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25 March 1960

SOVIET ABSTRACTS BIOLOGY

SECTION O - PLANT DISEASES

Book No. 23, 1958

Abstracts 104958 thru 105054

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SELECTED TRANSLATIONS OF
ABSTRACTS IN REFERATIVNYY ZHURNAL - BIOLOGIYA, No. 23, 1958

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.

COUNTRY : GDR
CATEGORY : Plant Diseases. General Problems. 0
ABS. JOUR. : RZhBiol., No.23 1958, No. 104958
AUTHOR : Reimuth, E.
INST. : Karl Marx University, Leipzig
TITLE : Practical Problems in Phytopathology.

ORIG. PUB. : Wiss. Z. Karl-Marx-Univ. Leipzig, 1956-1957. 6.
No. 4, 439-444

ABSTRACT : In the report at the conference of the faculty of Agriculture, Leipzig University, the author touches upon problems in the application of the means of plant protection, plant hygiene and prognosis of diseases. Increase in the number of parasite races under the influence of plant selection and in connection with their adaptation to new plants, external environment and poisonous chemicals, is pointed out. When using organic fertilizers (manure, feces), it is advisable to subject them to a long period of compost formation in order to destroy the

CARD: 1/2

COUNTRY :
CATEGORY : 0

ABS. JOUR. : RZhBiol., No.23 1958, No. 104958

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : causal agents of plant diseases and weed seeds. The effect of mineral fertilizers on the resistance of the plants should be taken into account. Treatment of potatoes with fertilizers containing chlorine and an excess of nitrogen contributes to the affection of potatoes with virus diseases. -- M. F. Sokolova

CARD: 2/2

COUNTRY : USSR
CATEGORY : Plant Diseases. General Problems. 0
ABS. JOUR. : RZhBiol., No. 23 1958 No. 104959
AUTHOR : Verderevskiy, D. D.
INST. : -
TITLE : On the Theory of Plant Immunity to Diseases.
ORIG. PUB. : Zashchita rast. ot vredit. i bolezney, 1958, No. 3, 31-34
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : YUGOSLAVIA
CATEGORY : Plant Diseases. General Problems. 0
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104960
AUTHOR : Petrik, A.
INST. : -
TITLE : Service of Plant Protection in Vojvodina
ORIG. PUB. : Zashchita bil'ov, 1957, No. 39-40, 101-111
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR
CATEGORY : Plant Diseases. General Problems. 0
ABS. JOUR. : RZhBiol., No. 23 1958 No. 104962
AUTHOR : Kuvshinova, Ye. V.
INST. : Moscow Agricultural Academy imeni K. A. Timiryazev
TITLE : The Use of Dry Serums in Phytopathology.

ORIG. PUB. : Dokl. Mosk. s.-kh. akad. in. K. A. Timiryazeva, 1957,
vyp. 31, 162-166

ABSTRACT : The feasibility of using dry serums in diagnosis of certain bacterial and virus diseases was studied. Prepared and studied were serums specific against *Pseudomonas tumefaciens*, *Xanthomonas vesicatorium* and *Ps. syringae*, the virus of tobacco mosaic and against X virus of potato. Dilution of anti-bacterial serums was 1:90; dilution of anti-virus ones - 1:8. Serums were diluted with distilled water, physiological solution, 1% glucose, 0.1% gelatine plus 1% glucose. The diluted serums were applied onto photographic film from which emulsion had been washed off.

CARD: 1/2

COUNTRY : 0
CATEGORY :
ABS. JOUR. : RZhBiol., No. 1958 No. 104962
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : and dried at room temperature. The activity of the serum was checked once a month. Control consisted of normal serum on the same kind of film and the same liquid serum kept at 4-5°. Serums, both anti-bacterial and anti-virus diluted in physiological solution and distilled water, preserved their activity for 3-4 months. Serums diluted with 1% glucose solution preserved their activity longer.
--G. A. D'yakova

CARD: 2/2

COUNTRY : USSR
CATEGORY : Plant Diseases. General Problems. 0

ABS. JOUR. : RZhBiol., No. 23 1958 No. 104963

AUTHOR : Kartasheva, N. N.

INST. : -

TITLE : Antibiotic Properties of Nectar and Nectaries
of Some Plants.

