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7 April 1960

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**SOVIET ABSTRACTS  
BIOLOGY**

SECTION M - CULTIVATED PLANTS

Book No. 23, 1958

Abstracts 104596 thru 104931

TRANSFER TO MAIN FILE

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SELECTED TRANSLATIONS OF  
ABSTRACTS IN REFERATIVNIY 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 subject classification system used in the Russian-language abstracts has been followed in this publication.

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104596  
AUTHOR : Kolyasev, F. A., Ippolitov, D. V.  
INST. : Leningrad Agricultural Institute  
TITLE : The Influence of Sowing Methods on the Conditions of the  
Development and the Yield of Grain Crops.  
ORIG. PUB. : Zemledeliye, 1957, No. 2, 36-44  
ABSTRACT : In 1949-1951, sowings of spring wheat Diamant and Golden  
Rain oats were carried out on the experimental field  
of Leningrad Agricultural Institute using different meth-  
ods: drill, crosswise, strip, strip-crosswise, sowing in  
three directions (crosswise-diagonal) and sowing in large  
hills. The relative and absolute humidity of the air  
during daylight hours was higher on plots with a more uni-  
form spacing of plants on the area (sowing in three direc-  
tions). The difference in the absolute humidity of the  
atmosphere comprised 1-1.5 millimeters. On sowings in  
hills, the maximum temperature of the air was 1.5-3° higher

Card: 1/3

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No.104596  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : than on sowings in three directions. Differences in ground  
surface temperature reached 2.5-3.5°, and at the depth of  
10 centimeters - 1.5°. During the night hours the above-  
mentioned differences between the variants leveled out.  
The soil moisture content under the drill sowing was, as a  
rule, lower than under the sowing in three directions, and  
higher than under the sowing in large hills. The most  
favorable conditions are created by sowing in three direc-  
tions and crosswise. On the plots of these variants, a  
higher germination of the seeds in the field was noted, and  
a lesser decline in the plants in the process of vegetation,

Card: 2/3

COUNTRY :  
CATEGORY :

M

ABS. JOUR. : RZhBiol., No. 1958, No. 104596

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : less contamination with weeds, an almost complete absence of undergrowth and a higher yield (spring wheat - 35.5 and 33.6, oats - 33.3 and 31.3 centners/ha). The lowest yield (wheat - 16.3 centners/ha, oats - 20 centners/ha) was obtained with sowing in large hills. -- G. M. Chernov

Card: 3/3

COUNTRY : USSR  
CATEGORY : Cultivated plants. Cereals.

M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104597

AUTHOR : Gvchinnikov, N. N., Serafimskiy, V. I.  
INST. : Odessa Hydrometeorological Institute.  
TITLE : Nitrogen Content in Grains Formed in Different Parts of Inflorescence.

ORIG. PUB. : selektsiya i semenovodstvo, 1953, no. 1, 70-71

ABSTRACT : A report on the experiments at Odessa Hydrometeorological Institute in the study of N content in the grains of wheat and rye spikes and corn ears. The N content in a grain and also the percentage content of total N and raw protein vary in relation to the place of the formation of grains within the area of inflorescence. It was found in the greatest amount in winter wheat grains which form in the second flowers of spikelets in the middle part of the spikes. The percentage content of total N and raw protein increases somewhat from the upper part to the lower. in

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No.104597

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : rye, the greatest content of N was found in the grains in the middle part of the spike. In corn, a somewhat different regularity was found, namely: the smallest amount of N was contained in the grains in the upper part of the ear; the percentage content of N hardly varies along the length of the ear. -- Ye. I. Saks

Card: 2/2

COUNTRY : BULGARIA  
CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No.23, 1958, No.104598

AUTHOR : Stefanov, B., Razsolkova, Ye., Tsikova, Ye.  
INST. : -  
TITLE : Results of Some Studies on Determination of the Influence of Pre-Sowing Soaking of Seeds on Their Germination.

ORIG. PUB. : Izv. in-ta za gorat. B<sup>ulg.</sup> AN, 1957, 2, 245-307

ABSTRACT : A delay in germination has been observed with the treatment of corn seeds by means of pre-planting soaking in 3% solution of KBr for 8 hours and those of rice for 48 hours. With soaking in a weak solution of KBr, the delay in germination is considerably less, the process runs its course almost identically as with the pre-planting soaking in distilled water. With the prolonged soaking of rice seeds for 7 days in 3 and 10% solution of NaCl and 3% KBr, a retarded germination has been observed. With such comparatively long process of soaking the seeds, sugar, proteins

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104598

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : and coloring matter pass into the solution used for the treatment. With the transfer of the seeds from salt solutions into distilled water, an accelerated growth of the root system in the sprouting grains has been observed. --  
O. V. Yakushkina

Card: 2/2

COUNTRY : GDR  
CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104599

AUTHOR : Ortlepp, H.  
INST. : Scientific Research Institute of Agriculture in Potsdam.  
TITLE : Potassium and Phosphoric Acid Fertilization of Winter Cereals.

ORIG. PUB. : Mitschurinbewegung, 1957, 6, No. 16, 734-737

ABSTRACT : Data of the experiment at the Scientific Research Institute of Agriculture in Potsdam. Question is broached on the significance of K and P in the vital activity of the plants, on the expediency of the utilization of these or other potassium and phosphorus fertilizers depending on the type of the soil, and also on the rates and dates of the application of these fertilizers under winter grain crops.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104600  
AUTHOR : Mikoyan, G. Ye.  
INST. : Armenian Scientific Research Institute of Hydraulic\*)  
TITLE : Effectiveness of autumn Irrigation of Cereals in Sevanskiy Basin.  
ORIG. PUB. : Izv. AN ArmSSR, Biol. i s.-kh. n., 1957, 10, No. 9, 75-81  
ABSTRACT : The high effectiveness of fall irrigation of winter wheat was ascertained at the Armenian Scientific Research Institute of Hydraulic Engineering and Melioration on the fields of Martuninskiy variety-testing plot. In 1955/56, the increase in the yield comprised 6.5-8.4 centners/ha with the of the control being 22-23 centners/ha. Recommendations are given on the technique of irrigation.

\*) Engineering and Melioration.

Card: 1/1

COUNTRY : GDR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104601  
AUTHOR : Görlitz, H.  
INST. : -  
TITLE : Productivity Reserves are in the Sowing Dates.  
ORIG. PUB. : Mitschurinbewegung, 1958, 7, No. 6, 245-247  
ABSTRACT : No abstract.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104606  
AUTHOR : Motrenko, T. G.  
INST. : Academy of Sciences, USSR.  
TITLE : Lodging in Relation to Agricultural Technique and Varietal Characteristics of Wheat.  
ORIG. PUB. : V sb.: Bio. osnovy oroshayem. zemled. N., AN SSSR, 1957, 611-623  
ABSTRACT : In 1952 and 1954, experiments and observations on lodging of winter and spring wheat in irrigated regions were conducted at Rostov Breeding Station. In these years, a bad type of lodging at the roots was observed owing to a large amount of precipitation. Losses of the grain yield in winter wheat comprised up to 24% after severe lodging at the stage of blossoming. The following varieties and forms of winter wheat of southern origin were assigned to the group with severe lodging: Odesskaya 3, Eritrospermum V-31, hybrid 16. Priezovskaya which did not lodge, and Ramonskaya 833 and hybrid 289/48 which rose up by harvest

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No.104606  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : time, produced in the variety trials the highest yield - 27.9-23.2 centners/ha. It is recommended to eliminate the additional nitrogen dressings of winter wheat and the spring application of N under the spring wheat. In the conditions of Rostov oblast', high sowing rates for either winter or spring wheat are not recommended since they lower the yield in droughty years and intensify lodging with irrigation. -- L. P. Maksimova

Card: 2/2



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104608  
AUTHOR : Ukolov, A.A.  
INST. : Timiryazev Agricultural Academy.  
TITLE : The Attributes of Winter Wheat Variety Moskovskaya 2453.  
ORIG. PUB. : Izv. Timiryazevsk. s.-kh. akad., 1957, vyp. I, 61-68  
ABSTRACT : Data on the 1953-1955 study of different reproductions of variety Moskovskaya 2453 at Timiryazev Agricultural Academy. Difference between the average yields of the reproductions of this variety comprised 2.6 centners/ha, 1.76 grams in the absolute weight of the kernels, and 3.3% in gluten content. Differentiation of the vegetive cones was almost identical in different reproductions. In 1954, in a competitive trial, this variety gave a yield of 23.3 centners/ha, and PPG-599 - 21.7 centners/ha. During 1953-1955, work was being conducted on the improvement of Moskovskaya 2453

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104608  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : variety, and in this period, Moskovskaya 2453 Uluchshennaya surpassed the original variety in the grain yield, absolute weight of the kernels, flintiness of the grain, in the content and elasticity of gluten, productivity of the spike, and in the accumulation of dry matter.

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104609  
AUTHOR : Kirichenko, F. G.  
INST. : All-Union Breeding and Genetics Institute.  
TITLE : Principle Results of the Work on the Creation of Hard Winter Wheat.

ORIG. PUB. : Seleksiya i semenovodstvo, 1958, No. 1, 21-28

ABSTRACT : Work on the creation of hard winter wheat for the conditions of the steppe areas of Ukraine, was started at the Wheat Breeding Section of the All-Union Breeding and Genetics Institute in 1945. By 1958, the Section had at its disposal a large amount of seeds of genuinely hard winter wheats obtained chiefly by repeated crossings. In resistance to cold, this material approaches the soft winter wheat variety Odesskaya 3. The original hybridization material are winter varieties of soft wheats - Odesskaya 3, Odesskaya 12, Voroshilovskaya, Koveyl, and spring varieties

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104609  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : of the hard wheats - Melyanopus 69, Melyanopus 37, Gordeiforme 26 194 and 26 200. Crossings carried out, were direct and reversed, with free and artificial pollination.  
-- Ye. I. Saks

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104610  
AUTHOR : Ryzhey, I. P.  
INST. : Kirghizian Scientific Research Institute of Agriculture.  
TITLE : Application of Spike Pinching Technique in the Growing  
of Wheat Seeds.  
ORIG. PUB. : Byul. Kirg. n.-i. in-ta zemled., 1957, 1, 22-25  
ABSTRACT : Experiments were conducted at Kirghizian Breeding Station.  
The seeds of five varieties of winter wheat were divided  
by size into three groups. From all varieties, the high-  
est yield was secured from large seeds (24.6-29.8 centners/  
ha), middling crop - from seeds of medium size (21.0-29.8  
centners/ha), and the lowest - from small ones (15.6-22.4  
centners/ha). In 1954, characteristics of the seeds from  
different parts of the spike were studied on 6 varieties.  
The largest ones are the older kernels of the middle part  
of the spike. From them is obtained the greatest yield.

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104610  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : The seed nursery is started with the outer (outside) ker-  
nels of the spikelets from the middle of the spike. The  
selection of these kernels is carried out by means of  
pinching the spikes of the standing wheat in the period  
from the beginning of earing until the blossoming of wheat.  
In the middle part of the spike on the main stem, 6-8  
spikelets are left from which the middle flowers are re-  
moved with pincers. The absolute weight of the kernels  
from pinched spikes increases by 5.1-17.5 grams.  
-- Yu. L. Guzhev

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104611  
AUTHOR : Pisarenko, G. S.  
INST. : -  
TITLE : Characteristics of Winter Wheat Seed Growing Under the  
Conditions of Vertical Zonality of Kabardino-Balkarsk \*)  
ORIG. PUB. : Seleksiya i semenovodstvo, 1958, No. 1, 32-36  
ABSTRACT : Experiments were conducted with winter wheat varieties  
Novoukrainka 83 and Osetinskaya 3 in Kabardino-Balkarsk  
Autonomous SSR the natural conditions of which have dis-  
tinct features of vertical zonality. In comparison with  
the seeds grown in the conditions of moist climate, the  
seeds of steppe reproduction with greater protein content,  
produce more viable progeny (cold resistance to the acidity  
of the soil and to diseases). Growing elite seeds of win-  
ter cultures in the steppe zone is recommended. --Ye.I.Saks  
\*) Autonomous SSR.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104612  
AUTHOR : Aliyev, D.A.  
INST. : Academy of Sciences, Azerbaydzhan SSR.  
TITLE : The Influence of Microelements on the Development and  
Yield of Wheat.  
ORIG. PUB. : Tr. 5-y Nauchn. konferentsii aspirantov AN AzerbSSR. Baku,  
AN AzerbSSR, 1957, 241-253  
ABSTRACT : Data of the Institute of Agriculture, Academy of Sciences  
Azerbaydzhan SSR. The influence of B, Mn, Cu, and Zn added  
to a background of nitrogen and phosphoric fertilizers was  
studied. These elements improved the wintering of the  
plants, accelerated growth, the vigor of tillering (espe-  
cially Mn and Cu) and the ripening of the grain (Cu). Un-  
der the influence of Zn and then B, the number of the ker-  
nels on the spike increased. Application of different mi-  
croelements is reflected differently on the water cycle of

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104612  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : the plants. With the background of nitrogen and phosphoric fertilizers, the requirement of wheat for microelements increases. Their application at different stages of the development of wheat produces a considerable increase in the yield: average increase due to Mn and Cu - 3.5 centners/ha, Zn - 3 centners/ha and B - 2 centners/ha. The best effect, especially in droughty years, is achieved with small doses. \*- V. A. Vnuchkov

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104613  
AUTHOR : Grammatikati, O. G.  
INST. : All-Union Scientific Research Institute of Hydraulic \*)  
TITLE : Moisture-charging Irrigation of Winter Wheat in the Steppe Zone.  
ORIG. PUB. : V sb.: Bio. osnovy oroshayem. zemled. M., AN SSSR, 1957, 105-116  
ABSTRACT : Conditions for obtaining stable crops of winter wheat with moisture-charging irrigation without vegetative applications of water, were studied at the All-Union Scientific Research Institute of Hydraulic Engineering and Melioration. Pre-sowing moisture-charging secures good development and wintering of the plants. In the chernozem soil on this side of Caucasus, the required amount of

\*) Engineering and Melioration.

Card: 1/2

COUNTRY :  
 CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104613

AUTHOR :  
 INST. :  
 TITLE :

ORIG. PUB. :

ABSTRACT : water can be distributed in 1.5-meter layer of soil. Therefore, it is expedient to wet the ground to the depth of 2 meters. Application of vegetative irrigation with the background of moisture charging, led to a severe lodging of the plants. The effectiveness of moisture-charging irrigation was expressed in the increase in the yield by 20 centners/ha. It is recommended to eliminate winter wheat in Rostov oblast' from crops requiring vegetative applications of water. -- L. P. Maksimova

Card: 2/2

COUNTRY : USSR  
 CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104614

AUTHOR : Lysogorov, S. D., Kiver, F. V.  
 INST. : Kherson Agricultural Institute  
 TITLE : The Influence of Moisture-charging Irrigations on Winter Wheat in the Southern Steppe of Ukrainian SSR.

ORIG. PUB. : Byul. po fiziol. rasteniy, 1958, No. 2, 21-26

ABSTRACT : The influence of moisture charging irrigation on the yielding ability of winter wheat OD-12, was studied during 1952-1956 at the uchkhov (training farm) of Kherson Agricultural Institute. On an average for 3 years, moisture-charging irrigation increased the yield of winter wheat on non-fallow predecessor, by 7.3 centners/ha or by 35%. The effectiveness of such irrigation is especially high in years with a dry autumn. With moisture-charging, the content of nitrates in the soil increases together with the improvement in the water cycle of the soil. A stable retention of the in-

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104614

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : creased chlorophyll content in the leaves right up to the milk stage of maturity was noted in plants with moisture-charging irrigation. Application of N<sub>45</sub>P<sub>60</sub> fertilizers under the tillage ground at the time of irrigation increased the yield by 6-7%. -- A.A. Kornilow

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104615

AUTHOR : Borodin, N. N., Dukarevich, B. I.  
INST. : Don Zonal Scientific Research Institute of Agriculture.  
TITLE : Moisture-charging Applications of Water Under Winter Wheat.

ORIG. PUB. : Byul. nauchno-tekhn. inform. Donsk. zonal'n. n.-i. in-ta s. kh., 1957, 1, 8-10

ABSTRACT : Three-year experiments in the study of moisture charging applications of water under winter wheat, started in 1953 on the fields of kolhoz "Zavety Il'icha" in Rostov oblast' and continued on the fields of kolkhos imeni Molotov (the transfer of the site of the experiment was caused by a considerable rise in ground water). Data on the follow-up of the yield and the absolute weight of the grain for 3 years are cited. Pre-sowing moisture-charging irrigation is the

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104615  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : main link in the agricultural technique for winter wheat under the conditions of irrigation with an obligatory follow-up of the depth of the groundwater table. With the level of groundwater deeper than 2 meters, the rate of the moisture-charging application should comprise not less than 1000-1200 m<sup>3</sup>/ha/. -- Ye. I. Saks

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104616  
AUTHOR : Luk'yenenko, P. P.  
INST. : Krasnodar Scientific Research Institute of Agriculture.  
TITLE : Placement of Winter Wheat in Field Crop Rotations.  
ORIG. PUB. : Zemledeliye, 1957, No. 7, 21-26  
ABSTRACT : Data of Krasnodar Scientific Research Institute of Agriculture. In Kuban', the foundation of correct crop rotation should be the bed and the turned bed of perennial grasses (alfalfa, esparcet, and red clover). Introduction of perennial grasses contributes to the securing of high and stable yields of winter wheat and corn.

Card: 1/1



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23.1958, No. 104617  
AUTHOR : Rzayev, N. D.  
INST. : Institute of Agriculture, AS Azerbaydzhan SSR  
TITLE : The Influence of Microelements on the Resistance to Cold  
and on the Occurrence of Lodging in Different Wheat  
Varieties.  
ORIG. PUB. : Tr. 5-y Nauchn. konferentsii aspirantov AN AzerbSSR. Baku,  
AN AzerbSSR, 1957, 8-15  
ABSTRACT : Experiments at the Institute of Agriculture, Academy of  
Sciences, Azerbaydzhan SSR. The influence of B, Mn, Cu  
and Zn with and without the background of nitrogen and  
phosphorus fertilizers was studied. Microelements, espe-  
cially Mn and Cu, considerably increase the resistance to  
cold in wheat, improve the water cycle in the plants, and  
appreciably check the lodging of wheat. With the applica-  
tion of Cu, no lodging at all was observed. Microelements,  
especially Cu and Mn, appreciably increase the absolute  
weight and the character of the grain.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23.1958, No. 104618  
AUTHOR : Il'inskaya-Tsentilovich, M. A., Gur'yev, B. F.  
INST. : Academy of Sciences USSR  
TITLE : Varieties in Connection with Lodging.  
ORIG. PUB. : Dokl. AN SSR, 1957, 113, No. 1, 217-219  
ABSTRACT : Dynamics of the formation of attributes determining the re-  
sistance to lodging, differs in reclinate and slightly re-  
clinate varieties of winter wheat (experiments at Kharkov  
Agricultural Institute). In the lodging variety Odess-  
kaya 3, the thickness of the ring of textural tissue  
of the stem is less and the amount of its growth in the  
period between the stages of spiking and full ripeness  
changed very little in comparison with the non-lodging  
variety Lyutestsens 238.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104619

AUTHOR : Kabulov, D. T.  
INST. : -  
TITLE : Large-Kernelled Wheat of Uzbekistan.

ORIG. PUB. : Priroda, 1957, No. 1, 99-100

ABSTRACT : From the local wheat in Samarkandskaya oblast', a wheat form was separated, distinguished by very large grain (weight of 1000 - 70-72 grams) with the general average weight of the kernels from a spike of 4.2 grams. Producing a yield of 42-48 centners/ha, the large-kernelled wheat does not lodge. The report points out the promising prospects of the cultivation of the new large-kernelled wheat on irrigated, well tilled lands. -- G. N. Chernov

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104620

AUTHOR : Senchenko, A. E.  
INST. : Kamensk Seed-Testing Laboratory.  
TITLE : Sowing Rate and the Vigor of Growth.

ORIG. PUB. : Zemledeliye, 1957, No. 3, 83-84

ABSTRACT : The relation between the initial growth and germination of hard spring wheat Melyanopus 69 and the absolute weight of the seeds was studied at Kamensk Seed-Testing Laboratory. The test specimens of the seeds were divided into groups according to thickness before being embedded for germination. The smaller the absolute weight of the seeds, the lower the vigor of growth. However, the germination of large seeds was lower in a number of cases. This was connected with the greater damage to their embryos caused by stink-bug, and by injuries at the time of threshing. It is

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104620  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : suggested to increase the sowing rate of the seeds of the spring wheat Melyanopus 69 by 25% if their weight is 17 grams or less, by 20% with their weight being 18-19 grams, by 15% with the weight of 20-24 grams, and by 10% with the weight of more than 25 grams. -- G. N. Chernov

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104621  
AUTHOR : Zagoruyko, A. T.  
INST. : Institute of Agricultural Biology, AS Ukrainian SSR.  
TITLE : The Influence of Mineral Fertilizers on the Yield of Spring Wheat.  
ORIG. PUB. : /Pratsi/ in-tu agrobiol. AN URSSR, 1957, 7, 31-36  
ABSTRACT : The highest yield of spring wheat (experiments at the Institute of Agrobiology AS Ukrainian SSR) was obtained with the application of 50% of N45 K45 before sowing and 50% at time of spiking. The increase in grain comprised 5.2%. The effectiveness of the additional dressing of spring wheat is also increased by a fractional application (in 2-3 applications) of mineral fertilizers.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104622  
AUTHOR : Malyugin, Ye. A., Shakhnovich, A. V., Smirnov, V. A.  
INST. : Academy of Sciences USSR  
TITLE : Moisture Consumption and the Microclimate of Spring Wheat  
in the Conditions of Irrigation.

ORIG. PUB. : V sb.: Biol. osnovy oroshayem. zemled. M., AN SSSR,  
1957, 385-389

ABSTRACT : An irrigated field (studies at the All-Union Institute of  
Plant Growing) differs from a non-irrigated one in its  
phyto- and local climates. Microclimate depends also on  
the conditions of irrigation, and the meteorological fac-  
tors of a field are reflected in the amount of transpira-  
tion in wheat and in the evaporation from the surface of  
the field. A. M. Alpat'yev found by empirical method a  
formula for the aggregate expenditure of moisture by the  
agricultural crops being irrigated. In checking this form-  
ula, the factual and computed values proved to be identical.  
Correction for microclimate of the aggregate expenditure of

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104622

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : moisture by spring wheat during its vegetative period on  
the land being irrigated, comprises about 25% in the  
direction of decrease. Proceeding from the formula of the  
aggregate expenditure of moisture and taking into account  
the correction for microclimate, a method of computing the  
rates of irrigation is recommended. A nomographic chart  
simplifying these computations is presented.

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104625  
AUTHOR : Sadygov, M. P.  
INST. : -  
TITLE : On the Agricultural Technique for Perennial Rye.  
ORIG. PUB. : Elmi-tekh. m 'lumet bulleteni. Az rb. elmi-t ogigat  
heyvan-darlyg v baytarlyg inst., 1957, No. (2), 17-19  
ABSTRACT : No abstract.

Card:1/1

COUNTRY : RUMANIA  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104626  
AUTHOR : Puia, I., Barbat, I.  
INST. : -  
TITLE : On the Study of Frost Resistance in Winter Barley.  
ORIG. PUB. : Studii si ce cetari ag on. Aced. RPR Fil. Cluj, 1957,  
8, No. 1-2, 43-73  
ABSTRACT : The most frost resistant varieties are Yanetskiy, El'figer,  
Mandorfer and Chenad 396.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104628  
AUTHOR : Kotayuba, T. Ya.  
INST. : All-Union Academy of Agricultural Sciences imeni Lenin  
TITLE : Barley in Yenissy Zapolyar'ye.  
ORIG. PUB. : Dokl. VASKhNIL, 1957, No. 8, 18-19  
ABSTRACT : Data on the selection of the best barley varieties and their acclimatization under local conditions. The best varieties - Olli (Nar'yan Marskaya Experiment Station), K2-21 (Khibinskaya Experiment Station), and Shestiluchevyy - are characterized by large grain, high vigor of germination and adequate emergence of sprouts, and require little heat.

Card: 1/1

COUNTRY : RUMANIA  
CATEGORY : Cultivation of Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104629  
AUTHOR : Velican V., Gebotaru, V., Pop, E., Pop, O  
INST. : -  
TITLE : Results of Comparative Trials of Varieties and Strains of Spring Barley at Kaluga Agronomic Scientific Research Station in 1949-1956.  
ORIG. PUB. : Studii si cercetari ag on. Acad. RPR Fil. Cluj, 1957, 8 No. 1-2, 23-42  
ABSTRACT : Data on the study of the varieties of *Hordeum distichum* and *H. vulgare*. Early maturing varieties: Prekotsius 0143, Khodoninskiy var, Pisaretskiy, Medikum 46. Late maturing: Ariste netece, Kluzh 52-3-3, Chenad 395 and Chenad 396. Resistant to loose smut: Pisaretskiy, Dornbyurger and Khanna Kargin; resistant to damping-off - Pisaretskiy, IKAR 143, Kluzh 139, Kluzh 123. The highest yielding varieties: Abed Mayya, Vyatka, Pisaretskiy, Sfaels Gol'-derste, Abed Keniya, strain 51-21, 51-22, Kluzh 52-410 and Kluzh 52-323. Local climatic conditions are favorable for the cultivation of barley brewing. -- A. F. Khlystova

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23, 1958 No. 104630  
AUTHOR : Trofimovskaya, A. Ya., Tsekhanovskaya, N. A.  
INST. : -  
TITLE : Biological Bases for the Resistance of Barley to Loose Smut.  
ORIG. PUB. : Tr. po prikl. botan., genet. i selektsii, 1957, 30, No. 3, 178-188  
ABSTRACT : The cultivated varieties of barley differ in the degree of resistance, but in different years and under different ecological conditions, their resistance varies a great deal. This is connected with the conditions under which the flowering stage runs its course. If the conditions of cultivation hold back the development of the plants, but promote their growth, then open blossoming is observed which is one of the chief causes of the intensified infection of barley with loose smut. The fall and very early February sowing periods under the conditions of Kuban', contribute to the recovery of the seeds from loose smut. -- O. V. Yakushkina.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104631  
AUTHOR : Korlyakov, N. A.  
INST. : Molotovskiy Agricultural Institute.  
TITLE : The Influence of Sowing Rates and Sowing Methods on the Yield and Brewing Qualities of Barley.  
ORIG. PUB. : Tr. Molotovsk. s.-kh. in-t, 1957, 15, 67-78  
ABSTRACT : Experiments were conducted at Ural Zonal Experiment Station in Karagayskiy rayon. An increase in the sowing rate from 4-6 million to 5.5 million kernels on 1 hectare on rich, and up to 6.5 million on poor podzolic soils, especially with greater contamination with weeds, produces an increase in the yield of 2.8 centners/ha and more, lowers the amount of protein in the grain, i.e. it secures a crop of brewing grain of higher quality. An increase in the sowing rate can be achieved by the method of close and crosswise sowing. -- V. A. Vouchkova

Card: 1/1

COUNTRY : RUMANIA  
 CATEGORY : Cultivated Plants. Cereals. M  
 ABS. JOUR. : RZhBiol., No. 23 1958, No. 104633.  
 AUTHOR : Lazanyi, A., Cabulea, I.  
 INST. : Academy of Agronomy RPR  
 TITLE : The Effect of the Treatment of Seeds with Ethylene,  
 Propylene and Butylene on the Growth and Development  
 of Oats.  
 ORIG. PUB. : Studii si ce ceteruagron. Acad. RPR Fil. Cluj, 1957, 8,  
 No. 1-2, 117-118  
 ABSTRACT : In 1955, dry seeds of 6 oat varieties of different geo-  
 graphic origin were subjected to the action of atmosphere  
 containing 9% of gas mixture (1:1:1) of ethylene, propy-  
 lene and butylene, at room temperature. A more intensive  
 growth, an increase in the yield and in the absolute  
 weight of the kernels, were observed. Alternate treatment  
 of the seeds with ethylene and ultra-violet rays lowered  
 viability.

