Forestry . Dendrology.

ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1446

AUTHOR : Mishchenko, A.S.; Novikov, G.S.
 INST. : Inst. of Agriculture AS Turkmen SSR

TITLE : Treelike Willow - Main Species for Biological
 Melioration in the Flood Plain of the Amu-Darya
 River.

ORIG. PUB. : Tr. In-ta zemledeliya. AN TurkmSSR, 1957, 1,
 199-214

ABSTRACT : The study of the biological characteristics of
 tree species which grow in the arid climate of
 Turkmenia showed that the tree-like willows
 are the best for the purpose of biological mel-
 ioration. They are easily propagated, can grow
 in saline soils and with the ground water level
 near. At the age of 10 years already, they yield
 a considerable mass of valuable wood.
 The root system of willow is located to a depth
 of 1.5 m. and pumps out ground water at places

CARD: 1/3

COUNTRY : K
 CATEGORY :

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 ; No:1446

AUTHOR :
 INST. :

TITLE :

ORIG. PUB. :

ABSTRACT :with near ground water . Treelike willows pos-
 sess higher transpiration capacity than other
 species, while in linear plantations their
 vegetative mass reaches 60 to 70 kg. per 1 tree
 During the vegetation period one
 tree in such plantations transpires 130 cu.
 m. of water. It was determined that one-row
 plantations along irrigators transpire up to
 40,000 cu.m. per 1 km. during the vegetation
 season. Linear one-to-two row plantings of

CARD: 2/3

K

COUNTRY :
CATEGORY :

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 ;

No. 1446

AUTHOR :
INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : willow can completely intercept all water being filtrated. For the intake of water from large irrigators, it is essential to increase the number of rows in plantations. Graphs are given on the growth of tree-like (Amu-Darya and steppe) willows in height and mass, their taxation indices, data on the daily course of transpiration intensity and the intensity of transpiration by months.

-- V.V. Protopopov

CARD: 2/3

COUNTRY :
CATEGORY :

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 ; No.

AUTHOR :
INST. :

TITLE :

ORIG. PUB. :

ABSTRACT :

CARD:

COUNTRY : USSR
CATEGORY : Forestry. Dendrology.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1447
AUTHOR : Mishchenko, A.S.
INST. : Inst. of Agriculture AS Turkmen SSR
TITLE : Black Locust in the Valley of the Amu-Darya
Middle Course.

ORIG. PUB. : Tr. In-ta zemledeliya AN TurkmenSSR, 1957, 1,
184-198

ABSTRACT : An investigation of acacia plantations was made
in 1951-1953. The value of black locust is in-
dicated as a tree species for the districts of
the Amu-Darya river's middle course, where nor-
mal plantations can be cultivated in the condi-
tions of artificial irrigation. In case of 2000
trunks per 1 hectare the stock of average-aged
plantings of black locust amounts to 85 cu.m.
Mixed plantings of black locust and smooth-
leaved elm have a larger stock of wood compared

CARD: 1/3

COUNTRY :
CATEGORY :
ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 . No. 1447
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : with the pure plantings. The black locust root
system is marked by pliability. The main mass of
roots is arranged in the soil horizon of 10
to 70 cm. The taproot goes to the depth of
1 m. The transpiration intensity of black locust
is low at night (2 to 5 mg. in 3 minutes per
1 gr. of leaf); in daytime it reaches the maxi-
mum of 110 to 115 mg. Variation of the black
locust's average transpiration intensity during
the vegetation period is noted. It reaches the

CARD: 2/3

COUNTRY :
CATEGORY :

ABS. JOUR. :

REF ZHUR . BIOLOGIYA, NO.1, 1959

AUTHOR :

No.1447

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT

Maximum value in July. Data are given on the water consumption by one tree in transpiration and the purpose of planting during the vegetation period. It is recommended that black locust be introduced in forest shelter belts.

--V.V.Protopopov.

CARD: 3/3

COUNTRY :
CATEGORY :

K

ABS. JOUR. ::

No.

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT :

CARD:

COUNTRY : USSR
CATEGORY : Forestry. Dendrology.

K

ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1448

AUTHOR : Anisimova, A.I.
INST. : State Nikitsk Botanical Garden
TITLE : Trials of Species of Coloneaster Med. in the Crimea.

ORIG. PUB. : Byul. nauchno-tekhn. inform. Gos. Nikitsk. botan. sad, 1957, No.3-4, 15-21

ABSTRACT : The findings are reported of the trials of 46 species and 16 varieties of Coloneaster Med. in the Nikitskaya botanical garden. The sorts that originated from the central, western and partly south-western parts of China proved to be most adapted to local conditions. Best growing of the evergreen sorts are *C. Henryana*, *C. glaucophylla*, *C. pinnosa*, *C. salicifolia* with varieties, *C. serotina*, *C. turbinata*, *C. horizontalis* with varieties, *C. buxifolia vellea*, *C.*

CARD: 1/2

COUNTRY :
CATEGORY :

K

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 No. 1448

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : *trubens* and others; exfoliate species *C. divaricata*, *C. hupehensis*, *C. nitens*, *C. adpressa* with varieties *v. praecox* and others. The exfoliate *C. multiflora*, *C. racemiflora*, *C. rosea* and others are worthy of attention among the Mediterranean flora.