ORIG. PUB. : Zh. obshch. biologii, 1957, 18, No. 3, 235-241

ABSTRACT : The test objects were *Paramecium caudatum*, *Bacillus micoides* (representative of gram-positive bacteria) and *Bacterium coli* (representative of gram-negative bacteria). It was found that nectar, its volatile fractions and nectaries of many plants possess protistocidal and bactericidal properties. Nectar and nectaries of each species of plants are distinguished by the specificity of their action on micro-organisms. The flower parts of some plants also proved to be phytoncidal. Their activity, as that of nectaries was not the same at different stages of the development of the flower. -- An. A. Zaytseva

CARD: 1/1

COUNTRY : RUMANIA
CATEGORY : Plant Diseases. General Problems. 0

ABS. JOUR. : RZhBiol., No. 23 1958 No. 104964

AUTHOR : Petrascu, S.; Polizu, A.

INST. : -

TITLE : Petroleum Chemistry in Plant Protection

ORIG. PUB. : Rev. chim., 1957, 8, No. 12, 763-767

ABSTRACT : A survey on the application of different petroleum distillation products in plant protection. Achievements obtained in the given area in Rumania give reasons for the application of these products on a wide scale. Bibliography of 71 titles.

CARD: 1/1

COUNTRY : USSR
CATEGORY : Plant Diseases. Diseases of Forest Species 0
ABS. JOUR. : RZhBiol., No.23 1958, No. 104967
AUTHOR : Klyushnik, P. I.
INST. : Moscow Society of Naturalists. Division of Biology.
TITLE : On Increasing the Resistance of Woody Plantings in the
Steppe Zone to Fungus Diseases.

ORIG. PUB. : Byul. Mosk. o-va ispyt. prirody. Otd. biol.,
1958, 63, No. 1, 65-69

ABSTRACT : Species composition of tree and shrub plants is recom-
mended for field-protective belts of the steppe zone
taking into account their biological traits and phyto-
pathological characteristics. Consideration is given to
the importance of the composition and mixtures of woody
plants as a factor determining their resistance to fungus
diseases. In the renewal of forests by undergrowth, the
substantial role played by fungi settling on stumps is
pointed out. In their effect on the undergrowth, the
author divides saprophytic fungi into 3 groups. To the
first is assigned *Daedalea quercina* affecting the pith

CARD: 1/3

COUNTRY :
CATEGORY : 0

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104967

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : part of the stumps. With slow development, the rot
passes into the trunks of the second growth trees of from
40 years of age and older. To the second group are as-
signed *Polyporus veraicolor*, *Daedalea unicolor*, *Auricularia mesenterica*, *Endoxylina estroidea*, affecting the cambi-
um and pith parts of the stumps. To the third group are
assigned *Irpex lacteus* and *Stereum hirsutum* causing a rap-
id infection of stump cambium, thereby creating a danger

CARD: 2/3

COUNTRY :
CATEGORY : 0

ABS. JOUR. : RZhBiol., No.23 1958 No.104967

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : for the young growth. Thus, the greater the capacity of the fungus to destroy the stump cambium, the greater its damage to the young growth. As a prophylaxis and a maintenance measure, it is suggested not to leave high stumps and to do the cutting in the steppe zone from November through March-April, after the autumn frosts.
-- Ye. S. Arutyunyan

CARD: 3/3

COUNTRY : YUGOSLAVIA
CATEGORY : Plant Diseases. Diseases of Forest Species 0

ABS. JOUR. : RZhBiol., No.23 1958 No. 104968

AUTHOR : Koleva-Shekatkovskaya, M.
INST. : -
TITLE : On the Sanitary Conditions of the Plantations of Karaorman Forest Complex.