Card: 1/1

COUNTRY : USSR  
 CATEGORY : Cultivated Plants. Cereals. M  
 ABS. JOUR. : RZhBiol., No. 1958, No. 104695  
 AUTHOR : Kuleshov, N. N.  
 INST. : Kharkov University  
 TITLE : Method of Indicator Varieties in the Evaluation of the  
 Fitness of Corn Hybrids and Varieties for New Regions.  
 ORIG. PUB. : V. sb.: Vopr. metodiki selektsii pshenitsy i kukuruzy.  
 Kher'kov, Un-t, 1957, 163-170  
 ABSTRACT : A method of indicator variety was proposed at Ukrainian  
 Institute of Plant Growing for an evaluation of the fitness  
 of corn hybrids and varieties in the enlargement of their  
 sowings in new areas, and consisting of a preliminary study  
 of the development stages of the plants of different varie-  
 ties in comparison with one, usually the earliest maturing,  
 indicator variety. If at a given point, the indicator var-  
 iety reaches, for example, full maturity, and another varie-  
 ty only the waxy stage, , then at another, more north-  
 erly point, the indicator will reach, for example, the waxy

Card:1/2



COUNTRY :  
 CATEGORY : M

ABS. JOUR. : RZhBiol., No.23, 1953 No.104635

AUTHOR :  
 INST. :  
 TITLE :

ORIG. PUB. :

ABSTRACT : stage of maturity, and another variety only the milkstage. With a comparative study for a minimum of 3 years, the sum of temperatures of each stage is determined. Later, raising the seeds of these and other varieties in southern regions, it is feasible to determine beforehand by the indicator variety, up to which stage this or another variety will develop in the northerly region. It is recommended that the method be verified on large-scale material.--N.F. Fedorova

Card: 2/2

COUNTRY : ROMANIA  
 CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No.23, 1958 No.104636

AUTHOR : Folecan, V.  
 INST. : Academy of Agriculture RFR  
 TITLE : Behavior of Some Varieties of Corn During Hybridization.

ORIG. PUB. : Studii si cercetari agron. Acad. RFR fil. Cluj, 1957, S. No. 1-2, 129-137

ABSTRACT : Results of the study (Scientific Research Agricultural Station in the city of Cluj) of the combinative ability of corn varieties in single, double, and reversed crossings, and also in the inter-breeding of self-pollinated strains.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104637.  
AUTHOR : -  
INST. : -  
TITLE : Hybrid VIR 25.

ORIG. PUB. : Kukuruz, 1957, No. 1, 59

ABSTRACT : Corn hybrid VIR 25, regionally adapted in 1952 in the forest steppe zone of Ukrainian SSR, Kabardinskaya Autonomous SSR and Moldavian SSR, was obtained at Kuban' Experiment Station (the yield of the hybrid - 70-75 centners/ha of dry grain).

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104638  
AUTHOR : Kibizov, V. P.  
INST. : Kharkov University.  
TITLE : Multiple Corn Hybrids.

ORIG. PUB. : Vopr. metodiki selektsii pshenitsy i kukuruzy. Khar'ov. Un-t, 1957, 223-230

ABSTRACT : Schemes for securing multiple hybrids (of synthetic varieties) of corn at Severo-Osetinskaya Experiment Station during 1935-1940 and 1946-1955, are set forth in detail. High-yielding multiple hybrids can be obtained in  $F_1$  only if the starting strains and the single crossing inter-strain hybrids possess high combinative ability. The most effective method of obtaining multiple hybrids proved to be re-pollination among themselves of  $F_1$  of double inter-strain hybrids. Individual high-yielding multiple hybrids

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No.23 1958, No.104638  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : decline by 1 to 5% in the yield in succeeding generations in comparison with their F<sub>1</sub> and produce yields equal or close to the yields of the first generations of the best double hybrids. --O. V. Yakushkina

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 1958 No.104639  
AUTHOR : Sidorov, F. F., Batygin, N. F.  
INST. : -  
TITLE : Some Biological Characteristics of the Development in Corn.  
ORIG. PUB. : Kukuruz, 1958, No. 1, 38-40  
ABSTRACT : Results of the studies (in Leningrad oblast<sup>1</sup>) of the processes in the formation of inflorescences, leaves, and stems in different varieties. One part of the plants of each variety was raised with natural day illumination, the other - with a short, 10-hour day. With the shortened day of illumination, the number of leaves decreases and the height of the plants declines. Under the conditions of a normal day, the plants developed a larger number of leaves and a longer stem. During this, the differences among the

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104639

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : varieties became evident: varieties of northern origin reacted to the short day less than varieties of southern origin. The presence of a residual amount of nutrients and water at certain stages of organogenesis, permits considerable variation in the amount of leaves on the plant and thereby an increase in the yield of green roughage. Under the conditions of non-chernozem zone, it is recommended to apply three supplementary dressings of nutrients: in the period of the formation of 2-3 leaves, 4-5 leaves, and at the beginning of stem growth (7-8 leaves and chiefly phosphoro-potassium dressing).--Ye. I. Saks

CARD 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No. 1958, No. 104640

AUTHOR : Gorbacheva, A. P., Rubinova, S. S.  
INST. : All-Union Academy of Agricultural Sciences imeni Lenin  
TITLE : Mineral Matter in Corn at Different Stages of Its Vegetation.

ORIG. PUB. : Dokl. VASKhNIL, 1958, No. 2, 16-22

ABSTRACT : Data on the composition of mineral matter in corn of two varieties: early maturing variety Voronszhskaya 76 and late maturing VIR 42, raised on the plot of grain crops at the All-Union Agricultural Exposition in 1955. With ripening, the mineral content decreases both in the whole plant and in the ears. The ears contain little Ca; the ratio of Ca to P in them is low. The mineral composition of the stems and leaves changes little at different stages; the ratio of Ca to P in them is higher than in the

CARD: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104640

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : ears. Accumulation of mineral matter in the plant continues until maturity. Corn contains more Ca, P, and Fe than other grain crops; the ratio of Ca to P in corn is higher than in other crops. --Ye. I. Saks

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104641

AUTHOR : Tikhonov, N. I.  
INST. : Sumsk State Agricultural Experiment Station.  
TITLE : Protein Content in the Kernels of Some Corn Varieties.

ORIG. PUB. : Byul. nauchno-tekhn. inform. Sumsk. gos. s.-kh. opytn. st., 1957, vyp. 3, 8-11

ABSTRACT : In 1955-1956, 24 varieties of corn were studied for their yielding ability and protein content in the grain. In the selection of corn varieties for cultivation for grain, not only the yield of the grain should be taken into account, but also its protein content. Under the conditions of Sumeskaya oblast', the following varieties and hybrids have the highest percentage of protein: Voronezhskaya 76, Odesskaya 5, Romenskaya, Bukovinskiy 1, Dnepropetrovskiy 31, which produce mature grain. -- G. V. Yakushkina

CARD: 1/1

COUNTRY : USSR M  
CATEGORY : Cultivated Plants. Cereals.

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104642

AUTHOR : Klimenko, V. G., Kozubenko, V. E.  
INST. : Kishinev University  
TITLE : Grain Proteins in Different Corn Hybrids.

ORIG. PUB. : Uch. zap. Kishinevsk. un-t, 1957, 28, 3-28

ABSTRACT : Results of an analysis of corn grain in 1955 at the breeding nurseries of Chernovitskaya Agricultural Station, for the content of total N, protein N, and its different forms. In the varieties analyzed, nitrogen fluctuates from 1.52 to 2.13%. In regard to the amount of total N, the grain of the hybrids was inferior to that of the parents. The low N content in the grain of  $F_1$  is explained as follows: it produces greater vegetative mass and more grain than the parental forms and  $F_2$ ; the amount of N present in the soil, is insufficient for the formation of a maximum

CARD: 1/2

COUNTRY : M  
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1958, No. 104642

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : amount of proteins. As the author states, this aspect requires a thorough verification by experiment. The decrease in the amount of protein in the grain of hybrids in comparison with parental forms, is accompanied by an increase in the content of other components, first of all, that of starch. Bibliography of 15 titles. -- O. V. Yakushkina

CARD: 2/2

COUNTRY : RUMANIA  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104643  
AUTHOR : Lazarescu, E., Bulinaru, V., Gobjila, M.  
INST. : Galatza Agronomical Institute.  
TITLE : The Influence of the Treatment of Seeds with Ultra-Sound  
on the Germination and Biochemical Processes in Corn.  
ORIG. PUB. : Probl. agric., 1957, 9, No. 6, 65-68  
ABSTRACT : Treatment of corn seeds (in the experimental field in Ur-  
lyaska-Galats, Agronomical Institute in Galatza) with ul-  
tra-sound of higher frequency and an intensity of 60-80  
decibels for 6 minutes contributed to the increase in the  
seed germination to 100%, to good growth and development,  
and also to a reduction in the vegetation period in corn  
(variety IKAR-54). Plants grown from seeds treated with  
ultra-sound (3-9 minutes) proved to be more stable, vigor-  
ous and viable, and were less vulnerable to diseases than  
the control plants. The effect of ultra-sounds on corn  
seeds induces changes in the stored matter in seeds (  
starch, proteins, and fats). --Ye. T. Zhukovskaya

CARD:1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104644  
AUTHOR : Temnikova, N.  
INST. : Academy of Sciences, Latvian SSR  
TITLE : Experiments in Growing Corn in Latvia under the  
Meteorological Conditions of 1955.  
ORIG. PUB. : Latv. PSR zinatnu Akad. vestis, Izv. AN Latv. SSR, No. 2,  
57-62  
ABSTRACT : The simplest method for the evaluation of adequate mois-  
ture supply is Selyaninov's "hydrothermal coefficient"  
(HTC). In regard to HTC, Latvian Republic has to be as-  
signed to the zone of excessive precipitation. Experi-  
ments in growing corn were conducted at 13 points in the  
Republic. The milk stage of maturity came on 12 plots in  
the second and third 10-day period of September. For  
Osetinskaya variety, the weight of the green roughage  
varied from 377 to 1104 centners/ha. The relation of the

CARD: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104644

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : height of corn to the value of HTC was determined. This makes it possible to evaluate objectively one or another experimental point in regard to corn growing, and to evaluate the feasibility of the profitableness of corn production for green roughage in the individual rayons of Latvian SSR with the first approximation of climatic forecast. --O. V. Yakushkina

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No. 1958, No. 104645

AUTHOR : Litvin, N.A.  
INST. : Ukraine Scientific Research Institute of Irrigated \*)  
TITLE : Cultivation of Corn for Grain with Widened Spaces Between the Rows.

ORIG. PUB. : Byul. nauchno-tekhn. inform. Ukr. n.-i, in-t oroshayemogo zemled., 1957, No. 3, 32-35

ABSTRACT : According to the 1956 experiments at Ukraine Scientific Research Institute of Irrigated Agriculture, on Izmailskoyske Experimental Field and under production conditions, the corn plantings by the rectangular-hill method (2 plants in a hill with a bed area of 140 x 70 centimeters) produced practically the same yields as with the square-hill method of 70 x 70 centimeters. The number of plants

\*) Agriculture.

Card: 1/2



COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104645

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : was the same in both methods (20,000 plants per hectare),  
but labor expenditures for the tillage of the spaces  
between the rows were reduced with the first method by  
43-50%. -- N. G. Buyankovich

CARD: 2/2

COUNTRY : ALBANIA  
CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No. 1958, No. 104646

AUTHOR : Dzhepa, Suleyman.  
INST. : Institute of Agriculture and Biology imeni I. V. Michurin  
TITLE : On the Determination of Optimum Sowing Dates and Width of  
the Spaces Between the Rows in the Cultivation of Corn by  
the Square-Pocket Method.

ORIG. PUB. : Mezhdunar. s.-kh. zh., 1957, No. 2, 107-114

ABSTRACT : Data of the experiment (1949-1955) by the Institute of  
Agriculture and Biology imeni I. V. Michurin in different  
climatic zones of Albania (Tirana, Fiera, Vlora).

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104647  
AUTHOR : Kiyak, G. S., Vol's'kiy, V. G.  
INST. : Institute of Agrobiolgy, AS Ukrainian SSR  
TITLE : The Influence of the Bed Area on the Formation of Corn Crop.  
ORIG. PUB. : /Pratsi/ In-tu agrobiol. AN URSR, 7, 3-11

ABSTRACT : In the western oblast's of Ukrainian SSR (experiments at the Institute of Agrobiolgy, Academy of Sciences, Ukrainian SSR), in the growing of fast-maturing varieties of corn for grain, an efficient bed area is 55 x 55 centimeters with two plants to a hill. Variety Bessarabka, with a feeding area of 55 x 55 cm gave an increase in the yield of 7.1-12 centners and variety L'vovskaya I - 5.53-14.8 centners/ha. With an area of 55 x 55 cm, the blossoming of corn and the onset of milky and wax stages of maturity are accelerated. -- Ye. T. Zhukovskaya

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104648  
AUTHOR : Naumov, S. A.  
INST. : Ryazan' Agricultural Institute  
TITLE : The Influence of Different Methods of Soil Tillage on Yield.  
ORIG. PUB. : Kukuruz, 1957, No. 2, 47-48

ABSTRACT : Deep subsoil plowing of fall-plowed land (experiments at Ryazan' Agricultural Institute) to 35-40 centimeters promotes accumulation of a large amount of moisture, a decrease in the contamination of the plantings with weeds and an increase in the yield of corn. With subsoil plowing of fall-plowed land, 206 centners/ha of the green corn roughage were obtained, after plowing with a plow with a coulter to the depth of 20-22 centimeters - 177 centners/ha and with shallow plowing to 10-12 centimeters - 168 centners/ha.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No.23 1958, No. 104649

AUTHOR : Poplavko, A. A.  
INST. : Kishinev Agricultural Institute  
TITLE : Planting Calibrated Seeds.

ORIG. PUB. : Kukuruz, 1957, 12, 48-51

ABSTRACT : In 1956-1957, observations were conducted at Kishinev Agricultural Institute on the quality of the planting of calibrated seeds of 4 corn varieties with planter SKG-6. With the planting of uncalibrated seeds, their number in a hill varied from 1 to 4-5 and even 6. On the other hand, with planting calibrated seeds, there were 2 seeds in a nest, and only in a negligible number of the nests - 3. The uniformity of the seed planting is also affected by the number and size of the aperture in the screening disks, their adjustment, removed chamfering at the upper edge of the screening, disks, etc. etc. --Yu. L. Guzhev

Card:1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No.23 1958, No. 104650

AUTHOR : Nestyuk, N. N.  
INST. : Academy of Sciences, Belorussian SSR  
TITLE : Corn Yield in Relation to the Amounts of Phosphoro-Potash Fertilizers.

ORIG. PUB. : V sb.,: Kukuruz v BSSR. Minsk, AN BSSR, 1957, 201-203

ABSTRACT : The influence of the amounts and methods of the application of phosphoro-potash fertilizers on the yield of corn in peat bog soils was studied at Kossovskaya Experiment Marshland Station. The highest yield of green roughage and ears (360 centners/ha) was obtained with the application of P7OK180. A decrease in the amount of PK considerably lowered the yield. A decrease of phosphoric fertilizer by 50% lowered the yield of grain in the ears by 9 centners/ha. With an increase in the amount of potassium fertilizer and a decreased dose of the phosphoric one, the yield of green roughage and grain remained unchanged. -- T. I. Karelin

Card: 1/1

COUNTRY : RUMANIA M  
CATEGORY : Cultivated Plants. Cereals.

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104651

AUTHOR : Coculescu, Gr.  
INST. : -  
TITLE : Application of Fertilizers Under Corn.

ORIG. PUB. : Probl. agric., 1958, 10, No. 3, 24-32

ABSTRACT : Data of numerous experiments in different areas of Rumania. In the wetted regions, on poor soils, corn reacts strongly to nitrogen fertilizers and does not react to the phosphorus and potassium ones. On the intermediate soils, between the moist and droughty regions, corn does not react or reacts very little to mineral fertilizers. In droughty regions, corn also reacts little to mineral fertilizers.

Card: 1/1

COUNTRY : USSR M  
CATEGORY : Cultivated Plants. Cereals.

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104652

AUTHOR : Didychenko, A. P.  
INST. : Ukrainian Scientific Research Institute of Agriculture.  
TITLE : Application of Fertilizers Under Corn in the Forest Steppe of Ukrainian SSR.

ORIG. PUB. : Udobreniye i urozhay, 1957, No. 4, 17-24

ABSTRACT : Data of 7-8 years' experiments at Ukrainian Scientific Research Institute of Agriculture. Increased amounts of phosphoro-potassium fertilizers (P60K60) not only promote an enhancement in the yield of corn and its quality, but accelerate the ripening of corn. Application of small amounts of fertilizers (up to 15 kilograms/ha) is more effective with the placement to the side of the seeds being planted than with the dressing in the period of vegetation.

Card: 1/1

COUNTRY : USSR  
 CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104653

AUTHOR : Smbatyan, A. T.  
 INST. : Armenian Scientific Research Institute of Animal \*)  
 TITLE : On the Study of Agricultural Technique for the Cultivation  
 of Corn in the Mountainous Environment of Armenian SSR.

ORIG. PUB. : Tr. Arm. n.-i. in-ta zhivotnovodstva i veterinarii,  
 1957, 2, 291-303

ABSTRACT : Results of the studies of agricultural technique for corn  
 in five basic soil-climatic zones of Armenian SSR in  
 1955-1956. Experiments were conducted in kolkhozes at  
 three points in the mountain-steppe zone (in Martuninskiy  
 Experimental Field) with irrigation, and in meadow-steppe  
 zone with dry farming (in Kalininskiy Experimental Field).  
 In addition to the experiments with different agricultural  
 techniques, also carried out in all the zones were the var-  
 iety trials of the selected introduced varieties and of  
 local populations. In all the zones of the Republic, ex-  
 cept the high mountain regions and the rainfed soils of the  
 \*) Husbandry and Veterinary Science

Card:1/2

COUNTRY :  
 CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104653

AUTHOR :  
 INST. :  
 TITLE :

ORIG. PUB. :

ABSTRACT : foothill-arid steppe zone, corn produces normal yields of  
 ears and green roughage. From the varieties and popula-  
 tions, Iazhevanakaya krasnaya, flinty corn of intermediate  
 maturity, and Alaverdskaya belaya, flinty population of  
 intermediate maturity, are of special interest. Ye. I. Saks

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104654  
AUTHOR : Prokoshev, V. H., Khalezov, N. A.  
INST. : Molotov Agricultural Institute  
TITLE : Some Problems of Agricultural Techniques in the Cultivation  
of Corn.  
ORIG. PUB. : Tr. Molotovsk. s.-kh. in-t, 1957, 15. 13-29  
ABSTRACT : The chief trend in the cultivation of corn in Western Ural  
(results of the experiments at Molotov Agricultural Institute and generalized conclusions from the wide production  
experience of kolkhozes) should be toward its  
planting for silage. Plantings for grain do not pay for  
themselves. The following mid-season and late maturing  
varieties are recommended for cultivation: Sterling,  
Osetinskaya belaya zubivdnaya, Krasnodarskaya 1/40,  
Odesskaya 10 and the early maturing - Voronezhskaya 76.

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958 No. 104654  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : Spasovskaya and others which can produce up to 30 cent-  
ners/ha of ears. Indicated are: the best planting dates,  
planting rate, the feeding area, the seed planting depth,  
and other agrotechnical measures contributing to an in-  
crease in the yield of green roughage. --V. A. Vnuchkova

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23 1958 No. 104655  
AUTHOR : Nagiyev, P. N.  
INST. : -  
TITLE : The best Planting for Corn in Foothill Regions.  
ORIG. PUB. : Elmi-tekhn. m'lumat b lleteni. Azerb. elmi-t dgigat  
eyvandarlyg v baytarlyg inst., 1957, No. (2), 10-12  
ABSTRACT : No abstract.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23 1958 No. 104656  
AUTHOR : Sokolov, B. P.  
INST. : -  
TITLE : The First Native Corn Hybrids.  
ORIG. PUB. : Byul. cil's'kogospod, inform. Dnipropetr. obl. vid. t-va  
dlya poshir. polit. i nauk. znan' URSR, 1957, No. 6, 78-79  
ABSTRACT : No abstract

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23 1958. No. 104658  
AUTHOR : Aliyev, N. S.  
INST. : -  
TITLE : Conditions of the Irrigation of Corn in Western Regions  
of the Republic.  
ORIG. PUB. : Elmi-tekh. m'lumat b lleteni. Azerb. elmi-tedgigat  
peyvandarlyg ve baytarlyg inst., 1957. No. 1 (2), 20-22  
ABSTRACT : No abstract.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104659  
AUTHOR : Batyuk, I. A.  
INST. : Ukraine Scientific Research Institute of Irrigated \*)  
TITLE : On the Effectiveness of the Fall Moisture Charge  
Under Corn for Grain.  
ORIG. PUB. : Byul. nauchno-tekh. inform. Ukr. n.-i. in-t oroshayemogo  
zemled., 1957, No. 3, 6-9  
ABSTRACT : According to the 1953-1956 experiments at Brilevskaya  
Experiment Station, moisture charging in the variants with-  
out vegetative applications of water, produces an increase  
in the yields of from 13.5 to 49%. However, if vegetative  
applications are feasible, moisture charging is inexpedient  
since variants with vegetative irrigations alone, produced  
increases from 146.4 to 148.2%, and variants with vegeta-  
tive applications of water combined with moisture charging-

\*) Agriculture.

Card: 1/2



COUNTRY :  
 CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958. No. 104659

AUTHOR :  
 INST. :  
 TITLE :

ORIG. PUB. :

ABSTRACT : - only 6.4-8.8%. Moisture charging can be of value only for the acceleration of germination and for the improvement in the development of the plants in the early periods of development in the years with the fall and early spring drought. -- N.G. Buyakovich

Card: 2/2

COUNTRY : USSR  
 CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No.23. 1958. No. 104660

AUTHOR : Smirnov, A. I., Trofimov, M. M., Il'icheva, O. M.. \*)  
 INST. : Saratov Agricultural Institute  
 TITLE : Rice in Saratov Oblast'

ORIG. PUB. : Tr. Saratovsk. s.-kh. in-ta, 1957, 10, 138-150

ABSTRACT : Climatic and soil conditions of the left shoreline of Volga permit rice growing. A number of varieties with a short vegetative period have been brought out for the cultivation of rice in the oblast'. The varieties recommended, produced grain yields of 20-30 centners/ha. In quality and chemical composition, the grain was not inferior to the varieties grown in the southern regions of Ukrainian SSR. Measures of agricultural technique for rice are cited: sowing dates, seed planting depth, methods of sowing, application of water and the maintenance of the crop.  
 \*) Komarov, B. A.

Card: 1/1

COUNTRY : USSR M  
CATEGORY : Cultivated Plants. Cereals.

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104661

AUTHOR : Shevchenko, N. Ya.  
INST. : Odessa Hydrometeorological Institute  
TITLE : The Influence of Temperature Conditions on the Growth and Development of Upland Rice.

ORIG. PUB. : Tr. Odessk. gidrometeorol. in-ta, 1957, vyp. 11, 97-114

ABSTRACT : Varieties of upland rice are more demanding in regard to temperature conditions than the varieties of flood plain rice. Low temperatures in the blossoming period of these varieties lead to excessive kernelling and even sterility of the panicles. Evaluation of individual varieties of rice according to their requirements to temperature conditions is very important in the advancement of this crop to more northerly regions.

Card: 1/1

COUNTRY : USSR M  
CATEGORY : Cultivated Plants.

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104662

AUTHOR : Sokolova, I. I.  
INST. : Kuban' Rice Experiment Station  
TITLE : Vegetative Period in Rice and Air Temperature.

ORIG. PUB. : V sb.: Kratkiye itogi nauchno-issled, raboty (Kubansk. ris. opyt. st.) za 1956 g. Krasnodar, "Sov.Kuban'", 1957, 104-114

ABSTRACT : The sum of temperatures for the vegetative period of rice serves as the value which characterizes groups of rice varieties according to early maturity for Krasnodarskiy kray. Rice varieties requiring sums of temperatures for the vegetative period not over 2700°, develop panicles and produce a crop. Varieties requiring a higher sum of temperatures do not develop panicles.