-- V.I. Nekrasov

CARD: 2/2

COUNTRY : USSR
CATEGORY : Forestry. Forest Management.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1450
AUTHOR : Matulionis, A.
INST. :
TITLE : Development of the Lithuanian SSR's Forest
Economy in the Years of Soviet Power.

ORIG. PUB. : Musu Girlos, 1957, No.5, 3-10

ABSTRACT : Statistical data are cited on the forests of
the Lithuanian SSR, which are characterized
in the scope of forestry and timber exploita-
tion measures. Problems of training forestry
personnel and publishing special literature
are touched upon.

CARD: 1/1

COUNTRY : K
CATEGORY :
ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 No.
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT :

CARD:

COUNTRY : USSR
CATEGORY : Forestry . Forest Management.
ABS. JOUR. : Ref Zhur_Biologiya, No.1, 1959, No. 1451
AUTHOR : Golikov, A.
INST. : Moldavian Forest Experimental Station
TITLE : The Work of Forestry Specialists.

ORIG. PUB. : Zemledeliye i zhivotnovodstvo Moldavii,
1958, No.2, 76-78

ABSTRACT : The results of ten years work of the Moldavian
experimental forestry station are summarized.
Developed were: a method of breeding oak of
natural seed renewal in the upper canopy of
planting, measures for conversion of low-value
beech plantings with partially preserved oak
in oak forests, agro-technology of growing
transplant material and the creation of spindle
tree and eucommia plantation, the winterhardy
forms being selected. Recommendations are given

CARD: 1/2

COUNTRY :
CATEGORY :

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 ; No. 1451

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : on the assortment of trees and bushes, the
construction of plantings and agro-technology
of forest crops. The periods and means are
determined for presowing preparation of the
seeds of linden, spindle tree and Tatar maple.
Considerable work has been done in field
shelter belt forestation. -- V.I. Klimov

CARD: 2/2

COUNTRY : USSR K
 CATEGORY : Forestry, Forest Management.
 ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1452
 AUTHOR : Sokolov, G.A.
 INST. :
 TITLE : In the Bakhchisarayskye Forests.
 ORIG. PUB. : Lesn. kh-vo, 1957, No.12, 62-65

ABSTRACT : Ruinous consequences of disorderly tree felling
 that brought about derangement of the Bakhchisarayskye forests of historic importance, are noted. The experience is described of successful afforestation of mountain slopes denuded of forests with Crimean pine and ordinary pine, a work begun long before the Great Fatherland war. The most successful cultivations are described. The significance of reconstruction of natural fruit plantings is emphasized and the method described.

-- L.V.Nesmelov

CARD: 1/1

COUNTRY : K
 CATEGORY :
 ABS. JOUR. : No.
 AUTHOR :
 INST. :
 TITLE :
 ORIG. PUB. :
 ABSTRACT :

CARD:

K

COUNTRY : USSR
CATEGORY : Forestry . Forest Management.

ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1454

AUTHOR : Verkhunov, P.M.
INST. : Siberian Sci.-Res. Inst. of Forest Management

TITLE : Defectiveness of Linden Timber Stands of the
South-western Urals.

ORIG. PUB. : Sb. statey po lesn. kh-vu. Sibirst.
n.-1 in-t lesn. kh-va, Krasnoyarsk, 1958,
1-33

ABSTRACT : A study was made of 2791 rooted trees
and 276 felled specimens of linden in the
Gafuriysky, Voskresensky, Makarovsky and Zigaz-
insky Leskhozos of Bashkiria at 14 test
areas in brush plantings of 50 to 115-year old
III - IV * classes with goutweed and gramineous
sorts (0.4 - 0.8) participating in the forest
types. Only 17.3 % of the trees did not have
trunk defects. Crookedness, rot, hollowness,
frostbite, knotiness and canker are the most

*locality

CARD: 1/2

COUNTRY : K
CATEGORY :

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 ; No. 1454

AUTHOR :
INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : prevalent among the 10 kinds of defect met.
With age the number of defective trees is in-
creased. The greatest average length of com-
mercial trunk wood (7.1 m.) was in trees with-
out defects. It was found that the wood of the
late-flowering forms of linden are less subject
than the early-flowering forms to defectiveness
(especially rot). Forestry measures to combat
defectiveness are described.

CARD: 2/2

-- V.I. Klimov

COUNTRY : Rumania
CATEGORY : Forestry . Forest Management.