ORIG. PUB. : Shumarski pregl., 1957, 5, No. 1-2, 42-54

ABSTRACT : The effect is described of abiotic (wind, snow, frost) and biotic (fungi; *Microsphaera alphitoides* on oak; *Fomes ignarius* on poplar; *F. fomentarius* on the dead wood tissue of beech) factors influencing the sanitary condition of Karaorman-Slavej forest complex (Okaridskiy okrug, Macedonian People's Republic, Yugoslavia. --G. A. D'yakova

**Rhytisma acerinum* on maple,

CARD: 1/1

COUNTRY : YUGOSLAVIA
CATEGORY : Plant Diseases. Diseases of Forest Species 0
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104970
AUTHOR : Comic, B.
INST. : -
TITLE : Detection of *Dasyscypha willkommii* (Hart.) Rehm on Larch
and *Trametes radiciperda* Hartig on Spruce in the Forests
of Mojstrana (Slovenia, Yugoslavia).
ORIG. PUB. : Šumarstvo, 1957, No. 9-10, 629-631
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR
CATEGORY : Plant Diseases. Diseases of Forest Species 0
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104972
AUTHOR : Guliyayev, V. V.
INST. : Tatar Republic Scientific and Technical Society of *)
TITLE : Fungus Diseases of Acorns in Middle Povolzh'ye and
Measures for Their Control.
ORIG. PUB. : Sb. statey po les. kh-vu. Tatarsk. resp. nauchn-tekhn.
o-vo lesn. prom-sti, 1956, vyp. 12, 159-208
ABSTRACT : A number of fungi has been discovered causing diseases in
the oak acorns in the environment of Middle Povolzh'ye.
The majority of them are assigned to the group of imper-
fect fungi; ascomycetes, basidiomycetes and fungi-algae
are represented in smaller numbers. Fungi affecting the
oak acorns can develop on acorns remaining in the forest
from the crop of the previous year, on living branches,
leaves and trunks of the oak, on fallen leaves and dead
*) Lumber Industry

CARD: 1/2

COUNTRY :

CATEGORY :

ABS. JOUR. : RZhEiol., No. 1958 No. 104972

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : wood, on different kinds of organic matter and on different plants.
Conditions favoring the development of diseases in acorns are indicated. Oak acorns were treated with preparation NIUIF-2 (granosan: ethylmercurochloride), with preparation AB, ethylmercurophosphate, with preparation No.2 and $KMnO_4$. The best results were obtained with NIUIF-2 (at the rate of 1.5 grams/kg of the seeds). Along with the fungicidal treatment of the acorns, prophylactic measures are recommended having as their purpose the prevention of their affection during gathering, readying, transportation and storage. -- A. A. Prisyazhnyuk

CARD: 2/2

COUNTRY : YUGOSLAVIA

CATEGORY : Plant Diseases. Diseases of Forest Species

ABS. JOUR. : RZhEiol., No. 23 1958 No. 104973

AUTHOR : Milatovic, I.

INST. :

TITLE : The Blight of Horse Chestnut Leaves.

ORIG. PUB. : Zashchita bil'a, 1956, No. 38, 109-111

ABSTRACT : A report on the appearance of Guignardia desculi on horse chestnut with recommendations for the control: burning of fallen leaves and spraying with Bordeaux mixture.

CARD: 1/1

NO.

USSR

Plant Diseases. Diseases of Forest Species

0

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104976

AUTHOR : Solomakhina, V. M.

INST. : Kiev University

TITLE : Fungus Diseases of the Trunks and Roots of Forest
Woody Plants in Western Poles'ye of Ukraine.

ORIG. PUB. : Nauk. zap. Kiivs'k. un-t, 1957, 16, No. 20, 163-166

ABSTRACT : Data are cited on the spread of the trunk and root rot
of woody plants, obtained by the author during the study
of mycological flora in the forests of Western Poles'ye
in 1952-1953.

CARD: 1/1

COUNTRY : CHINA

CATEGORY : Plant Diseases. Diseases of Cultivated Plants

0

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104979

AUTHOR : Liu Hsi-chin; Lin K'ai-jen; Wu Kung-ch'eng; *)

INST. : -

TITLE : A Test of the Effectiveness of Certain Methods Used
in the Control of Loose Wheat Smut.ORIG. PUB. : Nung-yeh hsueh-pao, Acta agric. sinica, 1956, 7,
No. 2, 193-202ABSTRACT : In the control of *Ustilago tritici*, the best results were
obtained with the treatment of the grain with hot water
for 24 hours, with lime solution for 72 hours and with the
sun drying of previously soaked seeds. The effectiveness
of these methods varied from 93.6 to 100%. -- From the
author's resume.