Card: 1/1

COUNTRY : CHINA  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104668  
AUTHOR : Wang Kuei  
INST. : -  
TITLE : The Influence of Temperature and Depth of Water on the Growth of the Sprouts of Lowland Rice.  
ORIG. PUB. : Chih-wu sheng-li-hsiu-e t'ung-hsun, 1957, No. 3, 3-11  
ABSTRACT : No abstract.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104673  
AUTHOR : Medvedev, P. F.  
INST. : Leningrad Breeding Station  
TITLE : On Sowing Dates for Buckwheat in Leningrad Oblast'.  
ORIG. PUB. : Zemledeliye, 1957, No. 2, 80  
ABSTRACT : Experiments on the determination of optimum dates for buckwheat sowing have been conducted at Leningrad Breeding Station for a number of years. Sowing was done in the last 10 days of May and in the first ten days of June. With the earlier sowing, the yield of buckwheat was higher than with the later one, especially if supplementary dressing with nutrients was used. In the plants of the earlier sowing period, a larger number of seeds formed, and their absolute weight proved to be higher than in the plants of the later sowing. -- G. N. Chernov

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104674  
AUTHOR : Neklyudov, B. M.  
INST. : -  
TITLE : The Influence of the Treatment of Seeds with Molybdenum  
on the Yield of Peas and Vetch.

ORIG. PUB. : Udobreniye i urozhay, 1957, No. 4, 36-40

ABSTRACT : During 1952-1955, at Gor'kovskaya Agricultural Experiment Station in the conditions of light-gray forest steppe soils, the yield of peas increased by 37% after the application of Mo into the soil (1 kilogram/ha). Application of Mo under vetch (0.5 kilograms/ha) increased the hay yield by 41% and that of seeds by 21%. The beneficial after effect of the application of Mo into the soil was noted on the yield of the succeeding bean crop. Soaking the seeds in the solution of ammonium molybdate was also reflected very favorably on the yield of peas and vetch.

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104674

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : The greatest increase in the yield of peas comprised 3.96 centners/ha, and in the yield of vetch: hay an increase of 13.2 centners/ha, and seeds - 5.08 centners/ha. The optimum dose of ammonium molybdate for the treatment of 1 centner of pea seeds is 12.5 grams and vetch seeds - 25 grams. In addition to raising the yield, application of Mo increased the protein content in the plants and improved the sowing attributes of the seeds. -- G. N. Chernov

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.23 1958, No.104675  
AUTHOR : Gritsun, A. T.  
INST. : -  
TITLE : Effectiveness of the Application of Mineral Fertilizers Under Soybeans.  
ORIG. PUB. : Zemledeliye, 1958, No. 4, 40-45  
ABSTRACT : Experiments were carried out at Primorskaya Experiment Station with variety Primorskaya 529. In the period from sprouting to blossoming, the plants absorb 16.6% of N, 12.4% of P and 25.6% of K. By the beginning of the ripening of the grain, soybeans assimilate 78.47% of N and 82.1% of K, i.e. the greatest amount of mineral salts is absorbed in the period of the formation of the beans. The uptake of P is uniform during the entire vegetative period; however, the constantly observed phosphorus deficiency in

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104675  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : the early stages greatly lowers the rate of the development in soybeans. In order to increase the yielding ability, a dose of N<sub>45</sub>P<sub>60-90</sub> K<sub>45</sub> optimum for soybeans, should be applied into the soil. The best effect is obtained from a combination of the basic fertilization and a supplementary dressing with nutrients. -- V. A. Vnuchkova

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104676  
AUTHOR : Klimenko, V. G., Dymchishina, T. D.  
INST. : -  
TITLE : Proteins in the Seed of Kidney Bean Species and Forms.  
ORIG. PUB. : Ueh. zap. Kishinevsk. un-t, 1957, 28, 59-70  
ABSTRACT : Results of an analysis of the seed of 8 species of kidney bean, represented by 25 test specimens, for the content of total N, protein and its different forms. Differences exist in the content of total, extractive, and intrinsically albuminous N among the kidney bean species and forms being studied. The content of these forms of N is greatly influenced

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104676  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : by the conditions of the development of the plants. Bibliography of 22 titles.

Card: 2/2

COUNTRY : CHINA  
 CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
 ABS. JOUR. : RZhBiol., No. 23 1958, No. 104679  
 AUTHOR : Chao T'ung-fang, Wang Hsiung  
 INST. : Institute of Plant Physiology, AS CPR  
 TITLE : The Influence of Maleic Acid Hydrazide and 2, 4, 5-Trichlorophenoxyacetic Acid on the Differentiation of the Terminal Bud, the Content of Total Nitrogen, Starch and \*)  
 ORIG. PUB. : Shih-yen sheng-wu hsueh-pao, Acta biol. exptl. sinica, 1957, 5, No. 4, 515-524  
 ABSTRACT : In the experiments at the Institute of Plant Physiology, Academy of Sciences CPR, potatoes were planted in March. In May, June, and July the leaves were sprayed with solutions of triethanclamine of maleic acid hydrazide (TH) ( $1500$  and  $3000 \cdot 10^{-6}$ ); four times in June - with triethanolamine of 2, 4, 5-trichlorophenoxyacetic acid (2,4,5-T) (from  $100$  to  $200 \cdot 10^{-6}$ ), and one week before harvest with 2,4,5-T in the concentration of  $500$  and  $1000 \cdot 10^{-6}$ . The content of different substances and the condition of the buds were studied during each period of the treatment and after \*) on the Period of Rest in Potato Tubers.

Card: 1/3

COUNTRY :  
 CATEGORY : M  
 ABS. JOUR. : RZhBiol., No. 1958, No. 104679  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : harvest. The tubers were stored under indoor conditions. The percentage of sprouting was computed every two weeks. Treatment with TH in early periods led to the disintegration of the buds; treatment in later periods, slowed down the differentiation. With TH treatment, the sprouting of the tubers increased with the degree of the approach of the periods of treatment to the harvesting of the crop. Under the effect of 2,4,5-T, the degree of the retardation of bud differentiation decreased with the degree of the approach

Card: 2/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104679

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : of the periods of treatment to the fall period. During 2-months storage, the control tubers sprouted to the extent of 77-96%; after treatment with 2,4,5-T (500 and 1000·10<sup>-6</sup>) - to the extent of 2%. In the process of maturing the content of soluble sugars decreased from 15.4 to 1.1%. The starch content increased from 43 to 70%. Treatment with TH and 2,4,5-T did not produce any effect on these processes. -- I. N. Zaikina

Card: 3/3

COUNTRY : CZECHOSLOVAKIA  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M

ABS. JOUR. : RZhBiol., No. 23195.8 No. 104680

AUTHOR : Priehradny, S.  
INST. : -  
TITLE : Characteristics of Nitrogen Metabolism in Potato Tubers Under the Effect of Calcium and Magnesium Carbonates.

ORIG. PUB. : Biologia, 1957, 12, No. 7, 489-500

ABSTRACT : Application of CaCO<sub>3</sub> under potatoes and ground dolomite with 33.2% MgCO<sub>3</sub> content, contributed to an increase in the content of non-protein forms of N in the tubers. The content of protein forms remained almost unchanged. Addition of B stopped the effect of dolomite as stated.

Card: 1/1



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104681  
AUTHOR : Kiper, I. M.  
INST. : Scientific Research Institute of Agriculture of Central \*)  
TITLE : On Increasing the Gross Yields of Potatoes in Voronezh Oblast'.

ORIG. PUB. : Byul. nauchno-tekhn, inform. n.-i. in-ta s.-kh.  
tsentr.-chernozem. polosy, 1957, No. 3, 25-27

ABSTRACT : It was determined that in Voronezh oblast', it is possible to secure potato yields of 115-200 centners/ha without irrigation and 250-300 centners/ha with irrigation. It is recommended to distribute the seed plots on irrigated and river valley lands and at the bottom of ravines. The seed potatoes should be grown with close in-row planting (70 x 30 cm). In southern and southeastern regions, all seed potatoes of early and intermediate-early varieties should be grown with summer planting. In northern regions, summer planting is recommended for roguing the seeding material.  
\*)Chernozem Belt.

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104681

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : for which allocation of 1/5 of the seed plot is sufficient. In regions with inadequate amount of precipitation, it is expedient to plant one tuber per planting hole on a space of 60 x 60 cm; with irrigation - 2 tubers to a hill on a space of 70 x 60 cm or 60 x 60 cm. Local application of 3-6 tons/ha of humus in mixture with 1.2-2.4 centners of F<sub>c</sub> produced an increase in the yield of 14-22 centners/ha. --  
Ye. A. Okorokova

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
ABS. JOUR. : RZhBiol., No.23 1958, No.104682  
AUTHOR : Kataeva, O. Ye.  
INST. : The North Ossetian State Agricultural Experiment Station.  
TITLE : Summer Plantings in the Control of the Degeneration of Potatoes.  
ORIG. PUB. : Byul. nauchno-tekhn. inform. Sev.-Osetinsk. gos. s.-kh. opyt. st., 1957, No. 1, 38-42  
ABSTRACT : A rapid degeneration of potatoes was noted at the station in spite of annual thorough cleansing and selection of seed tubers. In 1945, there was 11% of degenerated plants in the plantings of the early variety Vermont; in 1955 - 94%. The yield decreased correspondingly from 216 to 87 centners/ha. In the mid-season varieties, the most widespread form of degeneration in the filiform appearance of the sprouts; in the early varieties - rugose mosaic. In recent years, leaf roll has also been widely encountered. Use of seed potatoes grown in summer almost doubles the

Card:1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104682  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : yield. Manifold reproduction with the summer planting gives no advantage in comparison with the single reproduction. -- Ye. A. Okorokova

Card: 2/2

COUNTRY : GDR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104683  
AUTHOR : Luddecke, F.  
INST. : -  
TITLE : A Report on the Results of Production Field Experiments  
During 1954-1955 on Securing Potato Seeding Material.  
ORIG. PUB. : Z. Landwirtsch. Versuchs - und Untersuchungswesen,  
1956, 2, No. 5, 388-399  
ABSTRACT : It is noted that development of virus resistant potato  
varieties is the principal problem of potato breeding.  
7 methods for the reproduction of seeding material are  
suggested. The essence of the variants is reduced to the  
following characteristics: 1. Seeding material is vernal-  
ized by various methods. 2. Potato planting is done very  
early in the spring or summer. 3. A careful selection of  
tubers from healthy potato vines is carried out during the  
period of vegetation. 4. Harvesting of potatoes is carried  
out during the withering away of the tops or (in southern

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958 No. 104683  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : conditions) when potatoes are in full bloom (in early  
varieties), and in late varieties during the wilting  
of the flowers. -- I. A. Veselovskiy

Card: 2/2

COUNTRY : GDR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
ABS. JOUR. : RZhBiol., No. 23 1958 No. 104 684  
AUTHOR : Lobanov, V. Ya.  
INST. : Gross-Klusewitz Institute of Plant Breeding.  
TITLE : Studies of Potato for Affliction with Viral Diseases in GDR  
ORIG. PUB. : Kartoffel', 1958, No. 1, 61-63  
ABSTRACT : A description of laboratory methods of the determination of viral diseases of potato<sup>s</sup> in GDR (specifically at the Institute of Plant Breeding in Gross-Klusewitz). The author recommends these methods for scientific research institutions in USSR, engaged in the breeding and seed growing of potato<sup>s</sup> and agricultural technique for same. Large scale determination of viral diseases can be entrusted to the seed testing laboratories.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104685  
AUTHOR : Gotshalk, Yu. F.  
INST. : -  
TITLE : Agrohydrological Conditions for Potato Growing in Prikarpat'ye.  
ORIG. PUB. : Kartoffel', 1958, No. 1, 11-13  
ABSTRACT : On the basis of a study of materials on potato yield in 1954-1955, the author asserts that in the conditions of Prikarpat'ye, one has to speak not of the harm of high temperatures, but about the negative effect of abundant precipitation (800-700 mm) which leads to a decrease in the yielding ability. In connection with this, control of water cycle of the soils is necessary, for example by means of deep hilling, increase in the number of plants on 1 hectare to 80,000, etc. -- I. A. Veselovskiy

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
ABS. JOUR. : RZhBiol., No. 23 1958 No. 104686  
AUTHOR : Ivanchenko, Ye. A.  
INST. : Moscow Breeding Station of the Institute of Potato Farming  
TITLE : Breeding Nurseries on the Bed of Perennial Grasses.  
ORIG. PUB. : Kartoffel', 1958, No. 2, 67-68  
ABSTRACT : During 1953-1957, the influence of a bed of grasses, truck garden plot and a turned bed, on the starch content and yielding ability of 14 hybrid potato specimens and varieties Rannyaya Ross, Lorkh, and Vol'tman, was studied at Moscow Breeding Station of the Institute of Potato Farming. The highest percentage of starch (18.5) was obtained by planting on the bed. The highest yield (692 grams per vine) - on the truck garden plot. In growing on the bed of previous years, a yield of 603 grams per vine was obtained with the starch content of 17.8%; on the truck garden plot - 698 grams and 16.9% respectively. -- I. N. Zaikina

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104687  
AUTHOR : Matveyeva, Z. F.  
INST. : Ili Scientific Research Base, Academy of Sciences, Kazakh SSR  
TITLE : The Influence of the Planting Depth of Tubers on the Growth, Development and Yield of Potatoes in Southern Pribalkhash'ye  
ORIG. PUB. : KazSSR Bylyk Akad. khabarlary, I sv. AN KazSSR. Ser. botan. i pochvoved., 1958, vyp. 1, 118-126  
ABSTRACT : In 1955 and 1956, Planting depth of potato varieties Smyslovskiy, Katadin and Bul'ba on medium loamy sierozem with irrigation, was studied at Ili Scientific Research Base of the Academy of Sciences, Kazakh SSR. With the spring and summer periods of planting to the depth of 25-30 cm, the yield was 9-40% higher than with the usual planting to the depth of 15 cm. The average temperature of the soil during the entire vegetation period, at the depth of 25-30 cm was 4-5° lower than at the depth of 5-10 cm; sometimes the difference in temperatures reached 10-11°; the moisture is

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104687.

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : more stable. As the result, plants suffer less from the overheating of the soil. Tops wither away 20 days later than usual. With planting to the depth of 30 cm, the mass sprouting was 7 days late in comparison with planting to the depth of 15 cm. More vigorous vines developed. Plants on plots with shallow planting, were distinguished by accelerated growth in the first stages of development. However, in July their growth began to decline and in August the lower leaves started to drop off. More vigorous vines developed with deep planting. -- Ye. A. Okorokova

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M

ABS. JOUR. : RZhBiol., No. 23 1958 No. 104688

AUTHOR : Ivanchenko, G. Z.  
INST. : Institute of Potato Farming  
TITLE : A New Variety of Early Potato.

ORIG. PUB. : Mosk. kolkhoznik, 1958, No. 4, 21

ABSTRACT : A description of a new variety at the Institute of Farming. Lyubimets, obtained by crossing variety 3419 with 44 and Hindenburg. In variety trials, the new variety proved to be more productive than Priyekul'skiy family. The tubers are not affected by scab and wireworm. The variety is fairly resistant to phyththora, canker, and diseases of degeneration.

Card: 1/1

COUNTRY : CZECHOSLOVAKIA  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104692  
AUTHOR : Kochi, Ya.  
INST. : -  
TITLE : On the Utilization of Plastic Tarpauline in Vegetable Growing.  
ORIG. PUB. : Sad i agorod, 1958, No. 4, 32-34  
ABSTRACT : On the results of the utilization of polyamide tarpauline 0.15-0.21 mm in thickness on sheltered ground in Czechoslovakia. Experimental models of hotbeds and greenhouses are described. At noon on sunny days, temperature in the greenhouses reached 65° (22° outside); with cloudy weather 32° (18° outside). Before sunrise, temperatures outside and inside became equal.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104693  
AUTHOR : Edel'shtein, V. I., Tarakanov, G. I.  
INST. : -  
TITLE : On Transparent Tarpaulins.  
ORIG. PUB. : Sad i ogorod, 1958, No. 4, 29-31  
ABSTRACT : On the tests (since 1952) of 7 types of tarpaulins at the Vegetable Experiment Station of TSKhA. Recommended for practical utilization are polyethylene tarpaulins distinguished by frost resistance (to -60°) and tensile strength (130-300 kg) and polyamide tarpaulin PK-4 ("perfol") with tensile strength of 1250-1300 kg/cm<sup>2</sup>. In greenhouses, upon covering with tarpaulin, the soil temperature rose by 1.5-2°, and the temperature of the air - by 3-4°.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104696  
AUTHOR : Asadov, Sh. D.  
INST. : Academy of Sciences, Azerbaydzhan SSR  
TITLE : The Influence of Fertilizers on Cabbage Yield.

ORIG. PUB. : Izv. AN AzerbSSR, Ser. biol. i s.-kh. n., 1958, No.1,  
101-113

ABSTRACT : The influence of the amounts, proportions, and different forms of fertilizers on the yield of white head cabbage was studied in Ashperonskiy, Lenkoranskiy, and Khachmasskiy rayons of Azerbaydzhan SSR. Increase in N doses (to 120 kg/ha) intensified growth, and increased the number and area of the leaves; increase in the yield comprised 34%. Slowing-down in the growth and development was observed with the application of P120. With N120 and P90 the ripening of the heads accelerated. On an average for two years, N90P90 increased the yield on gray-brown soil by 30%. In addition, data are cited on the effect of fertilizers on bog and meadow soils. -- I. N. Zaikina

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104698  
AUTHOR : Maksakova, V. N.  
INST. : Institute of Vegetable Farming  
TITLE : Development of Biological Characteristics in Tomatoes Under Different Conditions of Growing.

ORIG. PUB. : Vestn. s.-kh. nauki, 1958, No. 3, 136-140

ABSTRACT : In 1952-1954, at the Institute of Vegetable Farming, hybrid tomato plants of F<sub>1</sub> were raised with the basic application of N90P180K180 (1), N180P90K90 (2) and N90P90K90 (3). For 15 days, the seeds were kept 16 hours a day at the temperature of -2.5° and 8 hours at the temperature of 18° and 22°. The 12-day seedlings were grown in the daytime at the temperature of 9-12° and at night at 5-4°. Hybrids were obtained by crossing early-maturing cold resistant varieties (Shtambovyi karlik 01185, Gruntovyy Gribovskiy 01180) with the late-maturing warmth loving ones (Alisa 639, Biryuchekutskiy 20). The conditions of raising F<sub>1</sub> were reflected

Card: 1/3



COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958 No. 104698

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : in F<sub>2</sub>. In the first variant, the sprouts emerged earlier; observed were an accelerated differentiation of the growth point, increase in the yield of fruits by up to 30%, a heightened activity of photosynthesis, hastening the ripening of the fruits, increase in the size of fruits, increase in vitamin C content and the total sugars. In the 2nd variant, a delay in blossoming and the ripening of fruits was noted. Increase in seed germination and the vigor of sprouting were observed with the hardening of the seeds. In growing the plants with the background

Card: 2/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104698

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : (1), the seeds germinated better at lowered temperatures. Morphological changes were observed only in F<sub>2</sub> in contrast to F<sub>1</sub>. With background (1), the number of plants with the stem form of the vine increased to 34%; with background (2), the number was reduced to 15 and with (3) to 23%. --I. N. Zaikina

Card: 3/3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104699  
AUTHOR : Shuin, K. A.  
INST. : Buryat-Mongolian Zooveterinary Institute  
TITLE : Thermal Pre-Sowing Preparation of Tomato Seeds.

ORIG. PUB. : Tr. Buryat-Mong. zoovet. in-ta, 1956, vyp. 10, 195-201

ABSTRACT : Seeds of tomatoes Gruntovyy gribovskiy 01180, swollen as the result of 7-hour soaking, were kept for 15 days at the temperature of  $-3^{\circ}$ ,  $0^{\circ}$  or in the conditions of an alternation of low and high temperatures. Test specimens of the seeds which had been grown at 4, 8, 10 and  $15^{\circ}$  were taken daily for 15 days from each variant. The percentage of the seeds which germinated was calculated 30 days after taking the test specimen for growing. Swollen seeds which had not been subjected to the effect of low temperatures, served as the control. Freezing the seeds through at  $-3^{\circ}$  (for three-five days, either continuously or 12 hours a day) increased

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104699  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : the vigor of their germination at lowered temperatures. A longer freezing-through was less effective, or even lowered the vigor of germination. Cooling seeds to  $0^{\circ}$  produced no effect. Field experiments showed that with a lowered temperature in the period of germination, the pre-sowing freezing-through of the seeds promotes acceleration in the ripening of the fruits and an increase in the yield.  
-- G. N. Chernov

Card: 2/2

COUNTRY : USSR  
 CATEGORY : Cultivated Plants, Potatoes, Vegetables, Cucurbits. M  
 ABS. JOUR. : RZhBiol., No.23 1958, No. 104700  
 AUTHOR : Khodyreva, G.  
 INST. : Belorussian Agricultural Academy.  
 TITLE : Top Dressing Tomatoes with Supplementary Nutrients.  
 ORIG. PUB. : Sb. stud. nauchno-issled. rabot Mosk. s.-kh. skad. im. K. A. Timiryazeva, 1958, vyp. 8, 160-165  
 ABSTRACT : In the experiments at Belorussian Agricultural Academy on plots of up to 4.6 square meters, favorable results were obtained from pre-sowing treatment of the seeds of tomato variety Bizon, with liquid manure and  $KMnO_4$ , and also with top dressing with NPK, NPK + microelements, NPK + liquid manure. The greatest increase (75%) was obtained on the plot where the seeds had been treated with  $KMnO_4$ , the seedlings were sprayed with 1% solution of  $P_2O_5$  at the stage of 3-6 leaves, and during blossoming and fruiting the plants were sprayed with NPK. -- M. V. Dranishnikov

Card: 1/1

COUNTRY : USSR  
 CATEGORY : Cultivated Plants, Potatoes, Vegetables, Cucurbits. M  
 ABS. JOUR. : RZhBiol., No. 23 1958, No. 104702  
 AUTHOR : Georgberidze, I. A.  
 INST. : All-Union Institute of Canning and Vegetable Drying \*)  
 TITLE : Application of Vegetative Hybridization in the Development of Tomato Varieties.  
 ORIG. PUB. : Referaty nauch. rabot. Vess. n.-i. in-t konservn. i ovoshchesush. prom-sti, 1957, vyp. 4, 98-101  
 ABSTRACT : No abstract.

\*) Industry

Card: 1/1

COUNTRY : ROMANIA  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104709  
AUTHOR : Iordachescu, O.  
INST. : -  
TITLE : The Best Varieties of Garden Beans for the Conditions  
of RPR.  
ORIG. PUB. : Gradina, via si livada, 1958, 7, No. 5, 10-13  
ABSTRACT : No abstract.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104710  
AUTHOR : Kopilovich, O. I.  
INST. : Chernovitskaya Agricultural Experiment Station  
TITLE : Local Varieties of Cucurbits.  
ORIG. PUB. : Sad i ozorod, 1958, No. 6, 39-41  
ABSTRACT : Results of the work at Chernovitskaya Agricultural  
Experiment Station on the improvement of local varieties  
of pumpkin (Starosel'skaya variety) and watermelon  
(Grubnenskiy), etc.

Card: 1/1

COUNTRY : USSR  
 CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
 ABS. JOUR. : RZhBiol., No. 23 1958, No. 104711  
 AUTHOR : Luk'yanenko, D. Ye.  
 INST. : Ukrainian Scientific Research Institute of Vegetable \*)  
 TITLE : The Influence of Fertilizers on the Yield of Muskmelons  
 in the Forest Steppe of Ukraine.  
 ORIG. PUB. : Nauchn. tr. Ukr. n.-i. in-t ovoshchevodstva i kartofelya,  
 1957, 4, 37-43  
 ABSTRACT : In 1951-1953, in the experiments at Volkovskaya Experi-  
 mental Base of the Institute, application under fall-  
 plowed land of 20 tons of manure and manure together with  
 mineral fertilizers at the rate of N45, P<sub>2</sub>O<sub>5</sub> 60, K<sub>2</sub>O 45  
 kilograms/ha. in the conditions of Ukrainian forest steppe,  
 contributed to a considerable increase in the yield of  
 muskmelons. Placement into planting holes 3 tons of hu-  
 mus and 15 kilograms of P<sub>2</sub>O<sub>5</sub> (P<sub>c</sub>) at seeding time, led to  
 an increase in the gross yield of from 4.7 (1951) to 57%  
 (1952). Mineral fertilizers alone, under fall-plowed land  
 \*) Growing and Potatoes.