ABS. JOUR. : Ref Zhurh-Biologiya, No.1, 1959, No. 1460

AUTHOR : Radu, Stelian
INST. :

TITLE : Method of Investigating the Process of Natural
Restoration.

ORIG. PUB. : Rev. padurilor, 1956, 71, No.2, 82-88

ABSTRACT : The definitions of the conception "natural
restoration", best known in literature, are
given: the author emphasizes that the concep-
tion "natural restoration" itself does not
exclude human interference in the formation of
new forest, but that, on the contrary, it is
necessary to assist natural restoration to
secure the most rapid regeneration of valuable
species. Methods of investigating the fertility
of forests are listed and briefly described.

CARD: 1/2

COUNTRY :
CATEGORY :

K

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 , No.1460

AUTHOR :
INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : The means are examined of founding permanent
and temporary test areas, methods of inventory-
taking, drafting of test area maps with each
tree pin-pointed, measurement of seed crop and
self-seeding estimation.

-- A.Yana

CARD: 2/2

COUNTRY : USSR
CATEGORY : Forestry. Forest Management.

ARS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1462

AUTHOR : Bystrov, V.N.
INST. : Bashkir Agric. Inst.

TITLE : Reconstruction of Plantings of Young Trees
in the Conditions of Bashkirian ASSR.

ORIG. PUB. : Tr. Bashkirst. s.-kh. in-ta, 1956, 7, 319-328

ABSTRACT : Two methods are indicated for reconstruction of
low-value young trees - care by tree-fellings
and cultivations. The technique is described
of tree-felling care for the purpose of
reconstruction and its economic foundation;
cultivation methods are also described.

CARD: 1/1

COUNTRY : Poland K
CATEGORY : Forestry. Forest Management.

ARS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1463

AUTHOR : Chodzicki, Edward

INST. :
TITLE : Reorganization of Carpathian Forests in Poland.

ORIG. PUB. : Sylwan, 1956, 100, No.10, 27-57

ABSTRACT : No abstract

CARD: 1/1

COUNTRY : GDR
CATEGORY : Forestry. Forest Management.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1466

AUTHOR : Erteld, W.
INST. :

TITLE : Modern Method of Investigation in the Field
of Forest Productivity.

ORIG. PUB. : Arch. Forstwesen, 1957, 6, No.5-6, 421-431

ABSTRACT : Increasing attention has of late been addressed
to investigation of problems of principle,
which renders essential the development of
methods that are more accurate than in the past.
A survey is given of the following important
problems in the field of forest productivity:
evaluation of plantings, effect of computation
methods, application of Eichhorn's law and
dynamic classification, problems of the so-called
"ideal" thinning and course of growth, and also

CARD: 1/2

COUNTRY :
CATEGORY : K
ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959, No.1466

AUTHOR :
INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : the productivity of the chief species in accord-
ance with habitat conditions. Modern ways and
means of solving the problems set are examined.

--P. E. Sarma

CARD: 2/2

COUNTRY : USSR
 CATEGORY : Forestry. Forest Management.
 ABS. JOUR. : Ref Zhur-Biologiya, No. 1, 1959, No. 1467
 AUTHOR : Levin, V.I.
 INST. :
 TITLE : New Graphic Method of Determining the Stock
 of Timber Stands.
 ORIG. PUB. : Izv. vyssh. uchebn. zavedeniy. Lesn. zh.,
 1968, No.1, 72-78
 ABSTRACT : Nomograms for spruce and pine groves of the
 north, drawn up by the author, are proposed
 for the purpose of simplification, without
 reducing the accuracy of results (in enumerational valuation) in determining the reserve
 stock. This method eliminates the need for
 multiplication of the tabular volume by the
 number of trees, inasmuch as the ready stock
 is given in the nomogram by height and
 : sum of the areas of stands. Put at the basis of

CARD: 1/3

COUNTRY : K
 CATEGORY :
 ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 , No.1467
 AUTHOR :
 INST. :
 TITLE :
 ORIG. PUB. :

ABSTRACT : the nomograms are the equations:

$$\text{for pine } M = Q(0.414 \cdot H + \frac{0.34}{0.641 + 0.908 \cdot H} + 0.814)$$

$$\text{for spruce } M = Q(0.416 \cdot H + 0.429 \cdot H + \frac{0.32}{0.647 + 0.898 \cdot H} + 0.767),$$
 where M is the reserve stock in the area of
 recalculation in cu.m.; Q is the sum of the
 stand areas in the recalculation area in sq.m.;
 : H is the average height of the timber stand in

CARD: 2/3

COUNTRY
CATEGORY

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 ,

AUTHOR
INST.

No. 1467

TITLE

ORIG. PUB. :

ABSTRACT : meters. A description is given of the use of
nomograms and stock determination by nomogram
by means of the Bitterlich amplitude-measure
(by visual estimation) remodelled by
the author.