*)Chang Ch'eng-wan; Liu Hwei-ming; Chou Shu-hua

CARD: 1/1

COUNTRY : ROMANIA
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104980
AUTHOR : Marta, M. V.
INST. : Institute of Agronomy Timisoara
TITLE : On the Study of Hard Wheat Smut in Banat /Rumania/.

ORIG. PUB. : Anuarul lucrur, stiint. Inst. agron. Timisoara,
Bucuresti, 1957, 195-214

ABSTRACT : Data are reported on the phytopathological analysis of 1066 specimens of winter wheat for infection with hard smut, and also the results of the studies of the role of the soil in the transmission of the infection, and of the tests of the effectiveness of fungicides. -- According to the author's resume.

CARD: 1/1

COUNTRY : CHINA
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104983

AUTHOR : Lu Shuai-i; Fan Kuei-fang; Hsieh Shu-min; Wu Wei-chung;*)
INST. : Agricultural Institute of Northern China
TITLE : A Study of Yellow Rust in Wheat. I. Physiological
Specialization of Puccinia glumarum (Schmidt) Erikss. and
Henn.

ORIG. PUB. : Chih-wu ping-li hsueh-pao, Acta phytopathol. sinica,
1956, 2, No. 2, 153-166

ABSTRACT : All of the wheat varieties tested at the Agricultural
Institute of Northern China proved to be resistant to the
races of P. glumarum with Elymus chinense, whereas the
races of P. glumarum with E. sibiricus and Agropyron spp.
infected many varieties of wheat.

*) K'ung Hsien-liang; Yang Tso-min; Wang K'e-ning;
Li Jui-pi

CARD: 1/1

COUNTRY : CHINA
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No.23 1958, No. 104985
AUTHOR : Wang He-ning; Hung Hsi-wu; Chou Chia-p'ing
INST. : Agricultural Institute of Northern China
TITLE : On the Germination of Ascospores of Gibellina
cerealis Pass.
ORIG. PUB. : Chih-wu ping-li hsiieh-pao, Acta phytopathol. sinica,
1956, 2, No. 2k, 167-171
ABSTRACT : Results of the experiments carried out at the Agricultural
Institute of Northern China showed that stimulation of the
tissues of wheat sprouts is a necessary condition for the
germination of the ascospores of G. cerealis - the patho-
gen of the "white straw" of wheat. It was determined
that low temperature, close to freezing point, is very
effective for the process of the maturation of the spores.
In the absence of the above-stated stimulation, the spores
are incapable of germination.

CARD: 1/1

COUNTRY : CHINA
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No.23 1958, No. 104986
AUTHOR : Hsia Yu-tien; Hsiao Ch'ing-p'u; Kao Ch'uan-hsun
INST. : *
TITLE : Development of Gibberella zeae in Wheat. I. Relation
Between the Development and Propagation of Fungus Spores
and the Amount of Precipitation and Epiphytotics of the**
ORIG. PUB. : Chih-wu hsiieh-pao, Acta phytopathol. sinica, 1956, 2,
No. 2, 187-202
ABSTRACT : No abstract.

*ping-li

** Disease.

CARD:1/1

COUNTRY : CHINA
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104994
AUTHOR : Fang Chung-ta; Liu Chin-fen; Chu Chia-lin
INST. : -
TITLE : Preliminary Study of the Life Cycle of the Causal Organism
of Bacterial Blight of Rice Leaves [Xanthomonas oryzae
(Uyeda and Ishiyama) Dowson]
ORIG. PUB. : Chih-wu ping-li haueh-pao, Acta phytopatol. sinica, 1956,
2, No 2, 173-185
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY :
CATEGORY :
ABS. JOUR. : RZhBiol., No. 195 , No.
AUTHOR :
INST. :
TITLE :
ORIG. PUB. :
ABSTRACT :

CARD:

COUNTRY : USSR
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No.23 1958, No. 104999
AUTHOR : Yakovleva, Z. M.
INST. : Institute of Microbiology and Virology, AS KazSSR
TITLE : Effect of the Fungi of Genus Alternaria on the sprouting
of Esparcet in the Field.
ORIG. PUB. : Tr. In-ta mikrobiol. i virusol. AN KazSSR, 1958, 2, 61-65
ABSTRACT : The species composition of the fungi of genus Alternaria
affecting the seeds and vegetative organs of esparcet was
determined: Alternaria tenuis, Al. humicola, Al. geophila.
By lowering the germination and the growth vigor of the
seeds, fungi of genus Alternaria have also a negative in-
fluence on the sprouting of the plants in the field.
Hulling the esparcet fruits is recommended as a method of
pre-sowing treatment of the seeds, which appreciably in-
creases the sprouting of the plants in the field. -- Ye. S.
Arutyunyan