Card: 1/3

COUNTRY : M  
 CATEGORY :  
 ABS. JOUR. : RZhBiol., No. 1958, No.  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : in the amount of N45, P<sub>2</sub>O<sub>5</sub> 60, K<sub>2</sub>O 45 considerably low-  
 ered the yield, and with the amount of each component  
 smaller by 15 kilograms, produced a negative result in  
 1951, and a negligible increase in 1952. Placement of  
 P<sub>c</sub> (15 kg of P<sub>2</sub>O<sub>5</sub>) alone in the planting holes, resulted  
 in the lowering of the yield. The author explains the  
 negative effect of mineral fertilizers by the poor toler-  
 ance of muskmelon to acid environment, and ammonium sul-  
 fate and P<sub>c</sub> do acidify the soil. On degraded chernozems,

Card: 2/3

COUNTRY :  
 CATEGORY : M  
 ABS. JOUR. : RZhBiol., No. 23 1958, No. 104711  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : the added acidification is especially noticeable with the increased amounts of fertilizers and with abundant precipitation in the first half of the vegetation period.  
 -- M. V. Dranishnikov

Card: 3/3

COUNTRY : POLAND  
 CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
 ABS. JOUR. : RZhBiol., No. 23 1958, No. 104712  
 AUTHOR : Wierzenowski, Z.  
 INST. : Pulawy Zootechnical Institute  
 TITLE : Variations in the Carotene Content in Forage Plants During Vegetation Period.  
 ORIG. PUB. :  
 ABSTRACT : The carotene content (C) in the stems, leaves, and flowers in the local early hybrid variety of alfalfa, red clover, yellow forage lupine, orchard grass, meadow fescue, timothy, perennial rye grass and tall oat grass, was determined at the Zootechnical Institute in Pulawy (Poland). The greatest C content was found in lupine (75.8 mg% of the dry weight from one clump) at the end of blossoming; in clover (70.3 mg%) at budding stage, in rye (70.6 mg%) at the end of earing. Distinguished by the smallest C content were

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104712.  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : the rye grasses (42 and 48 mg%) and alfalfa (45.5 mg%).  
The stems contained considerably less C (2-15 mg%) than  
the leaves (30-46 mg%) and the flowers (13-19 mg%).  
-- I. N. Zaikina

Card: 2/2

COUNTRY : BULGARIA  
CATEGORY : Cultivated Plants. Forage Crops. M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104713  
AUTHOR : Radomirov, P., Yakimova, Ya., Dzhumaliyeva, D.  
INST. : Central Agricultural Scientific Research Institute  
TITLE : Studies on the Fertilization of Grass Mixtures of  
Perennial Grasses in Sofia Rayon.  
ORIG. PUB. : Nauchni tr. Vissh. selskostop. in-t. "G. Dimitrov".  
Zootekhn. fak., 1956, 6, 257-284  
ABSTRACT : On the experimental field near Bozhurishche (Bulgaria) and  
on the fields of the Central Agricultural Scientific  
Research Institute near Gorna Banya on chernozems and near  
Gorna Lozen on meadow soil, powdered and granular P<sub>c</sub> and  
N<sub>aa</sub> were applied in different amounts and in different  
periods during 1950-1954. On chernozems, the higher in-  
creases in yield were secured with the application of P<sub>c</sub>.  
On meadow soils, the effect of N was more pronounced than  
that of P. Application of P and N raised the protein con-  
tent in the green roughage and produced changes in its

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104713

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : botanical composition. The grass stand became thicker at the expense of an increased number of the stems of cereal grasses. Under the influence of fertilizers, an increase in the amount of organic residues in the tillage layer was noted. Drill application of  $P_0$  at the time of sowing is recommended. -- V. S. Shmal'ko

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M

ABS. JOUR. : RZhBiol., No.23 1958, No. 104714

AUTHOR : Siradze, Sh. K.  
INST. : Georgian Scientific Research Institute of Agriculture  
TITLE : On the Problem of the Application of Mineral Fertilizers Under Grass Mixtures in the Conditions of Irrigation in Gardaben'.

ORIG. PUB. : Mitsatmokedebis sametsniyerokvieviti institutis shromebi Sakartvelo SSR, Tr. N.-i. in-ta zemledeliya. GruzSSR, \*)

ABSTRACT : Results of the experiments at Georgian Scientific Research Institute of Agriculture during 1953-1954 on the application of fertilizers under mixtures of alfalfa and multi-crop ryegrass, according to the following scheme; N40P90K60 before plowing + additional spring dressing with N20 (I); P90 K60 before + supplementary spring dressing with N20 (II); without supplementary dressing (III) and supplementary dressing with P30 K30 (IV). Experiments were conducted on light-chesnut soil with 4 replications. Difference in the state of the plants on fertilized and unfertilized plots

\*) 1958, 10, 93-106

Card: 1/3



COUNTRY : M  
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1958, No. 104714

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : became apparent in 17-19 days. In all variants, with the exception of (II), an excessive development of ryegrass was observed in the first year of utilization; its lodging was noted. Alfalfa suffered from an insufficiency of light. The amount of alfalfa stems in the grass stand on fertilized plots, was 1/10 of the amount of ryegrass; on unfertilized plots - 1/8. In the second year, the proportion of the grasses evened out. In the fourth mowing of both years of utilization, the cereal component was absent. The best crop was obtained in the (I) and (II) variants. A good

Card: 2/3

COUNTRY : M  
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1958, No. 104714

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : effect was also produced by the supplementary dressings of the first and third mowings with P30 and K30. --  
I. N. Zaikina

Card: 3/3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104719  
AUTHOR : Koryakina, V. F.  
INST. : Botanical Institute, Academy of Sciences, USSR  
TITLE : The Influence of Some Macro- and Microelements on the  
Growth and Development of Single-Crop Red Clover.  
ORIG. PUB. : Tr. Botan. in-ta AN SSSR, 1958, ser. 4, 12, 232-241  
ABSTRACT : At the Institute Station in Otradnyy in Leningrad oblast',  
studies were conducted of the effect of Cu and B when  
applied in the soil and in the pre-sowing treatment of  
seeds, on the growth, development and yield of clover dur-  
ing the 3 years of life. Copper sulfate at the rate of  
20 kg/ha, boric acid at the rate of 6 kg/ha, and lime at  
the rate of 3.6 tons/ha were applied before sowing. The  
seeds were soaked for 4½ hours in the solutions of copper  
sulfate (0.2 grams/liter) and boric acid (0.5 grams/liter).  
During the first two years of life, Cu increased the yield

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104719  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : of the aboveground mass and seeds of clover on podzolic  
soil. Treatment of seeds increased the crop of seeds in  
the 2nd year of life. Soaking the seeds and drying them  
off increased the weight of the aboveground mass and the  
number of inflorescences in the first two years of life.  
Cu and B accelerated the development of clover; lime in-  
creased the yield of the aboveground mass in all three  
years. Lime, Cu and B increased the water-holding capac-  
ity of the leaves. -- M. P. Ovsyannikova

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104720  
AUTHOR : Yagovoy, P. H.  
INST. : -  
TITLE : The Influence of Microelements on the Germination  
of Clover Seeds.  
ORIG. PUB. : Zemledeliye, 1958, No. 2, 68-69

ABSTRACT : The influence of microelements on the germination of clover seeds was determined in laboratory and in field conditions. Two lots of seeds were used: in one, seeds of normal color with shiny surface predominated (1); in the second - brown ones (2). Seeds were treated with solutions of borax, magnesium sulfate, potassium permanganate and copper sulfate (400 g/kg) in the following concentrations: 0.06; 0.19; 0.25%. The field test was conducted at the kolhoz imeni Chapayev in Poltava oblast'. The germination of seeds (1) increased by 5-14% in laboratory conditions with the following concentrations of the solution: B 0.19%; Mn 0.12%.

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104720  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : Mg and Cu 0.25%; in field conditions - B, Mn and Mg 0.19%, Cu 0.06%. The germination of seeds (2) increased by 5-10% with the application of the solutions of B and Mn in the concentration of 0.06%; Mg 0.25%; Cu 0.12% in laboratory and Cu 12% in the field. Seeds (1) are more responsive to the pre-sowing treatment. -- G. V. Vorob'yeva

Card: 2/2

COUNTRY : USSR  
 CATEGORY : Cultivated Plants. Forage Crops. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104721

AUTHOR : Iezhava, C. I.  
 INST. : Georgian Scientific Research Institute of Agriculture  
 TITLE : The Influence of Post-Harvest Sowing Periods on the Yield of Alfalfa Seeds in the Conditions of Nizhnyaya Kartlya

ORIG. PUB. : Mitsatmokmedebis sametsniyerokvleviti institutis shromebi. Sakartvelo SSh, Tr. N.-i in-te zemledeliya. GruzSSR, \*)

ABSTRACT : In 1950-1953, at the base of Georgian Scientific Research Institute of Agriculture, blue alfalfa was sown every 10 days from the 20th of July to the 10th of September on chestnut heavy irrigated soils on stubble with deep tillage. Plants of the sowing period from the 20th of July to the 10th August had a height of 60 centimeters, those of the sowing from 20-30 of August - 20-25 centimeters; plants of October sowing entered winter at cotyledon stage. The loss of the latter in winter time reached 61%. The yield of alfalfa seeds also decreased sharply in plants of the last sowing period. -- I. N. Zaikina  
 \*) 1958, 10, 75-92

Card: 1/1

COUNTRY : CHINA  
 CATEGORY : Cultivated Plants. Forage Crops. M

ABS. JOUR. : RZhBiol., No. 23 1958 No. 104722

AUTHOR : T'an ah'ao-hsia, Li Chi-yun  
 INST. : -  
 TITLE : Cultivation of Alfalfa and the System of Crop Rotations in the Southern Part of Shang-hsi Province.

ORIG. PUB. : Nung-yeh hsueh-pao, Acta agric. sinica, 1957, 8, No. 3, 314-329

ABSTRACT : Experience in the cultivation of alfalfa in the conditions of the southern part of Shang-hsi province (CPR) is generalized. Alfalfa is here the most important forage crop, and it is also of great value in crop rotations as the predecessor of wheat, cotton and other crops. Cultivation of alfalfa for the purpose of combatting soil erosion and also for the improvement of solonetz soils is promising.  
 -- G. N. Chernov

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104723  
AUTHOR : Silin, A. G.  
INST. : Natural Science Institute at Perm' University  
TITLE : On the Value of Mineral Fertilizers In Securing Alfalfa  
Seeds on Solonetz Soil.  
ORIG. PUB. : Izv. Estestv.-nauchn. in-ta pri Permsk. un-te, 1957, 14,  
No. 1, 19-29  
ABSTRACT : On the basis of experiments carried out in 1953-1954, the  
feasibility of growing and gathering two yearly crops of  
alfalfa seeds in Southern Zaural'ye has been ascertained.  
Application of PK at the rate of 50 kh/ha with cultivation  
of fall-plowed land and an annual supplementary dressing  
in autumn with PK at the rate of 50 kg/ha. contributed to  
the increase in the yield of alfalfa seeds by 30-51 kg/ha.  
A single pre-sowing fertilization increased the yield only  
in the first year. -- Ye. A. Okorokova.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops.  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104724  
AUTHOR : Klimova, Ye. S.  
INST. : Natural Science Institute at Perm' University  
TITLE : The Influence of Spraying with Solutions of Microelements  
on the Seed Production of Alfalfa.  
ORIG. PUB. : Izv. Estestv.-nauchn. in-ta pri Permsk. un-te, 1957, 14,  
No. 1, 43-48  
ABSTRACT : Experiments were carried out in 1953 and 1954 at Troitskiy  
Training and Experimental Forestry of Perm' University.  
During the blossoming of alfalfa, it was sprayed with sol-  
utions of microelements in the concentration of from 0.01 to  
0.1%. The best results were obtained from the sprayings  
with solutions of Mn, Cu, Mg, B and Bmg which increased the  
yield of alfalfa seeds by 40-86 kilograms or by 33-82% in  
comparison with the control. The weight of the aggregate  
mass of the plants increased on an average by 19%. In 1954.

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104724

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : in view of heavier moisture in the second half of the summer, spraying with Cu solution proved to be less effective than in 1953. -- Ye. A. Okorokova

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104725

AUTHOR : Saaremaa, L. V.  
INST. : Academy of Sciences, Estonian SSR  
TITLE : Propagation of Local Black Medick and Its Agricultural Utilization on the Island of Saaremaa.

ORIG. PUB. : ENSV Teaduste Akad. toimetised. Biol. seer., Izv. AN EstSSR. Ser. Biol., 1957, 6, No. 372-381

ABSTRACT : The sowings of black medick carried out here back in 1914 have survived on the Island of Saaremaa to the present time. Studies at the experiment point "Kar'ya" of the Scientific Research Institute of Agriculture and Melioration of Estonian SSR, showed that local black medick is inferior in yield to alfalfa by more than 40%. The valuable attributes of local medick are its longevity, resistance to the spoilage by cattle, and also the ability to produce satisfactory yields on thin, rich soils. -- G. N. Chernov

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104726  
AUTHOR : Haller, E.  
INST. : Estonian Scientific Research Institute of Agriculture \*)  
TITLE : The Influence of Germination Medium on the Growth of  
White Melilot (*Melilotus alba*).  
ORIG. PUB. : Sots. poliumajandus, 1957, No. 12, 549-540  
ABSTRACT : Experiment was carried out at the experimental base of  
Estonian Scientific Research Institute of Agriculture and  
Melioration on turf-podzolic soil having a pH of 5.2. In  
the experiment, there were variants with the sowing of  
seeds previously sprouted on turf-carbonate soil with a pH  
of 7.0. The previously sprouted seeds of the melilot pro-  
duced considerably larger number of viable plants than the  
seeds sown directly into podzolic soil. On 1 square meter,  
there were respectively 114 and 7 viable plants on unlimed  
podzolic soil, and 195 and 40 with the application of lime  
to the soil. -- G. Ya. Bronzova  
\*) and Melioration.

Card: 1/1

COUNTRY : ROMANIA  
CATEGORY : Cultivated Plants. Forage Crops. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104727  
AUTHOR : Ionita, N.  
INST. : -  
TITLE : The Yield of the Seeds of Hairy Vetch in Relation to  
Its Proportion in Mixture with Rye.  
ORIG. PUB. : Anuarul lucrar. stiint. Inst. agron. Timisoara, Bucuresti,  
1957, 95-105  
ABSTRACT : As the result of 6-year studies, it has been determined  
that the best cover crop from winter grains is rye. The  
greatest yield of villous vetch and aggregate yield of the  
mixture was obtained with the sowing on 1 hectare 40 kilo-  
grams of vetch seeds and 80 kilograms of rye. -- Ye. A.  
Okorokova

Card: 1/1

COUNTRY : USSR  
 CATEGORY : Cultivated Plants. Forage Crops M  
 ABS. JOUR. : RZhBiol., No.23 1958, No. 104728  
 AUTHOR : Bukhar, I.  
 INST. : Moldavian Affiliate, Academy of Sciences USSR  
 TITLE : Prospects of Growing Vetchling in Moldavia.  
 ORIG. PUB. : Agrikultura shi viteritul Moldovey, 1957, No. 11, 11-16;  
 Zemledeliye i zhivotnovodstvo Moldavii, 1957, No. 11, 12-17  
 ABSTRACT : During 1951-1955, Moldavian Affiliate of the Academy of  
 Sciences USSR carried out experiments in the study of  
 vetchling at kolkhoz "Vyatsa Noue" in Teleshskiy rayon.  
 It was found that vetchling is drought resistant, leaves  
 in the soil 2% more moisture than alfalfa, and 5% more  
 oats. In the calculation for 1 plant, 11.64 nodules form  
 on the roots compared with 0.90 in winter vetch and 0.92  
 in forage peas. Fallow, occupied by vetchling, contrib-  
 utes to the clearing of the fields from the weeds of amar-  
 anth and goosefoot, and as a predecessor of winter wheat

Card: 1/2

COUNTRY :  
 CATEGORY : M  
 ABS. JOUR. : RZhBiol., No. 1958, No. 104728  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : is inferior in few respects to the bare fallow. On vetch-  
 ling, plowed under as manuring crop, a yield of 32.3  
 centners/ha was obtained - 6.9 centers more than on fallow.  
 The sowing of vetchling was carried out in a continuous  
 drill with the sowing rate of 100-120 kilograms/ha and  
 planting depth of 4-8 centimeters. It is recommended to  
 sow vetchling in mixed and closer plantings of corn, Sudan  
 grass, sorghum and other silage and forage crops. -- M. V.  
 Dranishnikov

Card: 2/2



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104729  
AUTHOR : Gonashvili, Sh. G., Lolashvili, R. D., Masurashvili, I. T.  
INST. : Scientific Research Institute of Animal Husbandry, \*)  
TITLE : Chemical Characteristics of Different Forage Varieties  
of Soybean.  
ORIG. PUB. : Sb. tr. N.-i. in-t zhivotnovodstvo. FrusSSR, 1957,  
2, 221-235  
ABSTRACT : Studies of the chemical composition of forage varieties  
of soybean (Kustovaya, Chernosemyannaya, Novaya and  
Rannyaya) showed that these varieties are not inferior to  
alfalfa in the content of nutrients in the vegetative mass.  
-- G. N. Chernov  
\*) Georgian SSR

Card: 1/1

COUNTRY : RUMANIA  
CATEGORY : Cultivated Plants. Forage Crops. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104730  
AUTHOR : Ionita, M., Opris, I.  
INST. : -  
TITLE : On the Study of Embryoless Seeds of Forage Perennial  
Cereals.  
ORIG. PUB. :  
ABSTRACT : The presence of seeds without embryo was studied with the  
aid of diaphanoscope in the yield of the droughty year of  
1952. There proved to be 65.2% of such seeds in Alopecurus  
pratensis, in Bromus erectus 57.2%, Festuca rubra 53.5%,  
in Dactylis glomerata 50.4%, in Arthenatesum elatius 9.2%.  
-- Ye. A. Okorokova

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104731

AUTHOR : Amirov, N. S.  
INST. : Academy of Sciences, Azerbaydzhan USSR  
TITLE : Planting Dates for Corn as a Post-Harvest Crop.

ORIG. PUB. : Dokl. AN AzerbSSR, 1958, 14, No. 5, 395-399

ABSTRACT : Field tests for the determination of the best planting periods (6 altogether) for corn following winter wheat were conducted during 1955-1956 on the irrigated lands at Karabakhskaya Base, Academy of Sciences, Azerbaydzhan SSR. Varieties, Sterling, Minnesota 13, Khar'kovskaya 23, Nestnyy umuun were used. The best periods for obtaining corn grain is planting not later than the 5th of August, and for green roughage - not later than the 1st of September.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104732

AUTHOR : Bruy, A. M., Zamkovoy, G. M., Golokovskaya, I. N.  
INST. : Dnepropetrovsk Agricultural Institute  
TITLE : On the feasibility of Securing Two Mowings of Corn.

ORIG. PUB. : Zhivotnovodstvo, 1957, No. 6, 73-77

ABSTRACT : In the experiments at Dnepropetrovskiy Agricultural Institute, corn planted on the 29th of April (variety Uspek) reached a height of 80-110 centimeters by the 5-6th of July. Formation of flowers was in progress in the primordial panicle in the majority of the plants and elongation and differentiation of the terminal axillary buds was beginning. The moving of the green bulk was done on the 8th of July at a height of 8-15cm. As the result of the variation in the height of mowing, the stalk in some plants was cut off (in 49.4% of the plants), in others - the

Card: 1/4

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104732

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : panicle (42.1%) and in still others - only the leaves (8.5%). Plants with the stalk untouched during the mowing and with the panicle cut, grew by means of the continuation of the growth of the main stem and of the leaves remaining after the mowing. Plants in which the cut was above the primordial panicle, grew rapidly but developed slowly. In the plants with the panicle cut low, the continuance slowed down, the plants had an inhibited appearance; later, the growth proceeded normally. The cutting of the leaves with a partial removal or no removal of the

CARD: 2/4

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104732

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : developing panicle was later reflected in the overall diminution in the size of the plants. The earlier the mowing was done, the larger were the dimensions attained by the growing plants. Delay in the development and the lag in growth are explained by the removal of a considerable part of the assimilating surface. Plants with the stem cut, i.e. those in which the primordial panicle and part of the stem with axillary buds were removed, grew for

CARD: 3/4

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1956, No. 104732 .

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : the most part at the expense of the buds at the aboveground nodes; the suckers developed were of smaller dimensions. To obtain two mowings of corn, the first mowing has to be done at a height exceeding the developing panicle. In 1956, the yield of green roughage of corn from two mowings, on the whole, did not surpass the single mowing for silage.  
-- M. A. Novoderzhkin

Card: 4/4

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104733

AUTHOR : Nivinskas, G. I.  
INST. : -  
TITLE : Corn in Lithuanian SSR

ORIG. PUB. : Kukuruza, 1958, No. 1, 13-16

ABSTRACT : The article generalizes the experience at kolkhozes and scientific institutions of Lithuanian SSR in the cultivation of corn since 1954. Under local conditions, the ears do not complete ripening. The highest yields are produced by the late-maturing varieties: Sterling, Krasnodarskaya 1/49, Dnepropetrovskaya and especially American hybrids (No. 335, No. 347, No. 539 and No. 344). In 1956, hybrid No. 344 gave an average 157 centners/ha more green roughage than Sterling variety. The yield of hybrids on experimental farms reaches 700-750 centners/ha. Higher yields

Card: 1/2

COUNTRY :  
CATEGORY :

M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104733

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : are produced from close plantings with the plantings with the width of the spaces between the rows of 60 cm with the planting rate of 70-80 kilograms/ha. Experiments at Dotnuvskaya Experimental Base of the Scientific Research Institute of Agriculture showed that each cultivation of the spaces between the rows results in the increase in the green roughage by 40-50 centners/ha. -- G. N. Chernov

Card: 2/2

COUNTRY :  
CATEGORY :

USSR

Cultivated Plants. Forage Crops.

M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104734

AUTHOR :  
INST. :  
TITLE :

Borodin, I. T.

Scientific Research Institute of Agriculture of the \*)

Companion Plantings of Corn and Field Pea (*Pisum arvense*, L.)

ORIG. PUB. :

Byul. nauchno-tekhn. inform. N.-i. in-ta s. kh. sev-vist. r-nov nechernozemn. polosy, 1957, No. 2-3, 3-7

ABSTRACT :

Corn was planted by the square-~~plant~~ and wide-row methods. The distance between the hills comprised 45, 60 and 70 cm; 3, 5 and 8 plants were left in the hills. The width of the spaces between the rows in wide-row plantings was 45-60 cm with the planting rate for corn of 45 kg/ha. In all variants, field pea plantings were added to corn on one half of the area. With the increased thickness of the corn plant stand increase in the yield of green roughage was noted in the experiment. However, in mixed plantings this was accompanied by a lowering of the field pea yield which led to

\*) Northeastern Regions of Non-Chernozem Belt

Card: 1/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104734

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : a deterioration in the quality of the crop. With field pea plantings added to corn and leaving 5-6 plants in each hill with spaces of 60 x 60 cm between the hills, and with 3-5 plants with spaces of 45 x 45 cm, the yield of green roughage varied from 469.1 to 544.8 centners/ha. According to the variants, with an increase in the yield, the amount of field peas in the crop decreased from 28.2 to 10.8%. In wide-row plantings of corn with the planting of peas added, the yield of green roughage equalled 510.3 centners/ha (planting with the spaces of 45 cm between the

Card: 2/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104734

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : rows of corn) and 457.3 centners/ha (spaces of 60 cm between the rows) with the amount of field peas in the crop being 17.8 and 24.8% respectively. Increase in the yield attributable to the added planting of field peas, comprised, according to the variants, from 121 to 175 centners of green roughage from 1 hectare.  
-- G. N. Chernov

Card: 3/3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104735  
AUTHOR : Pashin, F. A.  
INST. : Scientific Research Institute of Agriculture of \*)  
TITLE : Planting Corn Together with Field Peas (Pisum arvanse, L.)  
on Occupied Fallow (A Brief Report).  
ORIG. PUB. : Byul. nauchno.-tekhn. inform. N.-i. in-ta s.sev.-vost.  
r-nov nechernozem. polosy, 1957, No. 2-3, 8-10  
ABSTRACT : In the experiment conducted at the Institute in 1956,  
combined planting of corn with field peas produced a yield  
of green roughage 2-1/5 - 3 times higher than the pure  
planting of corn.

\*) Northeastern Regions of Non-Chernozem Belt

Card: 1/1

COUNTRY : HUNGARY  
CATEGORY : Cultivated Plants. Forage Plants. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104737  
AUTHOR : Kapas, S., Keleman, I.  
INST. : -  
TITLE : Variety Trials of Corn for Silage.  
ORIG. PUB. : Magyar mezogazd., 1958, 13, No. 6, 6-7  
ABSTRACT : No abstract.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104738

AUTHOR : Tsup, V. P.  
INST. : Odessa Agricultural Institute  
TITLE : Biology of Blossoming in Wheat Grass.

ORIG. PUB. : Tr. Odessk. s.-kh. in-ta, 1957, 9, 30-37

ABSTRACT : In the studies of the biology of the blossoming of wheat grass near Odessa, it was determined that the mass blossoming begins about the 25th of May and continues until the 25th of June. The lower flowers of the middle spikelets begin to blossom first. Higher temperature accelerates blossoming by 2-3 days. The intensity of blossoming during the day varies. With the isolation of the spike, not more than 1.5% of the flowers produce seeds. In hybridization, castration should be performed 1-2 days before blossoming. Supplementary pollination of wheat grass

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104738

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : by means of passing a string over the spikes proved to be very effective. -- Ye. A. Okorokova.

Card: 2/2



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104739  
AUTHOR : Sokoloavskaya  
INST. : Western Voronezh Agricultural Institute  
TITLE : Biological Characteristics and the Principal Agricultural Methods in the Cultivation of Spiked Millet (*Setaria italica*) in Voronezh Oblast'.  
ORIG. PUB. : Zap. Voronezhsk. s. -kh. in-ta, 1957, 27, NO. 2, 211-216  
ABSTRACT : During 1951-1956, the yield of millet grain at the Field Experiment Station of the Institute varied from 18 to 48 centners/ha, and that of green roughage from 160 to 245 centners/ha. In moisture requirements, spiked millet approaches proso (Russian millet). Excessive wetting leads to the thinning out of the sprouts. Sprouts tolerate the lowering of temperature to -3%. Adventitious roots develop only at tillering stage and penetrate to the depth of 15-20 cm. The growth in height, retarded the first period of the development, accelerates at the

Card: 1/3

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104739  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : spiking stage and slows down with the beginning of the ripening of the panicle. The greatest accumulation of dry matter (69.2%) takes place in the period from spiking until ripening. The sowing qualities of the seeds decline from the upper part of the panicle to the lower. In the trials of 144 specimens, the most productive one proved to be Ol'khovatskaya variety. Vernalization of the seeds influenced the growth and the yield of the plants only with the late sowing period (the end of May). The best methods of sowing for grain proved to be the

Card: 2/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104739

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : wide-row single line with the sowing rate of 6-8 kilograms/ha and the hill method (45 x 45 cm) with 15-40 plants to a hill, and a seeding depth of 4 centimeters. In sowing for the green roughage, the best method was continuous-drill sowing at the rate of 10-15 kilograms/ha. The sowing dates are up to the 25th of July. Supplementary dressing with P20 K20 kg/ha together with the availability of moisture in the soil, increased the yield by 7-10 centners/ha. -- M. P. Ovsyennikova

Card: 3/3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M

ABS. JOUR. : RZhBiol., No.23 1958, No. 104740

AUTHOR : Zlobina, I. N.  
INST. : Western Voronezh Agricultural Institute  
TITLE : First Results of the Studies of the Primary Material in the Selection of Spiked Millet (*Setaria italica*).