-- L.V. Nosmelov

CARD: 3/3

K

COUNTRY : USSR

CATEGORY : Forestry, Forest Management.

ABS. JOUR. : Ref Zhur-Biologiya, No. 1, 1959, No. 1468

AUTHOR : Moiseyev, V.S.; Pishchelin, M.I.
INST.

TITLE : Ways to Rationalize Means of Drawing Up Forest
Plans in Various Types of Forest Management
and Locale Relief Conditions.

ORIG. PUB. : Sb. statey po ustroystvu i obsledovaniyu
lesov. I., 1958, 53-69

ABSTRACT : No abstract

CARD: 1/1

COUNTR. USSR
CATEGORY Forestry . Forest Management.
ARS. JOUR. Ref Zhur-Biologiya, No.1, 1959, No. 1469
AUTHOR Samoylovich, G.G.
INST.
TITLE Method of Studying Aerial Evaluation Charac-
teristics of Stands.
ORIG. PUB. Sb. statey po ustroystvy i obsledovaniyu
lesov. L., 1958, 26-34
ABSTRACT :No abstract

CARD: 1/1

K

COUNTR. USSR
CATEGORY Forestry . Forest Management.
ARS. JOUR. Ref Zhur-Biologiya, No.1, 1959, No. 1471
AUTHOR Kurzin, N.I.
INST.
TITLE Determination of the Age of Technical Maturity
of a Forest.
ORIG. PUB. Lesn. kh-vo, 1958, No.5, 15-19
ABSTRACT :No abstract

CARD: 1/1

K

COUNTRY USSR
CATEGORY Forestry . Forest Management.
ABS. JOUR. Ref Zhur-Biologiya, No.1, 1959, No. 1472
AUTHOR Vagin, A.V.
INST.
TITLE Industrial Price-fixing of the Wood Stock
to be Felled, by means of Maximal Output
Coefficients of Grades.
ORIG. PUB. Izv. vyssh. uchebn. zavedeniy. Lesn. zh.,
1958, No.2, 27-33
ABSTRACT No abstract

CARD: 1/1

K

COUNTRY USSR
CATEGORY Forestry . Forest Management.
ABS. JOUR. Ref Zhur-Biologiya, No.1, 1959, No. 1473
AUTHOR Tikhomirov, B.N.
INST. Siberian Forest Engineering Institute
TITLE Valuation Tables for Pine Timber Stands of
the Angara River Basin.
ORIG. PUB. Tr. Sibirsk. lesotekhn. in-ta, 1957, sb.
16, 113-133
ABSTRACT No abstract

CARD: 1/1

K

COUNTRY : Yugoslavia
CATEGORY : Forestry. Forest Management.

ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1474

AUTHOR : Klepac, Dusan
INST. :

TITLE : Annual Volume Increment Depending on the Diameter in Selected Plantings of Fir (Croatia)

ORIG. PUB. : Sumarski list, 1956, 80, No.1-2, 1-16

ABSTRACT : No abstract

CARD: 1/1

K

COUNTRY : USSR
CATEGORY : Forestry. Forest Management.

ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1475

AUTHOR : Kireyev, D.M.
INST. :

TITLE : Experiments of Measuring Tree Heights by Planned Large-Scale Aerial Photographs.

ORIG. PUB. : Sb. statey po ustroystvy i obsledovaniyu lesov. L., 1958, 78-83

ABSTRACT : No abstract

CARD: 1/1

COUNTRY : USSR
CATEGORY : Forestry . Forest Management.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1476
AUTHOR : Zhukov, A.Ya.
INST. :
TITLE : Experiment in Determining the Number of Trees
by Large-scale Aerial Photographs.
ORIG. PUB. : Sb. statey po ustroystvu i obsledovaniyu lesov.
L., 1958, 78-83
ABSTRACT : No abstract

CARD: 1/1

COUNTRY : USSR
CATEGORY : Forestry . Forest Management.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1478
AUTHOR : Kunin, S.M.
INST. : Ukrainian Agric. Acad.
TITLE : Nature and Management of Forest Economy in
Leningrad Forests.
ORIG. PUB. : Sb. stud. nauchno-issled. robot Ukr. s.-kh.
akad., 1958, vyp. 3, 153-156
ABSTRACT : No abstract

CARD: 1/1

COUNTRY USSR
CATEGORY Forestry. Forest Management.
ABS. JOUR. Ref Zhur-Biologiya, No.1, 1959, No. 1479
AUTHOR Mikhaylov, L.Ye.
INST.
TITLE White Willow and Black Poplar Economy in the
District of the Volgo-Akhtubinsk Flood Plain.
ORIG. PUB. Mash. kh-vo. 1958, No.6, 19-21
ABSTRACT No abstract

CARD: 1/1

COUNTRY Rumania K
CATEGORY Forestry. Forest Cultures.
ABS. JOUR. Ref Zhur-Biologiya, No. 1, 1959, No. 1482
AUTHOR Lazarescu, C.
INST.
TITLE Application of Biometric Method in Standardi-
zation of Forest Seeds.
ORIG. PUB. Rev. padurilor, 1957, 71, No.3, 157-159
ABSTRACT It is proposed that on the basis of biometric
data seeds be graded in 4 classes: (a) $< M - \sigma$;
(b) from $> M - \sigma$ to M ; (c) from M to $M + \sigma$;
(d) $> M + \sigma$, where M is the mean-weighted
value of a given characteristic, and σ is the
standard deviation. In individual selection,
it is proposed that seeds of the first and
fourth classes be employed.