CARD: 1/1

COUNTRY : YUGOSLAVIA
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104004
AUTHOR : Lednik, F.
INST. : -
TITLE : Changing the Seed Potatoes Aids the Control of
Virus Diseases.
ORIG. PUB. : Socialist. kmet., 1957, 8, No. 1-2, 25-38
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : CHINA
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958, No. 105007
AUTHOR : Huang Liang; Ch'en Yü-hsin; Huang Hung-yüan
INST. : -
TITLE : A Preliminary Study of Sweet Potato Wilt and its Control.
ORIG. PUB. : Chih-wu ping-li hsüeh-pao, Acta phytopathol. sinica,
1956, 2, No. 2, 97-114
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958, No. 10511
AUTHOR : Askarova, S. A.
INST. : -
TITLE : On the Prospects of Using Antibiotics of Microbial Origin
in the Control of Cotton Plant Gummosis.
ORIG. PUB. : V sb.: Materialy Ob'yedin. nauchn. sessii po khlopkovod-
stvu. T. 2. Tashkent, Gosizdat UzSSR, 1958, 326-331
ABSTRACT : Cotton plant seeds affected with gummosis were treated
with antibiotic matter isolated from Actinomyces. In
the majority of the experiments, the effectiveness of this
seed treatment was higher than that of the method of wet
process of treatment with formalin used in production, and
almost the same as the effectiveness of treatment with the
dry preparation of trichlorophenolate of Cu. Capability
of the indicated antibiotics to retard the appearance of
the leaf, stem and boll forms of gummosis, and in some
cases to eliminate the disease completely, is pointed out.
--Ye. S. Arutyunyan

CARD: 1/1

COUNTRY : USSR
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958 No. 10512
AUTHOR : Gubanov, G. Ya.
INST. : -
TITLE : Physiological Bases of Cotton Plant Resistance to Affection with Verticillium Wilt.
ORIG. PUB. : V sb.: Materialy Ob'yedin. nauchn. sessii po khlopkovodstvu. T. 2. Tashkent, Gosizdat UzSSR, 1958, 304-313
ABSTRACT : In the author's opinion, phenols accumulated in excessive amount in the affected plant, cause its wilt. In the sick plant, the activity of the amylase is sharply heightened, the starch content in the woody tissue of the stem is lowered and the amount of phenols and tannic matter in the leaves increases. The author's point of view contradicts the accepted opinion in regard to the protective role of phenolic-tannic substances. -- Ye. S. Arutyunyan

CARD:1/1

COUNTRY : USSR
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958 No. 10513
AUTHOR : Ying Hsin-yün
INST. : -
TITLE : Studies on Verticillium and Fusarium Wilt.
ORIG. PUB. : V sb.: Materialy Ob'yedin. nauch. sessii po khlopkovodstvu. T. 2. Tashkent, Gosizdat UzSSR, 1958, 230-240
ABSTRACT : Investigations have been carried out for the purpose of the study of verticillium (VW) and fusarium (FW) wilt of cotton under conditions of China. Studied were the problems of the wilt in connection with the environmental conditions, the mode of the dissemination of the disease, measures for the control and selection of varieties which are resistant to the disease. The spreading of Verticillium albo-atrum, V. n. is limited by temperature. A severe infection is observed with the temperature of the air

CARD:1/2

*average

COUNTRY :
CATEGORY : 0
ABS. JOUR. : RZhBiol., No. 1958, No. 105013
AUTHOR :
INST. :
TITLE :
ORIG. PUB. :
ABSTRACT : at about 25°; with 28° - it is milder, and with 30° the infection stops. *Fusarium vasinfectum* is encountered in large numbers in acid soil. Under conditions of China, VW is disseminated by cotton seeds and through the air. Control is achieved chiefly with the aid of actinomycetes. A method of preparing actinomycetic fertilizer is cited. Varieties developed by the vegetative crossing of *Gossyrium barbadense* and *G. hirsutum* are immune to VW. Resistance to FW is increased by the selection of individuals from uninfected plants. -- Ye. S. Arutyunyan