ORIG. PUB. : Zap. Voronezhsk. s.-kh. in-ta, 1957, 27, No. 2, 155-160

ABSTRACT : Work at the Department of Breeding in the Institute brought out considerable variability in the local red-grained spiked millet in regard to productivity and early ripening. Individual selection for the best panicles made it possible to determine the correlation between the weight of the grain and the panicle with the weight of the panicle ( $r = +0.96$ ) and the number of grains to the panicle ( $r = +0.98$ ); between the weight of the grain from a panicle and the length of the panicle ( $r = +0.74$ ); between the weight of the grain

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104740

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : and the width of the panicle ( $r = 0.70$ ). Individual selection for three years did not produce a positive result in comparison with the bulk selection.

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M

ABS. JOUR. : RZhBiol., No.23 1958, No. 104741

AUTHOR : Mazurin, S. A., Mil'man, G. B.  
INST. : -  
TITLE : Milo-A Valuable Forage Crop

ORIG. PUB. : Zemledeliye, 1957, No.12, 88

ABSTRACT : On the utilization of milo in Uzbek SSR where it produces up to 800 centners/ha of green roughage and 60 centners/ha of grain. A brief characteristic of a new variety producing two mowings is cited. This variety was obtained from crossing the local variety Khoraki and broom-corn. Agricultural technique for the cultivation of milo is described. It is pointed out that unlike corn, the stems and leaves of milo are fit for utilization as green forage up to the ripening of the grain.

Card: 1/1

COUNTRY : USSR  
 CATEGORY : Cultivated Plants. Forage Crops. M  
 ABS. JOUR. : RZhBiol., No. 23 1958, No. 104742  
 AUTHOR : Voloshin, Ye. S.  
 INST. : -  
 TITLE : Sorghum in Moldavia  
 ORIG. PUB. : Zemledeliye, 1957, No. 12, 89  
 ABSTRACT : On the agricultural technique for sorghum producing up to 700 centners/ha of green roughage. The most stable varieties for local conditions are Krasnyy yantar' 271/585 and Kubanskiy yantar' 84/327

Card: 1/1

COUNTRY : USSR  
 CATEGORY : Cultivated Plants. Forage Crops. M  
 ABS. JOUR. : RZhBiol., No. 23 1958, No. 104743  
 AUTHOR : Nagiyev, G., Yeritsyan, G.  
 INST. : Azerbaydzhan Scientific Research Institute of Animal \*)  
 TITLE : Fodder Cabbage - A New Forage Crop in Azerbaydzhan.  
 ORIG. PUB. : Azerbaychan sotsialist end t s rrufaty, 1958, No. 2, 38-41;  
 Sots. s.-kh. Azerbaydzhera, 1958, No. 2, 37-41  
 ABSTRACT : The best varieties, dates and methods of the sowing have been determined at Azerbaydzhan Scientific Research Institute of Animal Husbandry and Veterinary Science since 1954. The highest yielding variety is Listovaya mozgovaya sinyaya (895 centners/ha for 2 years). The best period of sowing into the ground is the last 10 days of February to the first 10 days of March. The method of sowing - square-hill 45 x 45 centimeters with one plant to a hill. Cultivation by direct sowing into the ground is better than with

\*) Husbandry and Veterinary Science

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104743  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : transplanting. For seed producing purposes, cabbage is sown in October by the square method. Plants of spring sowing can be utilized by cutting them at the time of harvesting at the height of 15-25 centimeters and leaving 2-5 buds. Preservation of whole plants in special shelters is not advisable since with the transplanting into the ground, 90% of the plants perish. The seed plants are harvested at the wax stage of the maturity of the seeds.  
-- G. V. Vorob'yeva

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104744  
AUTHOR : Balyan, G. A.  
INST. : Karabakhskaya Zonal Experiment Station, AS Azerbaydzhan SSR  
TITLE : The Continuance of Fodder Cabbage.  
ORIG. PUB. : Zhivotnovodstvo, 1958, NO. 2, 51-53  
ABSTRACT : Experience in three-year cultivation of fodder cabbage under the conditions of irrigation at Karabakhskaya Zonal Experiment Station, Academy of Sciences Azerbaydzhan SSR, are described. Fodder cabbage produced two crops a year in the first year of life for which the mowing in the first half of July must be provided for. With carrying out the first mowing on the 3rd of July, the aggregate yield of the 2nd mowing comprised 160.3 centners of silage mass from 1 hectare. In the conditions of the Experiment Station, fodder cabbage can vegetate the year round producing in the 2nd

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104744  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : year a new crop of green roughage not smaller than the  
yield of the 1st year. Seeds form in the 3rd year. --  
G. N. Chernov

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M  
ABS. JOUR. : RZhBiol., No.23 1958, No.104745  
AUTHOR : Kuliyeu, K. N.  
INST. : Azaerbaydzhan Agricultural Institute  
TITLE : Development of the Basic Agricultural Techniques for  
Raising High Yields of Squash Under the Conditions of  
Irrigation in the Lowland Western Zone of Azerbaydzhan. \*)  
ORIG. PUB. : Tr. Azerb. s.-kh. in-ta, 1957, 4, 105-111  
ABSTRACT : Studies were conducted in the experimental field of uchkhov  
(training farm) of Azerbaydzhan Agricultural Institute, and  
at the kolhoz of Safaraliyevskiy rayon with the bed  
areas of 1.5 x 0.5 meters; 1.5 x 1.0m; 1.0 x 1.5m;  
1.0 x 0.5 m; 1.0 x 1.0 m with the background of manure  
applied at the rate of 20 tons/ha. NPK was applied in  
various amounts. Experiments showed that under the condi-  
tions of Kirovskaya soil-climatic zone, fodder squash  
of the variety Azerbaydzhan, produces the highest yield of  
green fruits with N90P90K60. The best bed area proved  
\*) (Preliminary Report).

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104745

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : to be 1.0 x 1.0 m with two plants to a nest. Squash proved to be a good companion crop for corn plantings. In the experiments at the Department of Plant Growing, a yield of 80 centners/ha of ears of corn (inter-cropped with squash) and 280 centners/ha of the green fruits of squash were obtained. -- M. N. Myazdrikova

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104746

AUTHOR : Ovezmuradov, S. O.  
INST. : Turkmen Agricultural Institute  
TITLE : Some Data on the Yielding Ability of Fodder Root Crops.

ORIG. PUB. : Tr. Turkm. s.-kh. in-ta, 1957, 9. 63-66

ABSTRACT : Preliminary experiments in the variety trials of fodder root crops were carried out (in the conditions of irrigation) at the experimental base of the Institute of Animal Husbandry, Turkmen SSR. The 1954 experiment was conducted with two varieties of beets (Barres and Ekken-dorfskaya) and two varieties of carrots (Mirzoi Zheltaya and Loberiknskaya), which proved to be the highest yielding in the collection sowings of 1952 and 1953. The highest yield (1318 centners of roots and 197 centners of tops

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104746

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : from 1 hectare) was produced by the fodder beet Barres. The yield of the carrot Mirzoi zheltaya comprised 190.7 centners of roots and 59.6 centners of tops from 1 hectare. This variety proved to be more productive and had larger and more succulent roots than Lobberikhskaya variety. --G. N. Chernov

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Forage Crops. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104747

AUTHOR : Raudsepp, L.  
INST. : -  
TITLE : Jerusalem Artichoke - A New Silage Crop In Esthonia

ORIG. PUB. : Sots pollumajandus, 1958, No. 4, 163-165

ABSTRACT : No abstract.

Card: 1/1



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M.  
ABS. JOUR. : RZhBiol., No.23 1958.No. 104749  
AUTHOR : Kaziyev, T. I.  
INST. : Department of Botany, Kirovabad Pedagogical Institute  
TITLE : Nectar Productivity and the Yielding Ability of Cotton Plants with Different Methods of Spacing Plants in the Field  
ORIG. PUB. : Pchelovodstvo, 1957, No. 9, 51-53  
ABSTRACT : Results of the experiments at the Department of Botany, Kirovabad Pedagogical Institute in the study of nectar productivity and also of the degree of the bee visitations and fertilization of the flowers of the cotton plant in relation to the methods of planting. With the square-pocket spacing of cotton plant varieties 1298, 2420, 108-f, because of more favorable conditions created in this process for their vital activity, a greater extent of the visitations of the flowers by the bees has been observed. It was also found that with the scheme 55 x 2 of cotton plant

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958.No. 104749  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : spacing, the nectar collecting bees work on it more intensively than with other schemes of square-pocket planting with the result that by this method of planting a higher fertilization of the flowers is observed. -- B. L. Klyachko-Gurvich

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104 751  
AUTHOR : Akhmedov, K.  
INST. : Tashkent Agricultural Institute  
TITLE : The Effect of the Removal of Monopodial Branches on  
the Growth, Development, and Yield of Cotton.  
ORIG. PUB. : Tr. Tashkentstk. s.-kh. in-t, 1957, vyp. 8, 7-11  
ABSTRACT : The technique and results of experiments carried out in  
1953-1955 at Department of Industrial Crops at Tashkent  
Agricultural Institute are set forth. Early disbudding  
and early breaking-off of the monopodiae has a positive  
effect on the development of the cotton plant and produces  
an increase in the yield of cotton wool of 1.5-2.9 cent-  
ners/ha. Late breaking-off and partial pruning of mono-  
podial branches do not produce any substantial effect on  
the change in the development of the plant and on the  
increase in the yield.

Card: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104752  
AUTHOR : Litovshenko, M.  
INST. : -  
TITLE : Agricultural Technique for Cotton Plant on the  
Meadow Soils of Middle Zeravshan.  
ORIG. PUB. : Khlopvodstvo, 1957, No. 7. 3;-33  
ABSTRACT : In spite of their potential fertility, the yielding ability  
of cotton plant on these soils is lower than on previously  
plowed land (difference comprises 10-12 centners/ha). Here,  
a large number of roots of primary order develop in the  
cotton plant, but because of the proximity of groundwater,  
they lie at little depth. Because of a rich content of N  
and K in the humus in meadow soils, the aboveground parts  
of the plants have a tendency to growing out. On the basis  
of the characteristics of the soils given, appropriate  
agricultural measures assuring production of high yields  
are proposed. -- B. L. Klyachko-Gurvich

Card: 1/1

COUNTRY : USSR  
 CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
 ABS. JOUR. : RZhBiol., No. 23 1958, No. 104753  
 AUTHOR : Belousov, A. S., Khachaturov, N. A.  
 INST. : Azerbaydzhan Scientific Research Institute of Cotton \*)  
 TITLE : Securing Uniform Germination of Cotton Plant on the Heavy Soils of Shirvan'.  
 ORIG. PUB. : Tr. 1-y nauchn. sessii doveta po koordinatsii AN AzerbSSR, Baku, AN AzerbSSR, 1957, 175-184  
 ABSTRACT : A survey of studies on the causes of crust formation on the cotton fields in Shirvan'. Data of Azerbaydzhan Scientific Research Institute are cited on the effectiveness of planting cotton on ridges in the conditions of badly-crusting heavy sierozem soils. Experiments were conducted during 1952-1953 under field and laboratory conditions at Shirvan' Composite Zonal Experiment Station and at the kolhoz of Udzhurskiy rayon. In comparison with the  
 \*) Growing

Card: 1/2

COUNTRY :  
 CATEGORY : M  
 ABS. JOUR. : RZhBiol., No. 1958, No. 104753  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : the usual method of planting, the ridge method creates more favorable heat and air conditions on the heavy soils of Shirvan', contributes to an increase in soil moisture, prevents to a considerable degree the crust formation, and secures full-value sprouting and production of cotton wool yield, higher by 3.2-7.0 centners/ha.  
 --B. L. Kiyachko-Gurvich

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104754  
AUTHOR : Guseynov, I. N.  
INST. : Academy of Sciences, Uzbek SSR  
TITLE : Sorting the Seeds of Cotton Plant of Different Varieties.

ORIG. PUB. : Ref. nauchno-issled. rabot po khlopkovodstvu. Tashkent, AN UzSSR, 1957, 46-50

ABSTRACT : Planting cotton with the best groups of seeds sorted according to specific weight and thickness coordinate, secures an increase in the yield of 5-9 centners/ha. The larger and the higher the specific weight of the groups of the sorted seeds being planted, the higher the specific weight of "heavy" seeds in their yield. Successive annual sorting changes the inherent qualities of a variety; it accelerates the stem growth, heightens the resistance to diseases, and improves the technological attributes of the fiber. Different varieties of cotton plant have a differ-

Card: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104754  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : ent percentage of the yield of heavy and large seeds. In grading the seeds according to thickness, an appropriate assortment of screens for each variety is necessary. In view of the great advantage of sorting cotton plant seeds with the aid of stripping with sulfuric acid, it should be organized at some of the cotton-cleaning plants. -- B. L. Klyachko-Gurvich

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M

ABS. JOUR. : RZhBiol., No.23 1958, No. 104756

AUTHOR : Churlyseyev, A.  
INST. : Union Scientific Research Cotton Institute  
TITLE : Irrigation Practises for Cotton in Valley Zone.

ORIG. PUB. : Kyrgyzstandyn ayyi charbasy, 1957, No.6, 6-9;  
S. zh. Kirgizii, 1957, No. 6, 5-8

ABSTRACT : Data of Kirgiz Experiment Station of the Union Scientific Research Cotton Institute on the study of irrigation practises for cotton. Experiments were conducted in 1955-1956 with cotton plant variety 108-f with different schemes of irrigation. It was determined that delay in carrying out the first application of water until budding, restrains the formation of fruit branches, the accumulation and ripening of the bolls and produces a lowering of the yield at the expense of the first pickings. It was also determined that reduction in the number of the applications of water

Card: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No.104756

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : at the expense of using liberal irrigation rates lasting 3-5 days and longer, causes a serious detriment to the crop since during this, the N content decreases sharply in the soil layer occupied by the roots. --B. L. Klyachko-Gurvich

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104757

AUTHOR : Safarov, Ye. Sh.

INST. :

TITLE : On the Influence of Water Applications in the Period of Ripening on Cotton Yield.

ORIG. PUB. : Khogagii kishicki Tochikiston, 1957, No. 10, 7-10;  
S. kh. Tadshikistana, 1957, No. 10, 7-9

ABSTRACT : With sufficient soil moisture, formation of up to 44% of the aggregate yield of cotton plant takes place in the period of ripening. With 1-2 applications of water in this period, an increase in the yield of 2-3 centners/ha is secured. Applications of water in the period of ripening should be carried out judiciously, taking into account the temperatures conditions, with the availability of moisture in the soil at not more than 60% of the field moisture holding ability. Irrigation is done at small

Card: 1/2

COUNTRY :  
CATEGORY :

M

ABS. JOUR. : RZhBiol., No. 1958, No. 104757

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : rates - not more than 700-800 cubic meters to 1 hectare. On lands with deep groundwater level, with a dry autumn, applications of water should be continued every 15-20 days. --B. L. Klyachko-Gurvich

Card: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104758  
AUTHOR : Belousov, M. A.  
INST. : Scientific Research Cotton Institute  
TITLE : The Problem of Root Nutrition in Cotton Plant.  
ORIG. PUB. : V. sb.: Materialy Ob'edin. nauch. sessii po khlopkovodstvu. T. I. Tashkent, Gosizdat UzSSR, 1958, 348-355  
ABSTRACT : On the basis of data of vegetation experiments in sand cultures, conducted at Ak-Kavak Central Agrotechnical Station of Scientific Research Cotton Institute, it was determined that the uptake of  $P^{32}$  from the outer medium and incorporation in the metabolism, begins immediately after the beginning of the fermentative processes during the swelling of the seeds, in connection with this, phosphorus fertilizers should be applied into the soil as close to the location of the seeds as possible. The most effective action of N develops at the time of the formation in the sprouts of the first pair of true leaflets.

Card: 1/3

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104758  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : Increase in the concentration of N and the maintenance of it at a high level until the time of budding, contributes a great deal to the growth processes and reduces the period of blossoming. With an insufficiency of K in the period of fruit formation, the normal carbohydrate metabolism is disturbed. The proportion of nutrient elements and their concentration in the medium produce a considerable influence on the water consumption of the cotton plant. With the increase in the concentration of all substances or even of only the phosphates, the expend-

Card: 2/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104758

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : iture of water for the production of a unit of crop is reduced by 20-50%. The amounts of individual substances and the periods of their application have a substantial influence on the quality of cotton wool. Early supplementary dressings with N with a good supply of K, considerably increase the oil content of the seeds. Nutrient elements have an appreciable influence on the inherent properties of the seeds by changing their quality. These effects become fixed and are transmitted to the succeeding generations. -- A. M. Smirnov

Card: 3/3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104759

AUTHOR : Tillyayev, M. T.  
INST. : Botanical Garden, Middle Asiatic University  
TITLE : The Effect of Phosphate Nutrition of Cotton Plant on the Development of Its Offspring.

ORIG. PUB. : Tr. Sredneaz. un-ta, 1957, vyp. 116, 47-54

ABSTRACT : Results of experiments conducted at the Botanical Garden of Middle Asiatic University for the purpose of determining reaction of cotton plant to fertilization with P in relation to its content in the seeding material, and the determination of the degree of enrichment with P of cotton plant seeds of the first 3 generations. Cotton plant seeds with the background rich in P, produce plants which require less fertilization with P, especially in the first stages of development. -- B. L. Klyachko-Gur'dch

Card: 1/1



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104760  
AUTHOR : Kruzhilin A. S., Nezirov, N. N.  
INST. : Institute of Plant Physiology, AS Uzbek SSR  
TITLE : The Influence of Mineral Nutrition on the Passage of  
Developmental Stages in Cotton Plant.

ORIG. PUB. : Izv. AN UzSSR, Ser. biol., 1957, No. 2, 33-40

ABSTRACT : In 1954-1956, experiments were started at the hothouse of the Institute of Plant Physiology, to determine the influence of fortified nutrition with NP (double dose) on the rates of the passage of cotton plant through the developmental stages, and also on the periods of the beginning of differentiation in growth points and initiation of axillary and flower buds. In the period of passing through the vernalization stage, application of the increased dose of P in the background of NK, accelerated the development of the cotton plant by 4-8 days, and application in this period of an increased amount of N

CARD: 1/3

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104760  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : retarded its development. Use of the double dose of N upon completion of the light stage of development, starting with the period of the initiation of the flower buds, accelerated the growth of the flower buds and the beginning of budding in comparison with the full dose of NPK or with intensified nutrition with P in this period. Conclusion is made on the necessity of regulating doses of the application of N and P in the supplementary dressings, depending on the passage of the developmental

CARD: 2/3

COUNTRY : USSR  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104760  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : stages in the plants. Besides, it should be taken into account that the beginning and the duration of vernalization stage and the light stage are different in the late maturing varieties of cotton plant. --B.L. Klyachko-Gurvich

CARD: 3 / 3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104761  
AUTHOR : Malinkin, N. P.  
INST. : -  
TITLE : The Influence of Continuous Application of Fertilizers on the Dynamics of the Yield of Cotton Wool in Regions of Irrigated Agriculture in Middle Asia.  
ORIG. PUB. : Zemledeliye, 1957, No. 9, 50-55  
ABSTRACT : Procedurally a more correct initiation of experiments in large-scale crop rotation, when all of the fields in the rotation were studied in the same year, was carried out at a number of experiment stations in Middle Asia (Ak-Kavakskaya, Ferganskaya, Pakhta-Aral'skaya, Tedzhikskaya stations etc.). Experiments have determined that even with an annual application of mineral fertilizers under cotton, the yield of cotton wool decreases from one year

CARD: 1/3

COUNTRY :  
CATEGORY :

M

ABS. JOUR. : RZhBiol., No. 1958, No. 104761

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : to the next to the extent of the remoteness from the year of plowing up grasses. This decrease in the yield takes place especially sharply on soils having a tendency to salification when measures toward weakening this process had not been taken. However, with a systematic application of fertilizers to the fields of cotton-alfalfa crop rotations, owing to the constant accumulation of humus and N in the soil and an increase in it of the available forms of P, the yields at the end of the rotation remain at a comparatively high level in relation to the yielding

CARD: 2/3

COUNTRY :  
CATEGORY :

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

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : ability of cotton plant on the bed and increase with each succeeding turn of crop rotation. -- B.L. Klyachko-Gurvich

CARD: 3 /3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104762  
AUTHOR : Mamedov, Z. I.  
INST. : Institute of Chemistry, AS Azerbaydzhan SSR  
TITLE : The Influence of Boron-Magnesium Fertilizer Obtained  
from Bored Well Water on the Yield of Cotton Plants  
ORIG. PUB. : Dokl. AN AzerbSSR, 1957, 13, No. 8, 883-888

ABSTRACT : The effect of boron-magnesium fertilizer obtained by the  
Institute of Chemistry, Academy of Sciences Azerbaydzhan  
SSR, on the development and yield of cotton plant was  
studied in 1954 with background of NP fertilization. Ex-  
periment was repeated in 1955 in field conditions. Vari-  
ety 1298 was planted. In 1954, boron-magnesium fertiliz-  
ers were applied prior to planting at the rate of 30 and  
50 kg/ha. In 1955, also before planting or in the period  
of vegetation (16 of July) - at the rate of 50 and 100  
kg/ha. Experiments showed that application of boron-mag-  
nesium fertilizers accelerated its growth, increased the

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104762  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : number of ovaries per plant, reduced their dropping off  
by 13-32.5%, raised the yield of cotton wool by 10-16%,  
or by 2.1 - 6.5 centners/ha. -- B. L. Klyachko-Gurwich

CARD: 2/2

COUNTRY : YUGOSLAVIA  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104764  
AUTHOR : Fukarek, P.  
INST. : -  
TITLE : Euphorbia Wulfenti Hoppe and Its Economic Significance  
for the Mediterranean Caverned Regions.  
ORIG. PUB. : Narodni sumar, 1957, 11, No. 7-9, 229-233  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104765  
AUTHOR : Sedasheva, G.  
INST. : -  
TITLE : European Spindle Tree in Bashkiria.  
ORIG. PUB. : Bashkortostan auyi khuzhalyby, 1957, No. 9. 47;  
S. kh. Bashkirii, 1957, No. 46  
ABSTRACT : In the living fence at the nursery of Ufa Tree and Shrub  
Growing Trust, 50 shrubs of spindle tree survived without  
being affected by disease and freezing. In spite of the  
lack of care over a number years, they reached a height of  
0.8 - 1.6 meters and diameter of the trunk of 1.5 - 4.5 at  
the height of 15 cm, and fruit yearly. Seeds sown at the  
nursery of Park Silviculture in 1953 produced sprouts only  
in 1955 but by autumn reached the standard. Determined by

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104762  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : Kudasheva method, the gutta-percha content in the cortex of the roots of the 1st order is 10% (5 cm from the collum), that of the 2nd order - 8%, and of the 3rd - 6% (5 cm from the place of their formation). The average gutta-percha content in the stems is 0.425% (in the mother plants) and 0.375% (in 3-year seedlings). O. Yu. Sobolevskaya

CARD: 2/2

COUNTRY : POLAND  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104767  
AUTHOR : Strowski, Z.  
INST. :  
TITLE : Velvet Sumac (*Rhus typhina* L.) - A tannin Plant.  
ORIG. PUB. : Postepy nauk. roln., 1957, 4, No. 1, 119-122  
ABSTRACT : Directions on the cultivation of sumac (*Rhus typhina* L.) and collection of the leaves which are the raw material for obtaining valuable tannin extract.

CARD:1/1

COUNTRY : POLAND  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104768

AUTHOR : Staniewski, J.  
INST. : -  
TITLE : Urunday Tree (Astronium Balansae).

ORIG. PUB. : Przegl. skorzany, 1957, 12, No. 8, 206-209

ABSTRACT : In connection with the beginning of the imports into Poland of the tannin extract of Urunday tree (Astronium Balansae), a description of the properties of this extract and its application in leather-tanning industry is given.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104769

AUTHOR : Astvatsatryan, Z. A.  
INST. : Academy of Sciences, Armenian SSR  
TITLE : The Effect of Agrotechnical Measures on the Flow of Gum in Tragacanth Mil Vetch of Armenia.

ORIG. PUB. : Izv. AN ArmSSR. Biol. i s.-kh. n., .957, 10, No.9, 3-12

ABSTRACT : Experiments conducted during recent years in a number of regions of Armenia, showed that loosening the soil to 10 centimeters with the subsequent maintenance of the surface in a clean and friable state, contribute to the intensification of erosian processes without affecting the flow of gum. In 1952, weekly irrigation at the rate of about 25 liters per clump had no effect on the yield at Sevanskiy Station and produced a negative effect at

CARD: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958. No. 104769

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : Vedinskiy Station owing to the dryness of the air. Application of 100 grams of  $N_{aa}$ , 200 grams of  $P_c$  and 60 grams of  $K_x$  under each clump in the second and third years after the start of the experiment, increased the gum flow by 50-63%.

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104770

AUTHOR : Bolobolova, V. M., Malakorina, S. M.  
INST. : -  
TITLE : On Some Characteristics of Grassland Flax Crop Rotations on Cultivated Soils.

ORIG. PUB. : Len i konoplya, 1958, No. 2, 25-29

ABSTRACT : Results of the studies at the Experimental Station Field Crop Cultivation at TSKha\* of three seven-field flax crop corations in which flax was put in after grasses of two-year utilization from under oat cover, after grasses of two-year utilization from under the cover of winter rye and after one-year utilization from under oat cover. The best results in the yield of seeds, straw, and fiber were obtained in the crop rotation of the 1st variant. --  
B. I. Kazachek

CARD: 1/1

\* Moscow Agricultural Academy im.K.A. Timiryazev



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104771  
AUTHOR : Matyev, N. L.  
INST. : -  
TITLE : How Svetoch Variety was Developed

ORIG. PUB. : Len i konoplya, 1958, 1, 23-26

ABSTRACT : Svetoch variety was first adapted regionally in 1932-1936 and in 1956 it occupied in this country more than one half of the area of selected flax fibers (53%). In 1929, separated from a box sowing, was plant No. 1577 - the parental plant of Svetoch variety. The origin of the primary specimen has remained unknown. In subsequent trials, Svetoch demonstrated its resistance to rust and proved to be resistant to damping off and fusariosis. In 1935, it already became feasible to sow the new variety (numbered 1577) at the flax seed growing kolkhoz "Svetoch" in Kalinin oblast' and in 1936, variety 1577 was regionally

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104771  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : adapted under the name Svetoch. The history of the development of the selected flax fiber variety Svetoch demonstrates the usefulness of the procedure in the breeding of flax fiber, the development of which was started in 1925 and continued to be perfected over a number of years by the Collective of Breeders-Flax Growers at the Plant Breeding Station of Moscow Agricultural Academy and later at the Institute of Flax also. -- V. Z. Tselik

CARD: 2/2

COUNTRY : YUGOSLAVIA  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104773

AUTHOR : Paskovic, F.