-- A.Yana

CARD: 1/1

COUNTRY : USSR
CATEGORY : Forestry. FOREST CULTURES.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1483

AUTHOR : Khristeva, L.A.; Ponomarenko, V.A.;
INST. : Khar'kov Univ. Kotlyuba, V.G.
TITLE : Effect of Humic Fertilizers on the Growth of
Pine, the Chief Afforestation Culture of
the Lower Dnieper Sands.

ORIG. PUB. : V sb.: Guminovye udobreniya. Khar'kov
Khar'kovsk. un-t, 1957, 313-330

ABSTRACT : By experiments at the Golopristsanskiy Les-
khoz(1953), it was established that humic
fertilizers raise the vitality and drought-
resistance of pine in the lower Dnieper sands.
It is recommended that in nurseries humophos
and watering with a 0.001 % solution of sodium
humate be applied in combination with
supplementary mineral fertilizers. It is
expedient to activate planting material of
a different district by wetting the root system

CARD: 1/2

COUNTRY :
CATEGORY : K
ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959, No. 1483

AUTHOR :
INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : of seedlings in an 0.002 % solution of
sodium humate and in a mixer of humophos.

--L.V.Nesmelov

CARD: 2/2

K

COUNTRY USSR
CATEGORY Forestry. FOREST CULTURES.

ARK. JOUR. Ref Zhur-Biologiya, No.1, 1959, No. 1484

AUTHOR Danilova, A.A.
INST. Povolzh'ye Forest Engineering Inst.
TITLE Experiment in Use of Fertilizers in Growing
Seedlings of Certain Species.

ORIG. PUB. Sb. tr. Povolzhsk. lesotekhn. in-t, 1957 (1958),
No.52, 165-168

ABSTRACT No abstract

CARD: 1/1

K

COUNTRY USSR
CATEGORY Forestry. FOREST CULTURES.

ARK. JOUR. Ref Zhur-Biologiya, No.1, 1959, No. 1486

AUTHOR Verich, F.P.; Oberto, V.I.
INST. Voroshilovgrad Leskhoz
TITLE Growing of White Willow and Black Poplar
Seedlings in the Donbas Conditions.

ORIG. PUB. Lesn. kh-vo, 1958, No.1, 75-76

ABSTRACT An experiment at the Voroshilovgrad Leskhoz
in growing seedlings of white willow and
black poplar from seeds is described. Fertile
shoots were stuck into beds at the nursery.
The seeds began almost at once to come out and
in two days (with intensified watering)
fine sprouts appeared. The number of shoots
recommended is not more than 30 specimens per
1 sq.m.

CARD: 1/1

COUNTRY : Bulgaria
CATEGORY : Forestry .FOREST CULTURES.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1487
AUTHOR : Daskalov
INST. :
TITLE : Our (Bulgaria) Experience in Producing Linden
Planting Material in the Forest Nursery in the
District of the City, St. Dimitrov, in 1956.
ORIG. PUB. : Gorsko stepanstvo, 1957, 13, No.4, 180
ABSTRACT : Described are the technique and periods of
linden seed stratification, the methods of
preparing soil, sowing, the care for sowings
and sprouts and other agricultural measures.
Successful results in the growing of seedlings
are noted.

CARD: 1/1

COUNTRY :
CATEGORY :

ABS. JOUR. : No.

AUTHOR :
INST. :

TITLE :

ORIG. PUB. :

ABSTRACT :

CARD:

COUNTRY : Bulgaria
 CATEGORY : Forestry . FOREST CULTURES.

ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1488

AUTHOR : Palashev, Ivan
 INST. : Ministry of Agriculture and Forestry
 TITLE : Depth of Sowing Acorns. Preliminary Findings.