CARD: 2/2

COUNTRY : POLAND
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958, No. 105015
AUTHOR : Stachyra, T.
INST. : -
TITLE : Problems of the Dissemination of Viral Yellows on Sugar Beets in Poland.
ORIG. PUB. : Gaz. cukrown., 1957, 59, No. 8, 219-221
ABSTRACT : A description of the dissemination of sugar beet yellows in Poland. A list of 25 species of plants (cultivated and also weeds) affected by the virus of the yellows is cited. The principal breeding places of the annual breaking-out of the disease are the transplanted beet plants whence the infection is spread by aphids (beet, peach and to some extent by pea aphids). The degree of the infection with yellows of commercial sowings of sugar beets in different regions in 1956, corresponded to the degree of

CARD: 1/3

COUNTRY :
CATEGORY :

0

ABS. JOUR. : RZhBiol., No. 1958, No. 105015

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : the invasion by the beet aphids. The weight of the roots affected by the disease was lower by 56.8% and the sugar content - by 0.9%. For the year 1956, the shortage in the crop of sugar beet roots in Poland, attributable to the disease, amounted to 5%. Recommended are agricultural methods which promote a strong growth of sugar beets, destruction of weeds, limitation on the cultivation of fodder and table beets, of overwintering spinach, and discontinuance of sugar beet sowings for seed production in the regions of severe infection with yellows, isolation (200 meters) of transplanted seedlings, a systematic destruction of

CARD: 2/3

COUNTRY :
CATEGORY :

0

ABS. JOUR. : RZhBiol., No. 1958 No. 105015

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : aphids in greenhouses, spraying of transplanted seedlings and sowings for seeds with contact or systemic toxic preparations. -- V. I. Vergovskiy

CARD: 3/3

COUNTRY : ROMANIA
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958 No. 105019
AUTHOR : Negru, A.; Mircea, E.; Crisan, A.
INST. : Rumanian Academy, Cluj Affiliate; Cluj University
TITLE : New Host Plants of the Fungus *Monilia fructigena* Pers.

ORIG. PUB. : Studii si cercetari agron. Acad. RPR Fil. Cluj.,
1957, 8, No. 1-2, 93-98

ABSTRACT : The three-year observations (1953-1956) carried out at the University of Cluj (Rumania), revealed the following plants as the new host-plants of *M. fructigena*: *Berberis vulgaris* L., *B. sieboldii* Mig., *B. canadensis* Pursh., *Sorbus aucuparia* L., *S. dacia* Borb., *Crataegus oxyacantha* L., *C. subvillosa* Schrad., *Cotoneaster obtusa* Wall. *M. fructigena* was found on grape berries (variety Shessia dore). The infection of the enumerated plants under natural conditions, was verified by numerous artificial inoculations of the plants with the fungus conidia from the fruits of the apple tree and *B. vulgaris*.

CARD: 1/1

COUNTRY : USSR
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958 No. 105023
AUTHOR : Paterilo, G. A.
INST. : Moldavian Scientific Research Institute of Orchard *)
TITLE : Biological and Agrotechnical Principles of the Treatment of Black Canker in Apple Trees (*Sphaeropsis malorum* Peck)

ORIG. PUB. : Tr. Mold. n.-i. in-t sadovodstva, vinogradarstva i vinodeliya, 1957, 3, 267-271

ABSTRACT : The greatest affection of apple trees with black canker has been noted toward the end of their ontogenesis when the vital functions of the trees are weakened and the development of the infection during this time proceeds especially intensively. In early spring, it is recommended to perform the cleaning up of the wounds as far as the healthy tissue with their subsequent disinfection. The cleaning up should be done in the period preceding

*) Cultivation, Viticulture, and Wine Making.