INST. : -

TITLE : The Influence of Gibberellic Acid on the Growth of  
the Stem of Hemp Plant.

ORIG. PUB. : Taketil, 1958, 7, No. 2, 105-124

ABSTRACT : The affect of gibberellic acid on hemp was studied in the  
conditions of greenhouses. Hemp was sprayed with the  
acid solutions in the concentration of 1, 10, and 100  
mg/l when the plants reached the height of 20 centimeters  
(the first series of the experiments), 40 (the second  
series) and more than 50 centimeters (the third series).  
By the end of the experiment, solutions in the concentra-  
tion of 10 and 100 milligrams/liter increased the height  
in the first and second series by 23 and 27, and with the  
concentration of 1 milligram/liter, there was a decrease

CARD: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104773

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : in the height compared with the control. Plants grown  
from seeds treated with the solutions in the concentra-  
tion of 1 and 100 milligrams/liter, were smaller than  
the control plants, and plants treated with the solution  
in the concentration of 10 milligrams/liter were larger.  
All of the sprayed plants were delicate and had a sickly  
appearance. -- G. Yu. Dinesman

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104775  
AUTHOR : Revin, B. T., Zelezinskiy, Ye. N.  
INST. : -  
TITLE : Hemp in Kuban'  
ORIG. PUB. : Len i konoplya, 1958, No. 1, 15-18  
ABSTRACT : Kuban' is the principal supplier of the seeds of southern hemp for other oblast's and Republics of this country. Here, 13 rayons, chiefly in the northern and southern parts of Krasnodarskiy Kray, are engaged in hemp growing. Agricultural technique measures assuring production of high yields of the stems but chiefly of the seeds of hemp are described. -- V. Z. Tselik

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104776  
AUTHOR : Rogash, A. R.  
INST. : All-Union Scientific Research Institute of Flax.  
TITLE : Development of Soviet Science in the Area of Flax Growing.  
ORIG. PUB. : Byul, nauchno-tekhn. inform. Vses. n.-i. in-ta  
l'na, No.4, 3-6  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104778  
AUTHOR : Kuleshova, F. F.  
INST. : All-Union Scientific Research Institute of Oleiferous \*)  
TITLE : The Yield and Quality of Sunflower Seeds in Relation to  
the Thickness of the Plant Stand in a Hill with the  
Square-Pocket Method of Sowing.  
ORIG. PUB. : Vses. n.-i. in-t malichn. i afrozaslichn. kul'tur, 1957,  
No. 3, 18-20  
ABSTRACT : In the field experiments conducted during 1954-1955 at  
Chelyabinskaya breeding station, the sowing of sunflower  
with drill SSn-6A with spaces of 70 cm between the rows,  
produced the best yields of green roughage with the stand  
thickness of 4-5 plants to a hill, and higher yields of  
seeds (12.7-13.4 centners/ha) - with stand thickness of  
2-3 plants to a hill. On seed plots for the production of  
high-quality sunflower sowing material, 1-2 plants should  
be left in the hills since seeds with the highest absolute  
weight are obtained from such sowings. --O. P. Flyusnina  
\*) and Ethereal Oil Crops

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104780  
AUTHOR : Kushnir, L. G.  
INST. : Moscow Agricultural Academy imeni K. A. Timiryazev  
TITLE : Comparative Effectiveness of the Pollination of Sunflower  
by Different Methods.  
ORIG. PUB. : Dokl. Mosk. s.-kh. akad. im. K.A. Timiryazeva,  
1957, vyp. 30, ch. 2, 321-326  
ABSTRACT : A decrease in the number of wild insect pollinators in-  
creases the value of bees in the pollination of sunflower.  
At kolkhoz "Zavet Il'cha" in Mal'chevskiy rayon in Kamen-  
skaya oblast', an average of 168g grams of seeds were ob-  
tained from two plots of 8 m<sup>2</sup> each, located at the dis-  
tance of 400 meters from apiaries, and from the plot 2000  
meters distant - 137g grams. A study of the effect on the  
yield of this crop, of the pollination of the flowers with

CARD: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104780

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : a mitten made of rabbit skin, carried out on 105 plants (7 groups of 15 plants each), showed that increases in the number of pollinations raises the weight of the seeds in the calathium, the setting of the seeds and decreases the amount of husk. Utilization of bees for pollination is more effective and economically more profitable than hand pollination.

Abstractor's note: Experiments were conducted on plots 8 square meters in size, without replications. -- O. P. Plyusina.

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104781

AUTHOR : Takhakaya, K., Takhadaya, E.  
INST. :  
TITLE : Hybrid of Sunflower and Jerusalem Artichoke.

ORIG. PUB. : Sakarvelos kolmeurne, 1958, No. 12

ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104782  
AUTHOR : Voskresenskaya, G. S., Dublyanskaya, N. F.  
INST. : All-Union Scientific Research Institute of Oleiferous \*)  
TITLE : A New Trend in the Breeding of Chinese Mustard.

ORIG. PUB. : Byul. nauchno-tekhn. inform. Vses. n.-i. in-t maslichn. i  
efiromaslichn. kul'tur, 1957, No. 3, 32-34  
ABSTRACT : For the production of high-quality mustard powder, the  
mustard seeds must contain not less than 0.8% of allyl  
oil. Chinese mustard varieties Stalingradskaya 189/191  
and Neosypayushchayasya 2, adapted regionally in USSR,  
do not satisfy this requirement. A higher content of  
allyl oil characterizes new varieties VNIIMK 405 and  
VNIIMK 351, promising as to yield and oil content. There  
are specimens at the breeding nursery of All-Union  
Scientific Research Institute of Oleiferous and Ethereal  
\*) and Ethereal Oil Cultures

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104782  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : Oil Cultures, with 0.9-1.0% allyl oil content. Dis-  
tinguished by high allyl oil content, in addition to  
Chinese mustard, are black mustard (*Brassica nigra* Koch)  
and Abyssinian cabbage (*B. carinata* Brank). It is  
essential to include these plants in the breeding work,  
and to carry out an evaluation of their seeds as impro-  
vers of the raw material produced by Chinese mustard.  
O. P. Plyusnina

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104784  
AUTHOR : Taran, I.S. , Shvid', A. A.  
INST. : Kirovograd State Agricultural Experiment Station.  
TITLE : Breeding Castor Oil Plant.

ORIG. PUB. : Kretkiye itogi raboty (Korovogradsk. gos. s.-kh. opyt. st.) za 1931-1955 gg. Vyp. 1, Kiyev, 1957, 131-136  
ABSTRACT : Breeding work on castor oil bean plant was resumed in 1946 at the Ukrainian Scientific Research Station of Oleiferous Cultures situated at the northern border of the zone of castor bean cultivation. In this region, castor bean does not mature in all years. Spring frosts to  $-1^{\circ}$  are destructive for sprouts and the first autumn frosts to  $-2^{\circ}$ ,  $-3^{\circ}$ , -for adult plants. The fast maturing of the castor oil plant and non-dehiscence of its seed case are the most important characteristics in the breeding work.

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104784  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : The new varieties - Korovogradskaya 61 and Kirovogradskaya 11 - matured year in and year out, 5-6 days earlier than the standard variety - Kruglik 5. On an average for 1952-1954, these varieties surpass somewhat Kruglik 5 in the yield of seeds, have a greater oil content in the kernel and are faster maturing and also have a somewhat coarser husk. --R. I. Serebryanny

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M

ABS. JOUR. : RZhBiol., No. 23 195:8 No. 104785

AUTHOR : Presnyakov, P. V.  
INST. : Kirgiz Scientific Research Institute of Agroiculture  
TITLE : The Influence of Predecessors on the Yield of Crops  
in Beet Crop Rotation.

ORIG. PUB. : Byul. Kirg. n.-i. in-ta zemled., 1957, 1, 11-15

ABSTRACT : At Kirgiz Sugar Beet Experiment and Breeding Station, an experiment was initiated in 1949 on the study of the principles of laying out beet crop rotations with perennial grasses, without grasses, with different intensity of beet cultivation and with different alternation of crops. Inclusion of alfalfa and alfalfa-cereal grass mixtures in the beet crop rotation, increased the fertility of the soil and the yields of the succeeding crops. The yield of winter wheat on the bed of grasses was higher by 3.6 (grain) and 19.2 centners/ha (straw); the yield of sugar beets grown on the turned bed - 51.5 (roots), 4.65 (sugar)

CARD: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 195:8, No. 104785

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : and 48.2 centners/ha (tops); the yield of spring following as the third crop - higher by 1.2 (grain) and 1.7 centners/ha (straw). The yield of alfalfa hay and alfalfa-cereal grass mixture comprised 131.7-136.8 centners/ha for 3 years (calculated for each year) and surpassed by 2-3 times the yield of the hay of vetch-oat mixture. On the other hand, repeated succession in the crop rotation of beets on beets was unfavorably reflected in the yield of the second best crop and of the crops following it. --  
T. I. Karelin

CARD: 2/2



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104786  
AUTHOR : Rymarenko, V.  
INST. : -  
TITLE : Sugar Beet in Siberia.

ORIG. PUB. : S. kh. Sibiri, 1958, No. 2, 26-29

ABSTRACT : The state and the prospects of enlarging the sowings of sugar beets in individual oblast's of Siberia. Necessity of the solution of the problem of an efficient distribution of the sowings and the construction of new sugar refineries is pointed out.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrials, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104787  
AUTHOR : Peterburgskiy, A. V.  
INST. : -  
TITLE : The Yield and Fertilization of Sugar Beets in France.

ORIG. PUB. : Sakharnaya svekla, 1958, No. 3, 45-47

ABSTRACT : In France, the area under beets comprises about 370 thousand ha, and the average yield of roots is 27-307 centners/ha. Data are cited on the amounts of the fertilizers applied, and on the yield according to separate regions of France in different years.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104788  
AUTHOR : Dashevskiy, L. I.; Nichiporenko, O. M.  
INST. : Kirgis Scientific Research Institute of Agriculture  
TITLE : Results of the Verification of the Effectiveness of Pre-  
Harvest Aboveground Top-Dressing of Sugar Beets  
in Kirgis SSR.  
ORIG. PUB. : Byul. Kirg. n.-i. in-ta zemled., 1, 44-48  
ABSTRACT : The effectiveness of the top-dressing  
Of sugar beets (with supplementary nutrients was studied  
at Kirgis Experiment and Breeding Station for Beets. In  
1952, supplementary feeding was done with F and K 14 days  
before harvest. In 1953, two supplementary feedings were  
done with P 37 and 24 days before harvest. Under produc-  
tion conditions, experiments were conducted in 1952-1955  
only with the supplementary feeding with K, 20-30 days  
before harvest. Concentration and the amount of the solu-  
tion were applied according to Yakushkin directions. Ex-  
periments did not produce positive results.-G.Yu. Linesman

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104800  
AUTHOR : Mel'nik, S. A.  
INST. : Odessa Agricultural Institute  
TITLE : Methods of Increasing the Sugar Forming Capacity  
in Grape Vine.  
ORIG. PUB. : Tr. Odessk. s.-kh. in-ta, 1957, 8, 40-48  
ABSTRACT : In the calculation of the amount of sugar produced by  
each vine, of the sugar content and acidity of the must,  
the number of clusters, and the weight of the yield of  
Aligote and Belardzhe varieties, great variations were  
found in all of these elements of a crop. Absence of a  
direct relationship between the number of clusters on a  
shoot and the sugar content of the juice was ascertained.  
This served as a basis for the purposes of clone breeding.

CARD: 1/4

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104800

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : The effect of a number of methods for the improvement of conditions for fugar accumulation in the berries was determined. Banding of the fruit shoots to 150-180°, girdling the shoots, tying the bases of the shoots with wire 2 weeks before the coming of the physiological maturity of the berries, increased their sugar content by 3-5% against the control. Girdling the trunks is a less effective method and is not recommended in view of a severe weakening of the vines with its application. For the same reason, binding the bases of the shoots with wire every year is not recommended. Pinching the shoots

CARD: 2/4

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104800

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : increased the sugar content of the berries. Suckering produced the same effect in varieties of vigorous growth having a great capacity for the development of suckers. The removal of the tendrils and especially the involution of the clusters, increased the sugar content in the berries. The proportion of sugar and acid in the berries varied sharply with different forms of the vine; the form of the vine corresponding to the biological attributes of

CARD: 3/4

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104800  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : a variety improved the conditions for sugar accumulation  
in the berries. -- P. Ya. Taskhmistrenko

CARD: 4/4

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104800  
AUTHOR : Litvinov, P. I.  
INST. : Scientific Research Institute of Viticulture and \*)  
TITLE : Regeneration of the Roots of the Grapevine.  
ORIG. PUB. : Byul. nauchn-tekhn. inform. N.-i in-ta vinogradarstva i  
vinodeliya, 1957, No. 3, 19-31  
ABSTRACT : The effect of the renewal of planting on the condition  
of the plants and regeneration of roots was studied in  
the conditions of Rostov oblast' on the varieties Muskat  
Vengerskiy and Pukhlyakovskiy. Renewal of the planting  
was done at the distance of 50 cm from the vine to the  
depth of 55-60 cm, in the first year in odd numbered rows  
and in the second, in even numbered ones. In the third  
and fourth years, hoeing was carried out in a similar

\*) wine Making

CARD: 1/3

COUNTRY :  
CATEGORY :

M

ABS. JOUR. : RZhBiol., No. 1958, No. 104801

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : manner at the distance of 80 cm from the vines. NPK was applied at the same time. In individual variants, irrigation was used. In other experiments, the periods of the renewal of plantings were studied, and the optimum distance from the plants of the hoe blades mounted on VUM-60 was determined. Deep cultivation of the soil contributed to the improvement of water, air, and nutrition aspects of the soil and improved the condition of the plants. The pruning of the roots done during the renewal of the planting stimulated their growth and regeneration.

CARD: 2/3

COUNTRY :  
CATEGORY :

M

ABS. JOUR. : RZhBiol., No. 1958, No. 104801

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : The most active new growth was observed in the second half of May - beginning of July in the soil layer of from 20 to 50-60 cm. Most intensively of all, regenerated the roots of 0.5-2 cm in diameter. The best period for carrying out deep cultivation was the early autumn (following the harvesting of the crop).--A.V. Arkhangel'skaya

CARD: 3/3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104802

AUTHOR : Al'perin, N. I.  
INST. : Institute "Magarach"  
TITLE : The Influence of Scion on the Development of Root System in the Rootstock Varieties of Grapevines.

ORIG. PUB. : Gradineritul, vyeritul shi vineritul Moldovey, 1957, No. 5, 40-44; Sadovodstvo, vingradaretvo i vinodeliye \*)

ABSTRACT : Observations were carried out by the author on the former experimental plot of the Institute "Magarach" in the central zone of Moldavia. The soil to the depth of 100 cm is loamy and then heavy-loamy. The vineyard was established in 1939. A study of the root systems was carried out in 1956. Varieties Aligote and Chasselas developed the most vigorous root system on the rootstock Berlandiyeri x Riparia Kober 5 BB, variety Fetyaska on the rootstock

\*) Moldavii, 1957, No. 5, 40-44

CARD: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104802

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : Riparia x Rupestris 101-14 and variety Korna nyagra on the rootstock Riparia x Gluar. In yield, the best rootstocks for the varieties enumerated, proved to be Riparia x Rupestris 101-14 and Berlanditari x Riparia Kober 5BB. Maximum spreading of the root in all of the varieties was noted at the depth of 20-60 cm, and only in Fetyaska on Riparia Gluar - at the depth of 60-80 cm. The more the root system was developed, the longer living were the grapevines. -- I. K. Fortunatov

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104803  
AUTHOR : Zhemenyanu, B. P.  
INST. : Moldavian Affiliates, Academy of Sciences USSR  
TITLE : Development and the Spreading of the Root System of the Grapevine in Relation to the Mechanical Composition of the Soil.  
ORIG. PUB. : Izv. Mold. fil. AN SSSR, 1957, No. 4; 108-124  
ABSTRACT : In the studies of the root system of grapevine Rara nygra, Korna nygra and Terras 20 on different soils in Moldavia (1947-1953), it was determined that in heavy loams, the direction of the roots is more or less horizontal (maximum depth of the spread of the roots is 80-90 cm). Cases occur when the roots go downward but after reaching a certain depth they again rise closer to the ground surface and can be injured by drought and frosts. In medium loams, the root system of the grapevine is not strongly developed, the direction of the roots is inclined, the roots seldom penetrate to 2 meters (the tap root

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104803  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : reaches to 1.80 m, the lateral ones - to 1.60 m), the optimum depth of the embedment of the roots is 80-90 cm. On sandy soils, the root system has a vertical direction; sometimes the roots are embedded at the depth of more than 2 m. On sandy loams and on light loamy chernozems, the roots have a direction approaching vertical or a more inclined one, and can penetrate to the depth of 2 m and more (the tap root to 2 m, the lateral ones - to 180 cm).  
-- Ye. T. Zhukovskaya

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958 No. 104804  
AUTHOR : Ryabchun, C. P.  
INST. : -  
TITLE : On the Agricultural Technique for Grapevines  
in Keresnoderskiy Kray.  
ORIG. PUB. : Vinodeliye i vinogradarstvo SSSR, 1957, No. 6, 22-26

ABSTRACT : Some comments are given in reference to Ya. N. Kaklyugin article "A New System of Grapevine Cultivation in the Conditions of Krasnodarskiy Kray" (Vinodeliye i vinogradarstvo SSSR, 1956, No. 6, No. 8) which recommends the use of close planting, manifold pinching of green shoots at a certain height, and low trellis. It is pointed out that it is impossible to recommend one system of agricultural technique for grapevine for all of Krasnodarskiy kray. In the experiments at the agricultural laboratory of sovkhos "Abrao-Lyursk" (1954-1955), it was determined that manifold pinching led in many cases to the lowering of the

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104804  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : yield and sugar content in the grape (Aligote, Pino chernyy). The low position of the fruit spurs and, in general, the development of the entire vine in the air layer near the ground (to this Ya. M. Kaklyugin attaches very great significance), are unacceptable in a zone with a high humidity of the atmosphere (The Black Sea coastline of Caucasus) or with a large amount of precipitation (southern regions): the closer the bunches are located to the ground surface, the greater the extent to which they are subject to rot. -- Ya. T. Zhukovskaya

CARD: 2/2



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104805  
AUTHOR : Brodnikovskiy, M. I.  
INST. : Tadzhik Scientific Research Institute of Orchard \*)  
TITLE : Productivity of the Buds of the Grapevine Shoot  
in the Conditions of Dry Agriculture.  
ORIG. PUB. : Byul. nauchno-tekhn. inform. Tadzh. n.-i. in-t sadovod-  
stva vinogradarstva i subtrop. kul'tur, 1957, vyp.1, 20-29  
ABSTRACT : Experiments on the plots of Varzobskaya Mountain Botani-  
cal Station of the Academy of Sciences, Tadzhik SSR and  
at Kolkhov imeni Voroshilov in Varzobskiy rayon (1952-  
1954) in the conditions of dry farming showed that with  
the lengthening of the fruit spur of the grapevine to 10  
buds, the number of fruit bearing spurs increases at the  
expense of the increase in the productivity of the buds  
to the extent of their distance from the base of the spur  
with the long pruning, the increase in the yield is  
attributable not only to a larger number of clusters on  
a vine but also to an increase in their average weight.

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104805  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : In 1954, with long pruning, variety Tayfi rozovyy pro-  
duced 27.4 kg of grapes per vine with an average weight  
of the bunch of 527 grams, and with short pruning - 11.8  
kg and 454 grams respectively. The inefficiency of  
pruning grapevine shoots to 2-3 buds, as practiced at the  
present time in the kolhozes of Tadzhikistan, is pointed  
out. -- Ye. T. Zhukovskaya

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104806  
AUTHOR : Isakhanyan, G.  
INST. : -  
TITLE : Irrigation of Trellis System Vineyards.  
ORIG. PUB. : Ayastani kolntessakan, 1957, No. 6, 53-54  
ABSTRACT : Results of the experiments with the irrigation of trellis system vineyards, carried out in 1955 and 1956 at the sovkhos imeni Tairov "Araratrest", are reported. Experiments were conducted on an area of 1 hectare in four variants: in variant I, irrigation was done by flooding the spaces between the rows (this method is adopted in production); in variant II - through a furrow cut in the middle of the space between rows; in III through two parallel furrows cut in the spaces between the rows at the distance of 50-60 cm from the rows, and in IV - through a deepened bed of 1.5 m in width, made in the space between the rows.

CARD: 1/3

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104806  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : In each variant there were five rows of vines with the spaces of 2.5 m between the rows. In all of the variants the irrigation rate was 800-900 m<sup>3</sup>/ha. The year of 1955 was less moist than in 1956. In 1955, the yields from 1 hectare comprised according to the variants: I - 120 centners, II - 123 c, III - 129 c, IV - 117 c; in 1956: I - 144 c, II - 99c, III - 149 and LV - 129. The author draws the conclusion that irrigation by flooding the entire space between the rows requires a large expenditure

CARD: 2/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104806

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : of water, impairs the ground surface and hinders the work of machinery. Irrigation through one furrow in the middle of the space between rows, with the width of the space between the rows of 2.5 m, is of little effect: the moisture reaches the root system unsatisfactorily. Application of water according to variant IV is similar in its results with irrigation according to variant I, and only application of water according to variant III produces a better result, increases the yield and does not hinder the work of machinery. -- S. M. Marukyan

CARD: 3/3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104807

AUTHOR : Dubinko, V. K.  
INST. : Crimean Agricultural Institute.  
TITLE : Irrigation of Vineyards in the Steppe of Crimea.

ORIG. PUB. : Tr. Krymsk, s.-kh. in-ta, 1957, No. 4, 55-79

ABSTRACT : Investigations were conducted in the northeastern part of the steppe Crimea having precipitation of 390 mm. The soils are meadow-chnozem-like steppes, carbonate on alluvial deposits. The groundwater level is 3.5 meters in November and 2.7 meters in June; pH is 7.2 - 7.6. No contamination with salt was observed to the depth of 2 meters. Vegetative applications of water were made with the lowering of moisture reserves in the active soil layer (18-100 cm) to 60, 70 and 80%. In all irrigated

CARD: 1/4

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104807

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : variants, winter moisture-charging applications of water was carried out to the depth of one and a half meters to the level of the maximum moisture holding capacity of the field. In the first half of the vegetation (from the beginning of the sap flow to the end of blossoming) the moisture content of the active soil layer was above 80-85%. In the absence of irrigation, the reserve of moisture in the soil was becoming progressively lower from the beginning of July. To maintain the soil moisture at the level of 60-100%, it is necessary to carry out one moisture-

CARD: 2/4

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104807

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : charging application at the rate of 500 m<sup>3</sup>/ha and one vegetative application on the 20-22 of August at the rate of 1400 m<sup>3</sup>/ha. The use of the second vegetative application of water at the beginning of August creates the best conditions for the growth and during this time it is possible to increase the load per vine. The weight and the dimensions of the berries were in direct proportion to the degree of the wetness of the soil in the period of

CARD: 3/4

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1953, No. 104807  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : their growth and ripening, and reached the maximum with the soil moisture at 80-100% of the maximum moisture holding capacity of the field. The increase in the yield attributable to the moisture charging application of water was 14-16% in comparison with the non-irrigated variant. The increase in the yield with irrigation was 50-55 c/ha without lowering the quality of the grapes and wine. -- T. K. Fortunatov

CARD: 4/4

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104303  
AUTHOR : Ter-Lakharyan, P. K., Iskhanayan, U. Sh., Davtyan, M. O.  
INST. : Institute of Viticulture, wine making and Fruit Growing,\*)  
TITLE : Schedule of Vineyard Irrigation on the Lands of Volcanic Foothills of Armenian SSR.  
ORIG. PUB. : Tr. In-ta vinogradarstva, vinodeliya i plodovodstva armSSR, 1957, vyp. 3, 195-211  
ABSTRACT : The schedule of the irrigation of fruit-bearing vineyards (Mekhali variety) under production conditions, has been studied at the Armenian Agricultural Institute and the Institute of Viticulture, wine making and Fruit Growing since 1954. In the conditions of light-brown soils ("kirs"), in order to maintain the optimum moisture content of the soil, it is necessary to give the fruit-

\*) Armenian SSR

CARD: 1/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 23, 1958, No.104803

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : bearing vineyards not more than 5-6 applications of water during the vegetation at the irrigation rate of 1200-1300 m<sup>3</sup>/ha. The following periods of water applications are recommended for the fruit-bearing vineyards: the first application in spring, if it is an early one and not rainy, after the uncovering and pruning of the vineyards; the second - two weeks before the beginning of blossoming; the third - in June when the grapevines are shedding blossoms and the berries reach the size of pea; the fourth - one month after the third; the fifth - in August when the fruits begin to change coloration and

CARD: 2/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104803

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : the sixth - in the last days of August or in the beginning of September but not later than 15-20 days before the harvesting of the crop in order not to lower the sugar content of the berries. Before covering the vineyards for the winter, an application of water is carried out for the purpose of facilitating the performance of earth-work and for the creation of a moisture reserve in the soil. -- V. M. Kol'

CARD: 3/3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104809

AUTHOR : Fedotov, V. S.  
INST. : Moldavian Affiliate, AS USSR  
TITLE : Preliminary of the Studies on the Terracing of Slopes for Vineyards.