ORIG. PUB. : Nauchin tr. M-vo zemed i gorite. Ser. ras-
 teniyev"dstvi, 1958, 3, No.1, 43-48

ABSTRACT : Observations of acorns *Quercus cerris* sown
 by the nest method were conducted in 1951 and
 1953-1954 to ascertain the optimal depth for
 sowing acorns in the conditions of southeast
 Bulgaria. It was determined that differing
 depth of sowing determines variation of seed-
 lings in respect to quality and quantity. The
 highest germination is observed with spring
 sowing at a depth of 5 cm. The percentage of
 germination is reduced in proportion to the

CARD: 1/2

COUNTRY :
 CATEGORY :

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 ; No. 1488

AUTHOR :
 INST. :
 TITLE :

ORIG. PUB. :

ABSTRACT : increase of depth. The best results in spring
 sowing are obtained with acorns imbedded at
 8 cm. in a heap of earth. In all cases the
 maximal growth of seedlings is noted with
 sowing depth of 5 to 8 cm. With other conditions
 equal, spring sowing is most effective.

-- L.V.Nesmelov

CARD: 2/2

K

COUNTR. : USSR
CATEGORY : Forestry

ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1489

AUTHOR : Semenkova, I.G.
INST. : Moscow Agric. Acad. imeni K.A. Timiryazev

TITLE : Problem of the Effect Specific Weight of
Acorns Has on their Sowing Qualities and
Susceptibility to Diseases.

ORIG. PUB. : Dokl. Mosk. s.-kh. azhad. im. K.A. Timiryazeva,
1957, vyp. 31, 155-161

ABSTRACT : Acorns from Voronezhskaya, Bryanskaya, Moskovskaya Oblasts
and also from the Lithuanian and Georgian SSR
were investigated in 1955-1956 at the Phyto-
pathological Faculty of the Timiryazev Agri-
cultural Academy and at the Buturlinovskiy
Leskhov (Voronezhskaya Oblast). A solution of
Ca chloride (with specific gravity of 1.20
and 1.10) and water was used for the separation
of acorns according to specific weight. After
sorting, four fractions of acorns were received

CARD: 1/2

COUNTRY :
CATEGORY :

K

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959, No.1489

ABSTRACT : with the following specific weights: >1.2 ;
 $1.1 - 1.2$; $1.0 - 1.1$; <1.0 . The acorns with
the higher specific weight are distinguished
by higher sowing qualities, while the oak seed-
lings derived from such acorns grow better and
are to a lesser degree subject to powdery mildew.
Such acorns are better preserved over winter
and are found more resistant to fungus
diseases. The sorting of acorns according to
specific weight before putting them into winter
storage should be considered an expedient mea-
sure to eliminate the expense of storage and
fungicidal treatment of acorns known to be of
low grade.

N.Ye.Skripitsyna

CARD: 2/2

CATEGORY : Forestry. FOREST CULTURES
 ABS. JOUR. : Ref Zhur-Biologiya, No.1; 1959, No. 1490
 AUTHOR : Spirchez, Z.
 INST. :
 TITLE : Increase of Acorn Crop Yield in National
 Forest Seed Preserves.
 ORIG. PUB. : Rev. padurilor, 1957, 71, No.10, 632-635

ABSTRACT : The questions examined are: ^(a) in the conditions
 of the RNR (Rumanian Peoples Republic) does
 the oak bear fruit annually or periodically;
 (b) the search of means to raise the crop
 yield of acorns. Observations and experiments
 in national seed forests and forest farms
 resulted in the finding that the flowering
 is characterized by annual fluctuations in
 intensity. The periodic character of fruit-
 bearing is a result of the unfavorable effect

CARD: 1/2

COUNTRY :
 CATEGORY : K
 ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959, No. 1490
 AUTHOR :
 INST. :
 TITLE :

ORIG. PUB. :

ABSTRACT : of biological or climatic factors. Raising the
 acorn harvest-yield is possible through the
 removal of underbrush, special tilling of the
 soil and placement of mineral and organic
 fertilizers. In founding national seed forests
 it is recommended that the amplitude be reduced
 to 0.7 in 3 to 4 stages (during 8 to 9 years).

-- A.Yana

CARD: 2/2

COUNTRY
CATEGORY

USSR
Forestry . FOREST CULTURES.

K

ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1491

AUTHOR : Sechnyak, L.K.
INST. : Krymskaya Oblast State Agr. Exper. Station
TITLE : Hill Sowings of Oak in the Crimean Steppe.

ORIG. PUB. : Tr. Krynsk. obl. gos. s.-kh. opyt. st.,
1956, 2, 85-97

ABSTRACT : By observations of the condition of hill sowings of oak in the central steppe district of the Crimean peninsula in southern chernozema, it was established that all the hill sowings founded in 1949-1951 under a cover of grain crops and perennial grasses, perished completely in the first 1 to 2 years in the conditions of the arid climate of this zone and frosts reaching minus 33° in winter. The only oak sowings preserved partially were those where inspite of

CARD: 1/3

COUNTRY :
CATEGORY :

K

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 , NO.1491

ABSTRACT : instructions, the cover crops were removed from the nests by weeding and the soil was loosened. In experimental hill sowings of oak, planted in 1953 without cover crops, with high agro-technique and careful subsequent tending of the soil and plants to the end of the second vegetation season, 6480 to 13,040 oaks per 1 hectare were preserved in various belts with the average plant height reaching 10.0 to 20.9 cm. In row-hole sowings two-years old of the same period 11,020 to 16,640 oaks per 1 hectare

CARD: 2/3

COUNTRY
CATEGORY

ARS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 , No.1491

AUTHOR :
INST. :

TITLE

ORIG. PUB. :

ABSTRACT : were preserved in various belts with the average plant height reaching 10.0 to 16.7 cm. The placement of mycorrhiza did not have a marked effect on the growth and survival of oak. A dependence between the height of the oak and the method of sowing the acorns was not found. It is indicated that the method of hill crops without care of the soil and plants is inadmissible in a dry steppe.
-- D.I.Deryabin.