CARD: 1/2

COUNTRY :
CATEGORY : 0
ABS. JOUR. : RZhBiol., No. 195 8 No. 105023
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : the non-productive year. In testing various chemical and surgical methods of the control of the disease, one should take into account the condition of the tree, biological characteristics of the varieties, the degree of their yielding ability in the period of the performance of these operations, and the meteorological conditions of the preceding year. -- Ye. S. Arutyunyan

CARD: 2/2

COUNTRY : YUGOSLAVIA
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 195 8 No. 105026
AUTHOR : Josifovich, M.
INST. : -
TITLE : Polystigma rubrum and Puccinia prunispinosae - Causal Agents of a Dangerous Plum Disease in Yugoslavia.
ORIG. PUB. : Pol'oprivreda, 1957. 5. NO. 1. 54-56
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958, No. 105028
AUTHOR : Varypayeva, A. G.
INST. : Grodno Agricultural Institute
TITLE : On the Bioecology of the Causal Agent of Gray Mold Rot
in Stone Fruit Plants in Belorussian SSR
ORIG. PUB. : Tr. Grodnensk. s.-kh. in-ta, 1957, vyp. 3, 75-88
ABSTRACT : Surveys of cherry plantations carried out during 1951-1956
on the territories of the Botanical Garden, Academy of
Sciences, Belorussian SSR and experimental orchards of
Belorussian Fruit and Vegetable Experiment Station, de-
termined the infection of the entire assortment of cherry
varieties with the fruit gray mold rot (*Monilia cinerea*
Bon.). A comparative evaluation of the resistance of the
varieties was carried out. It was determined in field and
laboratory studies that the fungus develops three genera-
tions of conidial sporogenesis. The first conidia appear

CARD: 1/2

COUNTRY :
CATEGORY : 0
ABS. JOUR. : RZhBiol., No. 1958, No. 105028
AUTHOR :
INST. :
TITLE :
ORIG. PUB. :
ABSTRACT : in April. No formation of apothecia was noted. The
fungus winters in the form of mycelium. --Ye.S.Arutyunyan

CARD: 2/2

COUNTRY : YUGOSLAVIA
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958 No. 105039
AUTHOR : Ostojic, N.
INST. : -
TITLE : Comparative Effect of Organic and Inorganic Fungicides
in the Control of Grape Mildew.
ORIG. PUB. : Zashita bil'a, 1956, No. 38, 21-31

ABSTRACT : The fungicides tested, can be put in the following order according to their protective effect: "Kaptan" (I) 0.5% (98.1% of healthy clusters), Bordeaux mixture (II) 2 and 1.5%, (I) 0.25%, "Zineb" (III) 0.3%, (II) 1%, copper oxychloride (IV) + (III) (300 grams of IV and 100 grams of III to 100 liters of water), cupric oxide 0.5%, "Ziram" 0.15%, IV 0.5% (92.2% of healthy clusters). The difference in the concentrations of 2 and 1.5% is negligible. The mixture of IV and III produced the poorest results in comparison with the data of other authors.

CARD: 1/1

*action of II in

COUNTRY : USSR
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958, No. 105036
AUTHOR : Oltarzhevskiy, N. P.
INST. : -
TITLE : On the Preventive Measures Against Grapevine Mildew.

ORIG. PUB. : Vinodeliye i vinogradarstvo SSSR, No. 4, 29-31

ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : RUMANIA
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958, No. 105037
AUTHOR : Savin Gh.
INST. : Valea Calugareasca Experiment Station
TITLE : Studies on the Prevention of Mildew at the Experiment
Station of Viticulture of Valea Calugareasca.
ORIG. PUB. : Gradina, via si livada, 1958, 7, No. 6, 52-57
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
ABS. JOUR. : RZhBiol., No. 23 1958, No. 105038
AUTHOR : Petrukhina, M. T.
INST. : -
TITLE : Experiment in the Control of Mildew at Incubation Periods.
ORIG. PUB. : Vinodeliye i vinogradarstvo SSSR, 1958, No. 4, 27-29
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR
 CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
 ABS. JOUR. : RZhBiol., No. 23 1958, No. 105045
 AUTHOR : Vergovskiy, V. I.
 INST. : All-Union Scientific Research Institute of Oleaceous *)
 TITLE : Some Characteristics in the Development of
 Fusariosis on Basil.
 ORIG. PUB. : V sb.: Kratkiy otchet o nauchno-issled. rabote Vses. n.-i.
 in-ta maslichn. i efiromaslichn. kul'tur za 1956 g. **)
 ABSTRACT : The degree of the affection of basil seedlings with fusar-
 iosis is influenced not only by the presence of infection
 in the soil of the hotbeds and greenhouses, but also by
 excessively high temperatures at which the forming of the
 seedlings takes place. It is necessary to maintain the
 soil temperature in the greenhouses and hotbeds at not
 higher than 20°, while the basil seed plots should be
 spaced in crop rotations which preclude the cultivation of
 this plant in one field for longer than a year, at the
 same time carefully removing and destroying all plants
 with symptoms of fusariosis. --- G. A. D'yakova

CARD: 1/1

*)and Ethereal Oil Plants.