ORIG. PUB. : Izv. Mold. fil. AN SSSR, 1957, No. 9 (42), 85-103

ABSTRACT : In Moldavia, especially in its central regions, there are considerable areas of gentle and steep slopes which are either insufficiently utilized in agriculture or are not utilized at all. The usual cultivation of these slopes for vineyards leads to a strong development of erosion processes. In 1953, terracing of a 15-hectare slope with the grade of 25° was done in Bul'bokskiy rayon according to the system developed at the Soil Institute of the affiliate of the Academy of Sciences. In the spring of 1954, the planting of the grapevines was carried out. In the summer of 1954, there were heavy downpours (up to 29

CARD: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104809

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : mm in a 24-hour period), and in the summer of 1955 - an increased amount of precipitation. The general firmness of terraces of 5 meters in width and 6° grade proved to be high. A detailed characteristic of the water and nutritional conditions of the terraces is cited. The average reserve of moisture in one-meter layer of the terrace soil was about 100 mm and the maximum 168 mm. --  
I. K. Fortunatov

CARD: 2/2

COUNTRY : RUMANIA  
CATEGORY : Cultivated Plants. Fruits. Berries M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104810  
AUTHOR : Oprean, M.  
INST. : Institute of Agronomy (Rumania)  
TITLE : Studies on the Fusion of Calluses and Formation of  
Vascular Tissues in the Growing Together of Grapevine  
Shoots Grafted by English Whip Graft Method Performed \*)  
ORIG. PUB. :

ABSTRACT : The fusion of callouses and formation of vascular bundles (tissues) in grafts were studied at the Institute of Agronomy (Rumania). The scions were Riesling ital'-yanskiy and Feyaska al'ba, the rootstocks - Riparia Kobar 588 and Riparia Portalis. Stratification was carried out for 30 days after the grafting. The adhesion of the grafts was studied successively in 4 stages (the first - at the end of stratification, the second - 60 days after the first, and so forth). Microscopic study of the cuts obtained at the places of grafting showed that the form-\*) on the Table with Subsequent Stratification.

CARD: 1/5

COUNTRY : M  
CATEGORY :  
ABS. JOUR. : RZhBiol., No. 1958, No. 104810  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : ation of callus on the scion and rootstock begins immediately after making the wound. The fusion of calluses takes place by means of the union of the outer cells of the outer cells of the calluses of the scion and rootstock. This is hindered by the outer layer; in places where it exists, calluses cannot unite. The fusion of calluses also depends on a number of external and internal factors which promote the thickening and development

CARD: 2/5



COUNTRY :  
CATEGORY :

M

ABS. JOUR. : RZhBiol., No. 1958, No. 104810

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : of the walls of outer cells of callus. Sometimes, in the grafts studied, the outer layer was unbroken (Riesling ital'yanskiy x Kober 5BB), but in the majority of cases it appeared in the form of little islands in the callus (Riparia Fortalis x Riparia Portalis). This depended on the method of grafting, the mode of the development in callus and on the rupturing of the outer layer caused by the formation of new tissues in the callus. The rupture of the outer layer in the graft would take place suddenly and in most cases very late. Therefore, no fusion of calluses occurs at these places either. The appearance

CARD: 3/5

COUNTRY :  
CATEGORY :

M

ABS. JOUR. : RZhBiol., No. 1958, No. 104810

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : of vascular tissue in callus was the result of the activity of the formative phloem-xylem area in callus, which spread in the direction depending chiefly on the outer layer. Because of the effect of the outer layer, the formative area had no continuation out of the callus and could not unite the grafted sides at all parts where they formed callus. The spreading of the formative cambial area in callus began before the formative phloem-

CARD: 4/5

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104810

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : xylem zone of each component part of the graft. The spreading followed the line of the greatest accumulation of meristem. In all of the varieties and variants studied, hereditary factors surpassed the influence of the external and internal factors on the grafts in the process of growing together. In Riesling ital'yanskiy, there were cases of successful heteroplastic and homoplastic grafts in which it was used as stock. -- Ye. T. Zhukovskaya

CARD: 5/5

COUNTRY : RUMANIA  
CATEGORY : Cultivated Plants. Fruits. Berries. M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104811

AUTHOR : Banita, P., Baltagi, B.

INST. : -

TITLE : Determination of the Best Conditions for the Grafting and Growing Together of Grapevine Canes.

ORIG. PUB. : An. Inst. cercetari agron., 1957, No. 5, 503-519

ABSTRACT : As the result of studies at the experiment stations of viticulture in Drageshani and Krechynel (1951-1953), it is recommended to store stocks in winter before grafting, in the form of whole canes or cut to the length three times that of the scion. With the storage of the stocks of Berlandiyeri x Riparia Teleki 8B and Shasla x Berlandiyeri 4LB cut to the same or double length of the scion, 3.6-8% fewer grafts of the first class were ob-

CARD: 1/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104811

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : tained in comparison with the control (stock cut to the length three that of the scion). The optimum thickness of stock cutting for grafting is 8-9 mm. Scion must be of the same thickness as the stock or a little thinner. The area and the length of the stock and scion cuts which are to be placed against each other, must be identical. The largest percentage of grafts (43.6) of the first class were produced by cuttings taken from the middle part of the cane, then cuttings taken from the base of the cane (39.4) and the smallest percentage (33.7) - from the top of the cane. The optimum temperature in

CARD: 2/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 195 , No. 104811

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : during the growing of grafts together in the greenhouse was 25° at which 47% of first class grafts were obtained, and at the temperature of 35° - 36.3% of first class grafts (station in Dregheshani). Growing the grafts together according to Mishurenko method increased the crop of first class young plants by 26.3% in comparison with the usual method. -- Ye. T. Zhukovskaya

CARD: 3/3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104812  
AUTHOR : Novopavlovskaya, N. V.  
INST. : Central Genetic Laboratory imeni I. V. Michurin  
TITLE : Ascorbic Acid in Own-Rooted and Grafted Grapevine Plants.

ORIG. PUB. : Byul. nauchno-tekhn. inform. Tsentr. genet. labor. im.  
I. V. Michurina, 1957, vyp. 3, 15-19  
ABSTRACT : It was determined in the studies at the Central Genetic  
Laboratory (Michurinsk) that during the entire period of  
vegetation, the content of ascorbic acid in the leaves,  
shoots, inflorescences and berries remained at a higher  
level in the grafted varieties of grapevine (Seyanets  
Malengra, Seyanets Shasla on stock Buytur) in comparison  
with rooted plants. In the shoots of Seyanets  
Malengra variety (rooted) the content of ascorbic  
acid before blossoming was 6.62 and during the ripening  
of the berries 8.63 mg% of wet weight, and in the one

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958 No. 104812  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : grafted on the stock Buytur - 11.42 and 20.04. In the  
variety Seyanets Shasla (135), these differences are  
pronounced to a lesser degree than in the variety  
Seyanets Malengra. -- Ye. T. Zhukovskaya

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104815  
AUTHOR : Bibline, L. I.  
INST. : Moldavian Affiliate, Academy of Sciences USSR  
TITLE : Effect of Supplementary Feeding on the Nutritional  
Conditions of Soil and Distribution of Mineral Nutrients  
in the Organs of Grapevine.  
ORIG. PUB. : Izv. Mold. fil. AN SSSR, 1957, No. 5, 33-47

ABSTRACT : In the experiments with grapevine on ordinary chernozem,  
with one supplementary feeding in the amount of N60P45K60  
applied before the opening of the buds, 70 centners/ha of  
grapes were obtained at Moldavian Affiliate, Academy of  
Sciences USSR on an average for 2 years with the yield of  
the control being 60 centners/ha. Additional supplementary  
feedings with N30P30K35 before blossoming, and N20P30K15  
in the beginning of the setting of the berries, did not  
increase the yield. At the time of the application of

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104815  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : supplementary feeding, the content of nutrients in all  
organs of the plants was lower than in unfertilized  
plants. -- Z. I. Zhurbitskiy

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104816  
AUTHOR : Alexandrescu, I.  
INST. : -  
TITLE : Application of Manure in the Vineyard in Mufatlar.  
ORIG. PUB. : An. Inst. cercetari agron., 1957, 24, No. 5, 521-532  
ABSTRACT : At the experiment station of viticulture in Mufatlar (1951-1954), with the application of rotted horse manure at the rate of 600 centners/ha to different depth (15, 25, 35 and 45 cm) after the grapevines were covered, the greatest increase in the yield (13.5 and 16.8 centners/ha) was obtained with the application of manure to the depth of 35 and 45 cm (the zone of the maximum penetration of the root system). The manuring rate of 400 centners/ha produced an increase in the yield very close to that obtained with the application at the rate of 600 c/ha.

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958 No. 104816  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : Therefore, in the practice of viticulture, it is recommended to use the rate of 400 centners/ha. Manure promoted the growth of stronger shoots, increase in the amount of weight in grape clusters without lowering their qualities. — Ye. T. Zhukovskaya

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104817  
AUTHOR : Mininberg, S. Ya.  
INST. : All-Union Agricultural Academy imeni Lenin  
TITLE : The Effect of the Conditions of Soil Nutrition on the Productivity and Frost Resistance in Grapevine.  
ORIG. PUB. : Dok. VASKHNIL, 1958, No. 2, 26-30

ABSTRACT : Studies were conducted in Kiev oblast' in 1954-1956 with varieties Shasla belaya and Lidiya. Fertilizers were applied in the form of solutions into 6 holes punched with Kolesov "sword" around each vine to the depth of 40-50cm. In 1954, fertilizers were applied before the bursting of buds and at the beginning of the formation of clusters. In 1955, fertilizers were not applied and in 1956 they were applied only at the beginning of vegetation. Applied under 1 vine were  $N_{aa}$ -33 g,  $P_c$ -150 g,  $K_g$ -150 g,  $KMnO_4$  -1.5 g, which were dissolved in 3 liters of water. The average growth increment of a shoot in Shasla with

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104817  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : with the application of NPK was 132.6 cm. With NPK - Mn it was 172 cm. In Lidiya it was 151 and 194 respectively. With NPK, the immature part of the shoot comprised 28.5% and with NPK + Mn - 18%. In the winter of 1954/55, in Shasla fertilized with NPK, 27.5% were killed, and fertilized with NPK + Mn - 11%. Application of Mn increased the yield by 20-30% and the sugar content by 3%. --I. K. Fortunatov

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104818  
AUTHOR : Dobrovolskiy, M. P.  
INST. : -  
TITLE : Topdressing Grapes.  
ORIG. PUB. : Gredineritul, vyeritul shi vineritul Moldovey,  
Sadovodstvo, vinogradarstvo i vinodeliye Moldavii, \*)  
ABSTRACT : At the Sovkhoz imeni Ul'yanov (Odessa oblast'),  
the topdressing of the following varieties  
was carried out before blossoming: Muscat Hamburg  
(affected with cleistogamy and forming a large proportion  
of pea-size berries), Madalain Oberlen and Chaugh (as cross  
pollinators, poorly pollinated and producing a low yield).  
The composition of the supplementary feeding: 100 g of P<sub>2</sub>O<sub>5</sub>,  
20 g of K<sub>2</sub>O, 50 g of N<sub>2</sub>, 1 g of boric acid and 2 g of

\*) 1957, No. 3, 8-10

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104818  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : ammonium molybdate to 10 liters of 1.5% Bordeaux mixture.  
Considerable increase in the yield was noted when the  
topdressing was accompanied by  
supplementary pollination. -- R. I. Serebryanny

CARD: 2/2



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104819

AUTHOR : Nekrasova, A. A.  
INST. : Moldavian Affiliate, Academy of Sciences USSR  
TITLE : Effect of Organic-Mineral Granular Fertilizers on the Yield of Grapes.

ORIG. PUB. : Izv. Mold. fil. AN SSSR, 1957, No. 2-3, 97-104

ABSTRACT : A study of the effect of different combinations of organic mineral fertilizers in different forms in 1953-1955, showed that powdered ones increased the yield by 11-26% and the granular ones by 32-58%. The best effect was produced by granules of 1 cm in diameter. The rate of the application of granular fertilizers can be decreased by one half in comparison with the powdered fertilizers. The number of fruit-bearing shoots increased and inflorescences were developing better in the very first year of the application of fertilizers. In the 2nd and 3d

CARD: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104819

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : years, both the number of inflorescences and the number of berries in clusters and their weight increased. -- Ye. A. Makarevskaya

CARD: 2/2

COUNTRY : ROMANIA  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104821  
AUTHOR : Oprean, M., Manolache, E., Popescu, M., Dobrescu, I., \*)  
INST. : Institute of Agronomy  
TITLE : Behavior of Grape Vine on Sands in the First Year  
of Planting.

ORIG. PUB. : Gradina, via si livada, 1957, 6, No. 9, 23-28

ABSTRACT : It follows from the experiments at the Institute of Agronomy in the region of Craiova that in planting grapevines on hilly sands in Tymbureshti in trenches (3 meters in depth), hills (1.5 m) and holes (0.8 m), the growth of the root system and shoots depended on the planting depth, relief of the locality, exposure, method of planting and the direction of the rows. The greatest growth of the roots (length of 721.7 cm) was secured with planting into trenches at the top of the dune, and the weakest growth (362.5 cm) - in the middle of the dune. This is explained by

\*) Mandescu, Tr., Stegarus, E.

CARD: 1/3

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104821  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : an excess of moisture and lower temperatures in the middle of the dune in comparison with its top. It is recommended to do deeper planting of the grapevine at the top of the dune, and the drier the climate, the deeper. In the middle of the dune, planting should not be deep but not less than 0.8 m in order that the roots would not suffer from frosts. On the slopes of the dune, planting should be done to medium depth. In the region of Craiova, in places

CARD: 2/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104821

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : where the sand layer is 3 meters, grapevines may be planted at the top of the dune into trenches and hills. In places where the sand layer is less than 3 meters, the planting should be done in trenches at the top of the dune and in the upper part of the slope of the dune; and in the middle and lower part of the slope of the dune - in holes. The rows of grapevines have to be oriented from the north to the south, but with inadequate precipitation such orientation of the rows is unfavorable for the development of the grapevine. -- Ye. T. Zhukovskaya

CARD: 3/3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104822

AUTHOR : Yuzbasheva, A. K.  
INST. : Tadzhik Scientific Research Institute of Orchard \*)  
TITLE : The Influence of Pruning Length on the Yield of Vineyards.

ORIG. PUB. : Byul. nauchno-tekhn. inform. Tadzh. n.-i. in-t sadovodstva, vinogradarstva i subtrop. kul'tur. 1957, vyp. 1, 15-19

ABSTRACT : Experiments carried out in Gissarskaya valley with the principal regionally adapted grapevine varieties, showed that the "eyes" are potentially fruit-bearing along the entire length of the fruit spur. Most fertile is the zone between the 3d and 7th buds. In local varieties (Kishmish chernyy, Tayfi rozovyy), the yield rose with the increase in pruning length, but in European varieties the

\*) Cultivation, Viticulture and Subtropical Plants.

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104822  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : the yield was higher with medium pruning. Short pruning reduced the yield in Kishmish variety almost to one half. Short pruning of the grape vine to 2-3 eyes, widely practiced in Tadzhikistan to the present time, does not fit the biological characteristics of Tadzhik grapevine varieties and the conditions of the vegetation of the vine. -- I. K. Fortunatov

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104823  
AUTHOR : Mel'nik, S. A., Shchiglovskaya, V. I.  
INST. : Odessa Agricultural Institute  
TITLE : Ampelometric Method of the Determination of the Leaf Surface Area in Grapevine.  
ORIG. PUB. : Tr. Odessk. s.-kh. in-ta, 1957, 8, 82-88  
ABSTRACT : A method, called by the authors ampelometric, is proposed for the determination of grapevine leaf area without plucking leaves off the vine. In this method, the diameter of each leaf on each shoot is determined successively from the base to the tip. The diameter of the leaf is taken to be the distance in longitudinal direction from the farthest projecting tooth of the lower lobe to the tip of the central tooth of the upper terminal lobe. For

CARD: 1/2

COUNTRY : M  
CATEGORY :

ABS. JOUR. : RZhBiol., No.23 1958, No. 104823

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : varieties having a short midrib, the leaf diameter is measured according to the same principle but in the lateral, not longitudinal direction. The leaf area is conditionally assumed to be the area of a circle and is computed according to formula:  $W = \pi d^2/4$  where W is the area of the circle, assumed conditionally to be the leaf area, d - the length (conditional diameter) of the leaf. To facilitate computation, a special table of computed leaf areas with the diameter of 1-17 cm. is cited. Comparative verification of the results of the computation of leaf area by ampelometric methods, volumetric method and by means of measuring the leaf area with planimeter, showed that the proposed method is not inferior to other methods but is considerably simpler. — P. Ye. Tsekhmistrenko

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104825

AUTHOR : Iobidze  
INST. : Institute of Horticulture , Viticulture and \*)  
TITLE : Wild Grapevine.

ORIG. PUB. : Sakartvelos kolmeurne, 1957, No. 6, 27

ABSTRACT : At Gudantskaya Base Station (Abkhaz Autonomous SSR) of the Institute of Horticulture , Viticulture and Wine making, several forms of wild grapevine grow in the collection of 210 European grapevine varieties. Wine made from wild grapes was distinguished by rich coloration, medium extractability and pleasant sweetness; it contained 12% of alcohol and 4.8 grams/liter of titratable acid.

\*) Wine Making

CARD: 1/2

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104825

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : Wines from the old varieties of Western Georgia are also distinguished by considerable potency and pleasant sweetness. In the old days they were known under the name "Kolkhidskiye". The similarity of "Kolkhidskiye" wines and wine from wild grapes, permitted the author to voice a thought on the origin of the cultivated grapevine varieties of Georgia from the local wild forms growing universally in the viticultural regions of Georgia. --  
D. I. Tabidze

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104826

AUTHOR : Dashkevich, A. V.  
INST. : Scientific Research Institute of Viticulture and Wine \*)  
TITLE : On Comparative Frost Resistance in Grapevine Varieties of Different Climatic-Biological Adaptation.

ORIG. PUB. : Byul. nauchno-tekhn. inform. N.-t. in-ta vinogradarstva i vinodeliya, 1957, No. 3, 40-45

ABSTRACT : A study of comparative frost resistance in the varieties and hybrid seedlings of grapevine was carried out at Anapa Experiment Station. Characteristics related to the climatic-biological adaptation were determined. The difference in the critical minimum temperatures does not exceed 2-4° in the case of European varieties. For Amur grapevine and hybrids, the critical temperatures are 10-15° lower. In the first generation, European-Amur hybrids approach Amur variety in frost resistance; in the second generation they are less frost resistant, but nevertheless,

CARD: 1/2

\*) Making

COUNTRY :  
CATEGORY :

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104826

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : part of the eyes survives frosts of  $-30^{\circ}$ ,  $-31^{\circ}$ . The rate of the drop in winter temperatures is sharply reflected in the degree of frost resistance. Indices of frost resistance for 1953 and 1954 are cited for a large number of varieties and hybrid seedlings bred at the All-Russian Institute of Viticulture (Novocherkassk). The promising possibilities of the variety Fioletovyy ranniy (Severnyy x Muscat Hamburg ) having high frost resistance are underscored, and also the possibilities of varieties Severnyy, Zarya severa, Stepnoy, No. 6, Plotnyy and Michurinets. -- V. V. Arkhatel'skaya

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104827

AUTHOR : Kupcha, P. I.  
INST. : -  
TITLE : Italian Riesling

ORIG. PUB. : Gredineritul, viyeritul shi vineritul Moldovey, 1957, No. 5, 53-55; Sadovodstvo, vinogradarstvo i vinodeliye \*)

ABSTRACT : Italian Riesling is an austrian variety, an aborigene of the province of Styria where it has been grown since long ago under the name Welschriesling. It is widespread in Hungary, Rumania, Yugoslavia and USSR under the name of Italian Riesling although there is little of it in Italy. On the territory of present day Moldavian SSR it appeared at the end of last century. According to the data of

\*) Moldavii, 1957, No. 5, 53-58

CARD: 1/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104827

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : 1953 census, it occupies third place among the wine varieties. The yielding ability of Italian Riesling is twice that of Rhein Riesling; its yield is not less than that of Aligote whose competitor it is in all respects and can deservedly occupy the place after Aligote in the production of European white table wines of mass consumption. In the process of ripening, it accumulates sugar and loses acidity as uniformly as Aligote. This variety is distinguished from Rhein Riesling by a stronger growth of the vine, lighter coloration of the leaves, larger and

CARD: 2/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958 No. 104827

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : looser clusters with pale-green coloration of the berries. The pulp in Italian Riesling is of medium succulency, with weak, coarse, characterless aroma. In respect to quality, this variety is much lower than Rhein Riesling but in blending with it, produces high-quality tables wines. --  
P. Ye. Tsekhmistrenko

CARD: 3/3



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104831  
AUTHOR : Michurin, I. V.  
INST. : Central Genetics Laboratory imeni I. V. Michurin  
TITLE : Notes on Grapevine Seedlings of 1909 (From Unpublished Materials of the Archive).  
ORIG. PUB. : Byul. nauchno-tekhn. inform. Tsentr. genet. labor. im. I. V. Michurina, 1957, vyp. 3, 5-6  
ABSTRACT : Some notes by M. V. Michurin on raising grapevine seedlings (1909) in the middle belt of Russia, are given. American species Riparia is recommended as being frost resistant, early maturing and resistant to infection by parasites. Feasibility is pointed out of securing frost resistant grapevine varieties for middle Russia by means of selection from the sowings of several successive generations, of a seedling which shows a sharp deviation in the required direction. -- Ye. T. Zhukovskaya

CARD: 1/1

COUNTRY : HUNGARY  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104833  
AUTHOR : Zakharova, Ye. I.  
INST. : Scientific Research Institute of Viticulture and \*)  
TITLE : In the Vineyard Regions of Hungarian People' Republic.  
ORIG. PUB. : Byul. nauchno-takhn. inform. N.-1. in-ta vinogradarstva i vinodeliya, 1957, No. 3, 59-63  
ABSTRACT : In Hungary, vineyards and orchards occupy 4.2% of the entire area of the country (200 thousand hectares). On the sandy soils of Alföld and N'iosheg, the own-rooted vineyards comprise 60%, the grafted plantings - 25%, hybrid direct producers - 10%, rootstock plantings of European varieties - 5%. The wine varieties of grapevine comprise about 92% of the plantings; the table varieties -

\*) Wine Making.

CARD: 1/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104833

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : 8%. From the wine varieties, the largest area is taken up by the variety Kaderka which occupies 50% of the plantings in the Hungarian depression; then, varieties Italian Riesling (12.8%), Furmint (4.2%) and Bars-Levelyu. Among the table varieties, the most widespread are **Chasselas Blanc, Chasselas Rosé**, Zhemchuzh Babo, Koroleva vinogradnikov, Karaburnu and Mat'yash Yanosh. 9-12 thousand vines are spaced on 1 hectare. In most of the regions, the vineyards are covered for the winter. The form of the vines is trunkless, capitata with the pruning of

CARD: 2/3

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958, No. 104833

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : the vines to the length of from 2-4 to 6-10 eyes. The many years' experience of Hungarian viticulturists showed the advantages of companion plantings of grapevine and and fruit plants on sands. -- Ye. V. Kolesnikov

CARD: 3/3

COUNTRY : RUMANIA  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No.23 1958 No. 104834  
AUTHOR : Potec, I., Potec, E., Mereuta, N., Ene, M.  
INST. : -  
TITLE : Behavior of Some Grapevine Varieties Under Unfavorable  
Conditions of Growth in 1955.  
ORIG. PUB. : Anuarul lucar. stiint. Inst. agron. Iasi. Bucuresti  
1957, 123-129  
ABSTRACT : Observations on the development of principal grapevine  
varieties in the vineyards in Kornar, Buchum-Vishan and  
Kopou under the unfavorable conditions of 1955 (excessive  
moisture and low temperature in the period of vegettation).  
Varieties which proved to be most resistant to the un-  
favorable conditions of growth in 1955, were: Aligote,  
Muscat Hamburg and Chasselas doré. For grapevine  
varieties non-resistant to unfavorable conditions (Grasa  
de Kotnar', Frynkusha, Bebyaska nyagra and Fetyaska Al'ba),  
it is recommended to apply a complex agricultural tech-

CARD: 1/2

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No.23 1958, No. 104834  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : nique. For varieties subject to excessive formation  
of pea-size berries (Koarne nyagra, Koarne al'ba,  
Krympoishe, and others), a supplementary artificial  
is necessary. -- Ye. T. Zhukovskaya

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104836  
AUTHOR : Arutyunyan, A. S., Dzhanpoladyan, L. M. Samvelyan, A. M.\*)  
INST. : Institute of Viticulture, Wine Making and Orchard \* \*)  
TITLE : Grape Vine Nutrition and the Quality of Wine.

ORIG. PUB. : Vestn. s.-kh. nauki, 1957, No. 10, 87-98

ABSTRACT : At the experimental bases of the Institute of Viticulture, wine Making and Orchard Cultivation in Yerevan' and Parakar', and also under production conditions, experiments were carried out in 1954-1955 in the study of the effect of different fertilizers on the quality of wine made from varieties Mustat, Voskeut, Saperavi and Kakhet. A definite connection was found between the amounts of aromatic compounds and the P content in grapevine berries.

\*) Khachatryan, A. L.

\* \*) Cultivation

CARD: 1/3

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104836  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : Mineral fertilizers mixed with manure promoted an increase in the yield and quality of grapes. K improved the flavor and coloration of wine but at the same time it can promote precipitation of acids. N in moderate amounts, improves the quality of the wine; an excess of N impairs it. Wines containing a great deal of nitrogen compounds are not stable against cloudiness. If cloudiness lowers the quality of table wines, for brandy wines

CARD: 2/3

COUNTRY :  
CATEGORY : M  
ABS. JOUR. : RZhBiol., No. 1958, No. 104836  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : it is of no significance, and nitrogenous substances improve the quality of alcohol. In the initial period of grape ripening, the accumulation of sugars proceeds rapidly, and the accumulation of aromatic principles - comparatively slowly. In the last period of ripening, when the sugar content of grapes rises slowly, the amount of aromatic principles continues to increase. Consequently, grapes have to be harvested at full maturity regardless of whether they are destined for dessert, table or brandy wines. -- Ye. V. Kolesnikov

CARD: 3/3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104838  
AUTHOR : Chigrin, V. N.  
INST. : -  
TITLE : On the Value of Tip Layering in Northern Regions of Viticulture.  
ORIG. PUB. : Sad i Ogorod, 1958, No. 4, 76  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104839  
AUTHOR : Mishurenko, A. G.  
INST. : Ukrainian Scientific Research Institute of Viticulture \*)  
TITLE : Technological Scheme for Stratification and Hardening  
of Grapevine Grafts in the Conditions of a Standard  
Greenhouse.  
ORIG. PUB. : Byul. nauchno-tekh. inform. Ukr. n.-i, in-t  
vinogradarstva i vinodeliya, 1958, No. 4, 26-28  
ABSTRACT : No abstract.