CARD: 3/3

COUNTRY :
CATEGORY :

ARS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 , No.

AUTHOR :
INST. :

TITLE :

ORIG. PUB. :

ABSTRACT :

CARD:

COUNTRY : Bulgaria
CATEGORY : Forestry . FOREST CULTURES.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1496

AUTHOR : Petkuts, N.
INST. : Soil Inst. Bulgarian AS

TITLE : The Beginning of Field Shelter-belt Forestation
in Rumania and the System of Field Shelter-Belts
in Karvun.

ORIG. PUB. : Izv. Pochv. in-t. B'lg. AN, 1957, 4,
411-420

ABSTRACT : Field Shelter forest belts were founded in
Karvun in the 1936 to 1940 period with the
use of very diversified assortment of tree-
shrub species. The species were combined
chiefly to make possible the development of
plantings with triangular and trapezoid profile.
The agrotechnique of the Karvun forest belts
is given, the principles of selecting species
are described and recommendations are cited
for the care of plantings. Observations of

CARD: 1/2

COUNTRY :
CATEGORY :
ABS. JOUR. : REF ZHUR . BIOLOGIYA, NO.1, 1959 . No. 1496

AUTHOR :
INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : belt development established the advantage of
the mixed composition over the pure acacia
plantings which had been practised in the
initial period of field shelter belt forestation
in the country (1879-1881). Data are given on
the growth of belts and their shelter efficiency.

--L.V.Nesmelov.

CARD: 2/2

COUNTRY : USSR
CATEGORY : Forestry . FOREST CULTURES.

K

ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1497

AUTHOR : Yatsyno, L.P.
INST. :

TITLE : The Growth and Restoration of Forest Belts in
Ordinary Chernozems of the Middle Volga Region.

ORIG. PUB. : Lesn. kh-vo, 1958, No.1, 28-31

ABSTRACT : Narrow and broad (400 to 600 m.) belts were investigated in a number of sections of Saratov and Kuybyshev oblasts. In the majority of cases elm predominates in the belts, but at a number of places by tree-felling maintenance, a predominance of oak, birch, ash and pine has been attained. It was determined that with increase of age the belts decline in height gain and change to lower locality*which is, however, compensated by the increase in thickness gain.

* class

CARD: 1/2

COUNTRY :
CATEGORY :

K

ABS. JOUR. : REF ZHUR . BIOLOGIYA, NO.1, 1959 (No. 1497

AUTHOR :
INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : The elm, ash and oak reduce the locality class 1.5 to 3 classes, while the birch, maple and pine reduce by 0.5 to 1 class. The narrow belt plantings have higher average diameter than the usual (by 1.5 to 2.2 times), but the number of trunks in them is less. The sparsity of stand is covered by the greater thicknesses. In 50 to 60 years the majority of deciduous trees preserve brush growth capacity (excepting birch). Seed restoration is feeble,

CARD: 2/2

COUNTRY :
CATEGORY :

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959

No. 1497

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : and Norway maple and ash give good second growth. The effect of tree-felling maintenance on the form and structure of plantings is described. Recommendations are given on selection of restorative tree-fellings.

-- L.V. Nesmelov

CARD: 363

COUNTRY :
CATEGORY :

ABS. JOUR. :
No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT :

CARD:

COUNTRY : USSR

INST. : 1111

FOREST CULTURE

ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1498

AUTHOR : Kosourov, Yu.F.

INST. :
TITLE : Crop Gain in Irrigated Conditions and the Lower Limit of Optimal Soil Moisture-Content.

ORIG. PUB. : Lesn. kh-vo, 1957, No.12, 68-70

ABSTRACT : Observations were made in the shelter belt of the Volga-Don Canal on 2 to 3 year old irrigated cultivations of green ash, black locust and littleleaf elm in light-chestnut light-loamy soil with watering, in dark-colored medium-loamy soil with and without watering. The observation method is briefly set forth. It was determined that the seasonal gain in cultivations is extremely uneven and closely connected with the supplies of available moisture

CARD: 1/3

COUNTRY :
CATEGORY :

ABS. JOUR. : REF ZHUR - BIOLOGIYA, NO.1, 1959 No.1498

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : in the layer inhabited by roots. In case of soil moisture deficiency, the average-daily gain drops abruptly, and when moisture content is close to unavailable, is discontinued entirely. Replenishment of water reserves determines the renewal of growth gain. Characteristics are given of the course of gain during the vegetation season by species.