**)Krasnodar, "Sov. Kuban' ", 1957, 195-197

COUNTRY : USSR
 CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0
 ABS. JOUR. : RZhBiol., No. 23 1958, No. 105046
 AUTHOR : Kvartskhava, P. A.
 INST. : Sukhum Zonal Experiment Station of Ethereal Oil Plants.
 TITLE : On the Study of Infectious Wilt (Fusariosis) of Eugenol
 Basil (Ocimum gratissimum).
 ORIG. PUB. : Tr. Sukhumsk. zonal'n. opyt. st. efiromaslich. kul'tur.,
 1957, vyp. 2, 101-113
 ABSTRACT : The disease causes serious damage on plantations and
 nurseries in Abkhazia. The typical symptoms of fusari-
 osis are: a lengthwise streak on the stem, underdeveloped
 and chlorotic leaves, their wilting and dropping-off, the
 bending of the affected part of the stem. The pathogen
 (Fusarium sp.) penetrates chiefly through the root system.
 Injuries to the root tissue and the stem base caused from
 tools, insects and other causes, contribute to the in-
 fection. A source of infection is the residue of the

CARD: 1/2

COUNTRY :
CATEGORY : 0

ABS. JOUR. : RZhBiol., No. 1958, No. 105046

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : sick plants from which the fungus getting into soil develops there on the dead residues of various plants, including weeds. The affected seedlings, and also to some extent the seeds from the diseased plants, are the principle sources of the dissemination of the disease on new plots. Measures for the control are indicated. The pathogen is a specialized parasite of *Ocimum gratissimum*, and does not infect other plants, among them geraniums and patchouli, in the breeding place of the disease. -- G. A. D'yakova

CARD: 2/2

COUNTRY : GDR
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0

ABS. JOUR. : RZhBiol., No. 23 1958. No. 105053

AUTHOR : Sauthoff, W.; Gerlach, W.
INST. : Berlin Institute of Mycology
TITLE : On a Hitherto Unknown Fusarium Wilt on *Aechmea fasciata* (Lindl.) Bak.

ORIG. PUB. : Nachrichtenbl. Dtsch. Pflanzenschutzdienstes,
1958, 10, No. 1, 1-3

ABSTRACT : In 1956, fusarium wilt of *A. fasciata* (of pineapple family) was discovered at Berlin Institute of Mycology. The progress of the disease and its external manifestation depend on the ecological conditions and are different in winter and summer months. The coloration of the vessels is characteristic of the diseases of this type. The pathogen was isolated in pure culture and assigned to

CARD: 1/2

COUNTRY :
CATEGORY :

0

ABS. JOUR. : RZhBiol., No. 1958, No. 105053

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : *Fusarium bulbigenum* Cke et Mass. f. *aschmeas* Gerlach et Sauthoff n. f. Pathogenicity was proven by the artificial infection of one-year plants. Biological specialization in regard to other plants of pineapple family (Bromeliaceae) has not been conclusively proven. The infection occurs chiefly through the roots. Recommended are sterilization of the soil, of the cultural vessels and housing, and destruction of the diseased plants. -- Z.G.Lavitskaya

CARD: 2/2

COUNTRY : USSR
CATEGORY : Plant Diseases. Diseases of Cultivated Plants 0

ABS. JOUR. : RZhBiol., No. 23 1958, No. 105054

AUTHOR : Kling, Ye. G.
INST. : Main Botanical Garden, Academy of Sciences USSR
TITLE : On the Physiology of Gladioli in the Presence of Yellow Disease.

ORIG. PUB. : Byul. Gl. botan. sada. AN SSSR, 1958, vyp. 30, 72-77

ABSTRACT : No abstract.

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CARD: 1/1