\*) and Wine Making

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958 No. 104840  
AUTHOR : Kovalev, A. A.  
INST. : -  
TITLE : Apparatuses for Artificial Pollination of Grapevine.  
ORIG. PUB. : Sad i ogorod, No. 5, 67-69  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : RUMANIA M  
CATEGORY : Cultivated Plants. Fruits. Berries.  
ABS. JOUR. : RZhBiol., No. 23 1958 No. 104842  
AUTHOR : Neagu, M. I.  
INST. : --  
TITLE : Practical Problems of Viticulture and Wine Making in RPR  
ORIG. PUB. : Gradina, via si Livada, 1958, 7 No. 4, 1-8  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR M  
CATEGORY : Cultivated Plants. Fruits. Berries.  
ABS. JOUR. : RZhBiol., No. 23 1958 No. 104844  
AUTHOR : Vermenicheva, A. D.  
INST. : Tashkent Agricultural Institute  
TITLE : Comparative Frost Resistance in the Varieties of  
Fruit Species.  
ORIG. PUB. : Tr. Tashkentsk. s.-kh. in-t, 1957, vyp. 8, 13-22  
ABSTRACT : Vegetation of fruit trees in 1954 was delayed and the  
fruit culture of Uzbekistan and other Republics of Middle  
Asia suffered a great loss from the severe freezing of  
fruit trees. Observations were conducted at the training  
farm of Tashkent Agricultural Institute. In spring and  
beginning of summer, the degree of injury to the trunk  
bark, mother branches, one-year, two-year and three-year  
wood, was considered. Apple tree varieties were divided  
into three groups: a) those tolerating frosts well -

CARD: 1/3

COUNTRY :  
 CATEGORY : RZhBiol., No. 1958 No. 104844 M  
 ABS. JOUR. : RZhBiol., No. 1958 No. 104844  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ORIG. PUB. :  
 ABSTRACT : Belyy naliv, Chellini, Letneye persikovoye, Tompkins King, Pepin shafranny, Gendevis and Edel'roter; b) those which suffered severely from frosts - Parmen zimnyy zolotoy, Dandil'-Sinap, Delishes, Pepin Longonskiy, Edel'bemar and Zolotoye grayma; c) perished completely from frosts - Boyken, Renet Simirenko, Rozmarin, Grafenshteyn, Steyman Baynsep, Napoleon, Zimniy banan, Renet Shampanskiy, Sary-Sinap, Bel'fler and Krasnyy sheleznyak. Pears of the varieties Oliv'ye de Serr and Lyubimitsa Klappa became abundantly covered with leaves after the injuries and

CARD: 2/3  
 CARD: 2/3

COUNTRY :  
 CATEGORY : RZhBiol., No. 1958 No. 104844 M  
 ABS. JOUR. : RZhBiol., No. 1958 No. 104844  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ORIG. PUB. :  
 ABSTRACT : injured well. Injured most severely were the trunk, then the mother branches and one-year continuance shoots. Injured severely in many varieties were the three-year and, especially, two-year wood. The older branches kept better. As a rule, the trunk and mother branches on the southern exposure suffered from frost more severely than those on the northern side. -- Ye. V. Kolesnikov

CARD: 3/3  
 CARD: 3/3



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958 No. 104847  
AUTHOR : Stolbov, A. N.  
INST. : -  
TITLE : Accelerated Growing of Stocks.  
ORIG. PUB. : Sad i ogorod, 1958, No. 4, 53-54  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104847  
AUTHOR : Prokop'yev, G. S., Maltabar, L. M.  
INST. : -  
TITLE : Orchard Cultivation and Viticulture in Tyrnovskiy Rayon.  
ORIG. PUB. : Gredineritul, vyeritul shi vineritul Moldovey, 1958, No. 1,  
48-50; Sadovodstvo, vinogradarstvo i vinodeliye Moldavii,\*  
ABSTRACT : No abstract.

\*) 1958, No. 1, 46-48

CARD: 1/1

COUNTRY : ROMANIA  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104849  
AUTHOR : Ionita, G.  
INST. : -  
TITLE : On the Organization of Work in the Upkeep of Soil in  
Young Orchards.  
ORIG. PUB. : Gradina, via si livada, 1958, 7, No. 4, 36-41  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23, 1958 No. 104850  
AUTHOR : Kott, V.  
INST. : -  
TITLE : Methods of Protecting Fruit Orchards from the First  
Autumn Frosts.  
ORIG. PUB. : Ovochar. a zelinar., 1958, 6, No. 4, 98-99  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958 No. 104851  
AUTHOR : Yenikeyev, Kh. K.  
INST. : -  
TITLE : Orchard Cultivation in Norway.  
ORIG. PUB. : Sad i ogorod, 1958, No. 4, 62-64  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23 1958 No. 104854  
AUTHOR : Vaskan, G. K.  
INST. : Moldavian Scientific Research Institute of Orchard\*)  
TITLE : Effect of Mineral and Organic Fertilizers on the Growth and Fruiting of Apple Tree.  
ORIG. PUB. : Tr. Mold. n.-i. in-t sadovodstva, vinogradarstva i vinodeliya, 1957, 3, 131-132  
ABSTRACT : In 1951-1953, at the experimental base of the Institute (the city of Kishinev) and in the orchard of sovkhos imeni Frunze (the city of Tiraspol'), experiments were conducted on the fertilization of apple trees Renet bumazhnyy, Vagnera prizovoye and Parmen zimniy zolotoy, grafted on doucin, and at sovkhos on strong-growing wild apple tree planted in 1933 and 1929 respectively. On the leached

\*) Cultivation, Viticulture and Wine Making.

CARD: 1/4

COUNTRY :  
CATEGORY : M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104854

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : out chernozem, in unirrigated conditions, most effective proved to be doses of NPK 180, NPK 90 and NPK 60+40 tons/ha of humus which increase the yield by 33-55% with the autumn application of them to the soil. Application of organic-mineral fertilizers for the variety Renet bumazhnyy at the rate of 60 kilograms/ha produced the best effect in regard to the accretion of wood and increased fruiting in comparison with the powdered fertilizers applied at the rate of NPK 120 and humus 40 tons/ha. A better effect was secured with method of deep focal application into holes 55 cm in depth also in furrows

CARD: 2/4

COUNTRY :  
CATEGORY :

ABS. JOUR. : RZhBiol., No. 195 8 No. 104854

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : 35 cm in depth than with the embedment to the depth of 22 cm. Spaced application of fertilizers in 3 periods (NPK 60+humus at the rate of 40 tons/ha in autumn, NPK 30 in early spring and NPK 30 after blossoming) produced a better effect in regard to the accretion of wood, leaf blades and the aggregate amount of the crop in comparison with the application of the same amount of fertilizers in one period. Considerable effect was also

CARD: 3/4

COUNTRY :  
CATEGORY :  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104854

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : obtained in the variant with the application of organic-mineral fertilizers: humus at the rate of 40 tons/ha in autumn and NPK 120 in spring. -- Ye. V. Kolesnikov

CARD: 4/4

COUNTRY : CZECHOSLOVAKIA  
CATEGORY : Cultivated Plants. Fruits. Berries. M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104858

AUTHOR : Dvorak, A.  
INST. : -  
TITLE : Apple Tree Variety - Oldenburg

ORIG. PUB. : Ovocnar. a zelinar., 1958, 6, No. 3, 70-71

ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104859  
AUTHOR : Yemel'yanov, F. A.  
INST. : -  
TITLE : Irrigation of Apple Tree Stocks.  
ORIG. PUB. : Sad i ogorod, 1958, No. 5, 48-49  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104861  
AUTHOR : Kohout, K.  
INST. : -  
TITLE : On the Regional Adaptation of Plum, Especially Domestic Plum Varieties.  
ORIG. PUB. : Ovocnar. a zelinar., 1957, 5, No. 9, 269-270  
ABSTRACT : Regional adaptation of plum plantings was carried out for 4 zones out of which the 3d and 4th zones will be producing a crop of exclusively local value. In the first zone, 27% of land suitable for orchard cultivation will be occupied by plums. The altitude above sea level is 350-400 meters, the average annual temperature - 8°, precipitation - 600-700 mm; the soil is chernozem-like, clayey, moderately podzolized. In the second zone, it is

CARD: 1/2

COUNTRY :  
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1953, No. 104861

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : expected to have 31% of suitable land under plums. The altitude above sea level is 500 meters, average annual temperature 7°, precipitation - 800 mm. The soil conditions are satisfactory. Higher than 500 meters above sea level, only certain varieties of consumer value complete ripening. -- Ye. I. Parshina

CARD: 2/2

COUNTRY : BULGARIA  
CATEGORY : Cultivated Plants. Fruits. Berries. M

ABS. JOUR. : RZhBiol., No. 23, 1953, No. 104862

AUTHOR : Marinov, P.  
INST. : -  
TITLE : Plum Culture in Bulgaria.

ORIG. PUB. : Ovoshcharstvo i gradinarstvo, 1957, No. 7, 5-9

ABSTRACT : Indicated are the regions of the cultivation of plum in Bulgaria, the assortment, causes of its low yields and the value of plum culture in the economy of the country. Favorable conditions for plum culture exist in the southwestern (Kyustendil'skiy, Radomirski, Sofiyskiy) and southern rayons of Bulgaria. In the country, there are about million plum trees of which about 5 million are fruit-bearing. The plum fruits every other other year or or two; the fruits are of low quality. The principal

CARD: 1/2

COUNTRY :  
CATEGORY :

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104862

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : causes of low yields are: depletion of soil, trees, injuries caused by diseases and pests and, in addition, by a limited assortment. In the majority of the rayons, one variety is disseminated - Kyustendil'skaya sinyaya, a self-pollinating variety but under conditions unfavorable for self-pollination, the crop is non-existent. The low yield of plums is also explained by the fact that in most orchards, there are grown wheat, barley, oats, alfalfa, which use up a great deal of moisture and nutrients at the time when the plum is in a particular need of them (April - July). Measures for increasing the yield of plums are indicated. -- Ye. T. Zhukovskaya

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104864

AUTHOR : Voronchikhina, A.  
INST. : -  
TITLE : Plum Variety - Nagrada.

ORIG. PUB. : Sad i ogorod, 1958, No. 5, 60

ABSTRACT : No abstract.

CARD: 1/1



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104365  
AUTHOR : Ul'yanishchev, M. M.  
INST. : -  
TITLE : Apricot Variety - Rossoshanskiy Krasavets.  
ORIG. PUB. : Sad i ogord, 1958, No. 5, 60  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104866  
AUTHOR : Dzhangaliyeva, S.  
INST. : -  
TITLE : Felted Cherry  
ORIG. PUB. : Nauka i peredov. opyt v s. kh., 1958, No. 5, 58-60  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : BULGARIA  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104867  
AUTHOR : Khristov, L.  
INST. : -  
TITLE : Wild Strawberry Variety - Mitsi Shindler.  
ORIG. PUB. : Ovoshcharstvo i gradinarstvo, 1958, No. 4, 13-14  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Fruits. Berries. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No.104868  
AUTHOR : Zotova, Z. S.  
INST. : -  
TITLE : Productivity of the New Altay Varieties of Black Currant  
in Comparison with Their Primary Forms.  
ORIG. PUB. : Byul. nauchno-tekh. inform. Altaysk. plod.-yagodn.  
opytn. st., 1958, No. 2, 9-12  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : CHINA  
CATEGORY : Cultivated Plants. Subtropical. Tropical. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104780  
AUTHOR : T'ang Chen-yao  
INST. : -  
TITLE : Experiment in Planting Citrus Trees and Tea Plants in Mountain Regions.  
ORIG. PUB. : Nung-yeh k'e-hsüeh t'ung-hsün, 1958, No. 2, 112-113  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Medicinal. Ethereal. Poisonous. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104881  
AUTHOR : Kozlova, T. G.  
INST. : Kirov Agricultural Institute  
TITLE : On the Biological Activity of Digitalis Grown in Kirov Oblast'.  
ORIG. PUB. : Tr. Kirovskogo s.-kh. in-ta, 1957, 12, No. 24, 107-110  
ABSTRACT : Studies of the leaves of digitalis grown on the experimental field of Kirov Agricultural Institute, showed by the method of biological standardization on cats and frogs, that the leaves of Digitalis purpurea contain in the first of growth, 53.3 frog units or 10.8 cat units and the leaves of Digitalis lanata - 132.3 frog units or 14.4 cat units. The leaves meet the requirements of

CARD: 1/2

COUNTRY :  
CATEGORY :  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104881  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : the pharmacopeia of USSR and can be utilized for therapeutic purposes. Cultivation of digitalis in Kirov oblast' is promising. -- I. A. Fortunatov

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Medicinal. Ethereal Oil. Poisonous. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104883  
AUTHOR : Kampeka, E.  
INST. : -  
TITLE : Digitalis grandiflora (Digitalis ambigua Murr., Digitalis grandifloratum Jacq.).  
ORIG. PUB. : Kauno med. inst. darbai, Tr. Kaunassk. med. in-ta, 1957, 5, 191-198  
ABSTRACT : Work was conducted for the purpose of a study of the feasibility of introducing into culture Digitalis grandiflora found in wild state in Veviyskiy rayon of Lithuanian SSR, and its utilization as raw material in the local pharmaceutical industry. Botanical description of Digitalis grandiflora is given, its occurrence in USSR, published information concerning it and its advantages in comparison with Digitalis purpurea. The studies carried out, showed the presence of cardiac glucosides

CARD: 1/2

COUNTRY :  
CATEGORY :

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104883

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : In *Digitalis grandiflora* gathered in the period of bloom. The alcohol extract prepared from it meets the requirements of GFUSH in regard to its biological activity and other characteristics. Conclusions are made regarding the feasibility of introducing *Digitalis grandiflora* into cultivation in the conditions of Lithuanian SSR and its utilization in the local pharmaceutical industry. -- T. L. Braytseva

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Medicinal. Ethereal Oi. Poisonous. M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104885

AUTHOR : Shukyurov, Ch. Z.  
INST. : -  
TITLE : Some Plants of Azerbaydzhane Containing Tannic Matter.

ORIG. PUB. : Azerb. tibb zh., 1958, No. 3, 19-22

ABSTRACT : Tannic substances have important value in medical practice as binding remedies in gastro-intestinal disorders and as antiseptics in the diseases of oral cavity, throat, etc. Analyses performed, indicated a high content of tannic matter in the flowers, leaves and bark of *Myricaria alopecroides*, Schrenk, *Coranilla varia* L. and *Lygustrum vulgare* L., widely propagated in the mountain-forest regions of Azerbaydzhane. Some anatomical characteristics of the leaves were studied. -- L. I. Lipayev

CARD: 1/1

COUNTRY : CHINA  
CATEGORY : Cultivated Plants. Medicinal. Ethereal Oil. Poisonous M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104889  
AUTHOR : Lo Ch'ien, Hu Pen-jung, Hsueh T'ao-yun, Chao Hsiang-lan.  
INST. : -  
TITLE : Hypotonic and Tranquillizing Effect of Rauwolfia  
verticillata Grown in the Province of Ku-an-tung.  
ORIG. PUB. : K'ie-hsueh t'ung-pao, 1957, No. 12, 376-377  
ABSTRACT : It is shown that 0.14% of alkali is contained in the  
root cortex of R. verticillata. Experiments on dogs and  
mice demonstrated that its preparations can be used as  
a remedy for lowering blood pressure and as a tranquillizer.  
-- L. N. Lanskoj

CARD: 1/1

COUNTRY : KOREA  
CATEGORY : Cultivated Plants. Medicinal. Ethereal Oil. Poisonous. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104895  
AUTHOR : Vorob'yeva, P. P.  
INST. : -  
TITLE : Growing Ginseng in Primorskiy Krai.  
ORIG. PUB. : Choson yakkhak, 1957, No. 2, 37-38  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : KOREA  
CATEGORY : Cultivated Plants. Medicinal. Ethereal Oil. Poisonous. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104896  
AUTHOR : Grushvitskiy  
INST. : -  
TITLE : Physiology of Ginseng Seed Germination.  
ORIG. PUB. : Choson yakkhak, 1957, No. 3, 40-43  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : BULGARIA  
CATEGORY : Cultivated Plants. Medicinal. Ethereal Oil. Poisonous. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104897  
AUTHOR : Khershkovich, Ye., Iliyeva, S., Dimitrova, Ye.  
INST. : Institute of Plant Cultivation, Bulgarian AS  
TITLE : On the Problem of the Effect of Climatic Conditions on  
the Development of Lavender and Mint in the Mountains of  
Samokov and Kazalyk.  
ORIG. PUB. : Iav. In-ta resteniev"dstvo. B"lg. AN, 1957, kn. 4,  
219-234.  
ABSTRACT : The experiment station in Samokov is situated at the  
altitude of 1030 meters above sea level and the experiment  
station in Kazanlyk - at the altitude of 380 meters above  
sea level. It has been determined that both of the  
regions investigated, are suitable for the cultivation  
of lavender and mint. However, in Samokov, the growing  
period is longer than in Kazalyk. No substantial  
difference was noted in the yield of lavender essential

CARD: 1/2

COUNTRY :  
CATEGORY :  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104897

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : oil in the plants from Samokov and Kazenlyk. The amount of total and free menthol in the mint **essential oil** obtained from Samokov, is considerably higher apparently because of higher relative humidity, less evaporation and a longer period of sunlight in this region. -- T. L. Bravtseva

CARD: 2/2

COUNTRY : RUMANIA  
CATEGORY : Cultivated Plants. Ornamental M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104902

AUTHOR : Bujorean, G.  
INST. : -  
TITLE : Rare Valuable Woody Plants in Timișoara.

ORIG. PUB. : Anuarul lucr. stiint. Inst. agron. Timișoara,  
Bucuresti, 1957, 189-194

ABSTRACT : A list is given of valuable foreign woody species growing in certain gardens and along the streets of the city of Timișoara. Some of similar species have disappeared, although they existed in Timișoara only a few years ago. It is recommended to propagate and grow the species indicated in the list in the conditions of Timișoara. -- L. I. Lipayeva

CARD: 1/1



COUNTRY : USSR  
CATEGORY : Cultivated Plants. Ornamental. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No.104903  
AUTHOR : -  
INST. : -  
TITLE : Acclimatization of Tulip Tree in USSR.  
ORIG. PUB. : Priroda, No. 5, 93-94  
ABSTRACT : Tulip tree (*Liriodendron tulipifera* L., of magnolia family, native habitat - North America) is cultivated in USSR for decorative and scientific purposes only in small numbers in Caucasus, Crimea and in the southern regions of Ukraine. Data are cited on the mensuration of height, diameter, trunk and crown of some specimens growing in USSR. A particularly abundantly fruiting tree on the Black Sea coastline of Caucasus near the village of Golovinka in Lazaverskiy rayon is described.--  
L. I. Lipayeva

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Ornamental. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No.104907  
AUTHOR : Shafrenskiy, T. P.  
INST. : Ministry of Municipal Economy, RSFSR  
TITLE : Transplanting Trees and Shrubs in Summer in Cities, 2nd Edition, Corrected and Supplemented.  
ORIG. PUB. : M., MOvo kommun. kh-va ASFSR, 1958, 122 str., ill.  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : POLAND  
CATEGORY : Cultivated Plants. Ornamental. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No. 104908  
AUTHOR : Augustynowicz, J.  
INST. : -  
TITLE : Observations on Some Small Mountain Shrubs.  
ORIG. PUB. : Wiadom. bot., 1958, 2, No. 1, 31-32  
ABSTRACT : No abstract

CARD: 1/1

COUNTRY : RUMANIA  
CATEGORY : Cultivated Plants. Ornamental. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104910  
AUTHOR : Teisanu, Tn.  
INST. : -  
TITLE : Pruning Roses.  
ORIG. PUB. : Gradina, via si livada, 1958, 7, No. 4, 42-47  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA  
CATEGORY : Cultivated Plants. Ornamental. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104914  
AUTHOR : Stursa, J., Menehould, St.  
INST. : -  
TITLE : Breeding Chrysanthemums in France.  
ORIG. PUB. : Ovocnar. a zelinar., 1958, 6, No. 3, 83-84  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Ornamental. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104916  
AUTHOR : Chigayeva, A. F.  
INST. : Siberian Botanical Garden (Tomsk University)  
TITLE : Experiment in the Growing of Perennial Ornamental Plants  
in the Conditions of the City of Tomsk.  
ORIG. PUB. : Byul. Sibirsk. botan. sada (Tomskiy un-t), 1958, vyp. 5,  
69-72  
ABSTRACT : For several years, Siberian Botanical Garden at Tomsk  
University, has been conducting the selection and study  
of the fitness for the taiga regions of Siberia of  
ornamental perennials, cultivated and wild growing. By  
1958, their collection consisted of 1003 varieties,  
assigned to 115 species and 83 genera. As the result of  
the work carried out, studies were completed on the  
growing of irises, gladioli, phloxes, dahlias and of

CARD: 1/2

COUNTRY :  
CATEGORY :

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104916

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : 52 wild-growing species from which 41 have been recommended for introduction into the cultivation of ornamental plants. -- N. S. Lebedeva

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Ornamental. M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104917

AUTHOR : Kravchenko, O.  
INST. : Ufa Botanical Garden  
TITLE : Perennial Flowers for Bashkiria

ORIG. PUB. : S. kh. Bashkirii, 1957, No. 4, 22-23

ABSTRACT : Trials of ornamental perennials, introduced from other oblasts of Soviet Union, have been conducted for a number of years at Ufa Botanical Garden. The results of this work are represented by a table encompassing 27 species of perennial ornamental plants recommended by the Garden for production utilization in the cultivation of ornamental plants in Bashkir Republic. -- A. G. Vyatkina

CARD: 1/1

COUNTRY : GDR  
CATEGORY : Cultivated Plants. Ornamental. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104918  
AUTHOR : Riehl, G.  
INST. : Institute of Ornamental Plants. Humboldt University.  
TITLE : The Influence of Leaf Area on the Rooting of Cuttings.

ORIG. PUB. : Dtsch. Gartenbau, 1957, 4, No. 3, 65-67

ABSTRACT : At the Institute of Ornamental Plants and at Humboldt University in Berlin, experiments were carried out on the influence of leaf area on the rooting of carnation cuttings with different moisture content of the substratum. It was found that a decrease in water evaporation by means of covering part of the leaf, impairs the development of the roots. This was reflected especially sharply with the optimum moisture of the substratum when the evaporation from the leaf is fully compensated. Experiments on a series of different ornamental plants with a number of parallel variants produced the same result. - S. S. Chernysheva

CARD: 1/1

COUNTRY : GDR  
CATEGORY : Cultivated Plants. Ornamental. M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104919

AUTHOR : Riehl, G.  
INST. : -  
TITLE : Application of Growth Substances for the Propagation of Plants by Cuttings at Different Levels of Moisture in the Substratum.

ORIG. PUB. : Arch. Gartenbau, 1957, 5, No. 4-5, 265-283

ABSTRACT : It is shown that treatment with alpha-naphthylacetic acid (100 mg/l) acts especially favorably on the rooting of the cuttings of Chrysanthemum indicum and Myrtus communis with low soil moisture content; with medium moisture content - less favorably, and has no effect or acts unfavorably with a high soil moisture content.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Ornamental. M  
ABS. JOUR. : RZhBiol., No. 23, 1953, No. 104921  
AUTHOR : Jesinovskaja, V., Süvalepp, A.  
INST. : Academy of Sciences, Estonian SSR  
TITLE : On the Replenishment of the Collection of Ornamental  
Plants at the Institute of Experimental Biology, Academy  
of Sciences, Estonian SSR.  
ORIG. PUB. : ENSV Teaduste Akad. Toimetised. Biol. seer, Izv. AN  
EstSSR. Ser. biol. 1957, 6, No. 3, 294-292  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Ornamental. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104925  
AUTHOR : Mantrova, Ye. Z  
INST. : Ministry of Municipal Economy, RSFSR  
TITLE : Gladioli (Experiments on Manuring).  
ORIG. PUB. : M-vo kommun. kh-va RSFSR, 1958, 59 str. ill.  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : GDR  
CATEGORY : Cultivated Plants. Ornamental. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104926  
AUTHOR : Piltz, H.  
INST. : Hamburg Institute of Applied Botany  
TITLE : Experiment in the Study of the Tolerance of Tulip Bulbs  
to Gas Treatment with Methyl Bromide.  
ORIG. PUB. : Nachrichtenbl. Dtsch. Pflanzenschutzdienstes, 1958, 10,  
No. 1, 6-7  
ABSTRACT : At Hamburg Institute of Applied Botany. experiments were  
carried out on the gas treatment of tulip bulbs with  
methyl bromide for the purpose of the control of mites  
damaging the rootlets of the bulbs, and for the determina-  
tion of permissible concentrations of methyl bromide and  
duration of the treatment. 100 bulbs of the Rose copland  
variety were subjected to the gas treatment. Treatment  
was conducted in a special chamber; the doses of methyl  
bromide were from 20 to 40 grams/m<sup>3</sup> with the duration of  
5, 6 and 10 hours. The treated bulbs were set out for

CARD: 1/2

COUNTRY :  
CATEGORY :  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104926  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : forced growth. Observations showed that treatment with  
methyl bromide even with the concentration of 20 grams/m<sup>3</sup>  
for 5 hours severely lowers the capacity of the bulbs to  
flower, and with a higher concentration disturbs the  
normal development of the leaves. -- A. G. Vyatkina

CARD: 2/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Ornamental. M  
ABS. JOUR. : RZhBiol., No.23, 1958, No.104929  
AUTHOR : Sõvalepp, A.  
INST. : Academy of Sciences, Estonian SSR  
TITLE : Results of the Experiments in Growing Double-Flowering Begonias.  
ORIG. PUB. : ENSV teaduste Akad. toimetised. Biol. seer., Izv. AN EstSSR. Ser. biol., 1957, 6, No. 4, 392-396  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Ornamental. M  
ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104931  
AUTHOR : Stroganova, T. r.  
INST. : Ministry of Municipal Economy, RSFSR  
TITLE : Asters.  
ORIG. PUB. : M., M-vo kommun. kh-va RSFSR, 1958, 59 str., ill.  
ABSTRACT : No abstract.

E N D

CARD: 1/1

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