-- L.V.Nesmelov

CARD: 2/3

COUNTRY USSR
CATEGORY Forestry. FOREST CULTURES. K
ABS. JOUR. Ref Zhur-Biologiya, No.1, 1959, No. 1503
AUTHOR Kushnikov, N.; Gavrilov, A.
INST. TITLE Collection of Seeds of Yellow Pine.
ORIG. PUB. Lesn. kh-vo, 1958, No.4, 78-79
ABSTRACT No abstract

CARD: 1/1

COUNTRY GDR
CATEGORY Forestry. FOREST CULTURES. K
ABS. JOUR. Ref Zhur-Biologiya, No., 1959, No. 1504
AUTHOR Belitz, G.
INST. TITLE Various Times for Planting Pine Cultivations
(German Democratic Republic)
ORIG. PUB. Forst und Jagd, 1958, 8, No.3, 105-108
ABSTRACT No abstract

CARD: 1/1

COUNTRY . USSR K
CATEGORY . FORESTRY . FOREST CULTURES
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1505
AUTHOR : Afonin, A.K.; Turenko, A.P.
INST. : --
TITLE : Planning of Shelter-Belt Forestation in the
Golodny Steppe.
ORIG. PUB. : Lesn. kh-vo, 1958, No.5, 22-24
ABSTRACT : No abstract

CARD: 1/1

COUNTRY . USSR K
CATEGORY . Forestry . FOREST CULTURES.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1506
AUTHOR : Komissarov, N.A.
INST. : --
TITLE : Experience of Shelter-belt Forestation in the
Verkhne-Mokshanskiy Leskhoz.
ORIG. PUB. : Lesn. kh-vo, 1958, No.5, 65-66
ABSTRACT : No abstract

CARD: 1/1

COUNTRY : USSR
CATEGORY : Forestry .FOREST CULTURES. K
ABS. JOUR. : Ref Zhur-Biologiya, No.1,1959, No. 1507
AUTHOR : Gavrik, O.Ya.
INST. : Ukrainian Agric. Acad.
TITLE : Growth of Tree Species in the Forest Belts
of the "Pobeda" Kolkhoz, Malo-Viskovskiy
Rayon, Kirovogradskaya Oblast.
ORIG. PUB. : Sb. stud. nauchno-issled. rabot Ukr. s.-kh.
akad.,1958, vyp. 3, 145-147
ABSTRACT : No abstract

CARD: 1/1

COUNTRY : USSR K
CATEGORY : Forestry .FOREST CULTURES.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1508
AUTHOR : Fedorenko, S.I.
INST. :
TITLE : State Forest Shelter Belt of Belgorod-Don.
ORIG. PUB. : Len. kh-vo, 1958, No.5, 5-9
ABSTRACT : No abstract

CARD: 1/1

COUNTRY : USSR
CATEGORY : Forestry. FOREST CULTURES.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1509
AUTHOR : Yelinetkiy, L.M.
INST. : --
TITLE : Convincing Data on the Effect Forest Belts
Have on the Crop Yield.
ORIG. PUB. : Lesn. kh-vo, 1958, No.5, 33-34
ABSTRACT : No abstract

CARD: 1/1

COUNTRY : USSR K
CATEGORY : Forestry. FOREST CULTURES.
ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1510
AUTHOR : Voronin, I.V.; Popov, V.M.
INST. :
TITLE : Economic Importance of Forest Belts in the Work
of the South-eastern Railway.
ORIG. PUB. : Izv. vyssh. uchebn. zavedeniy. Lesn. zh., 1958,
No.2, 34-40
ABSTRACT : No abstract

CARD: 1/1

K

COUNTRY : USSR
 CATEGORY : Forestry. FOREST CULTURES.
 ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No. 1511
 AUTHOR : Kapustinskaite, T.
 INST. :
 TITLE : Means of Breeding Black Alder (Lithuania)
 ORIG. PUB. : Soc. zemes ukis, 1956, No.8, 48-51
 ABSTRACT : No abstract

CARD: 1/1

COUNTRY : USSR K
 CATEGORY : Forestry. FOREST CULTURES.
 ABS. JOUR. : Ref Zhur-Biologiya, No.1, 1959, No.1513
 AUTHOR : Pekshibayev, M.I.
 INST. :
 TITLE : The Kuban Chestnut Groves - A Valuable Seed Base
 ORIG. PUB. : Sb. rabot po lesn. kh-vu Sev. Kavkaza. Vyp. 3, Maykop, 1958, 137-145
 ABSTRACT : No abstract

: 1471

END

CARD: 1/1