

CHIRKOV, Yu. I.

Chirkov, Yu. I.

"The selection of green-fodder crops for the birdraising farms of the southeast." Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev. Moscow, 1956 (Dissertation for the degree of Candidate in Agricultural Sciences)

Knizhnaya letopis  
No. 15, 1956. Moscow

CHIRKOV, Yu.I.

Determining the soil temperature on the basis of the air temperature  
during planting and germination of corn. Meteor. i gidrol. no. 6:32-34  
Je '56. (MIRA 9:9)  
(Corn (Maise)) (Soil temperature) (Atmospheric temperature)

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
AEC. JOUR. : RZhBiol., No.14, 1958, No. 63359  
AUTHOR : Chirkov, Yu. I.  
INST. : Central Institute of Forecasting  
TITLE : Evaluation of the Conditions of Heat Supply for Corn in  
the Period between Planting and the Mass Appearance of the  
Sprouts.  
ORIG. PUB. : Tr. Tsentr. in-ta prognozov, 1956, vyp. 47 (74), 97-100  
ABSTRACT : In 1955, observations were conducted at the agricultural  
meteorological station Lenino-Dachnoye (Moskovskaya Oblast)  
on soil temperature and moisture and the rapidity of seed  
germination under different conditions of heat supply  
(different planting periods, distribution of plantings on  
slopes with different orientation). Data are cited on the  
calculation of the sum of effective soil temperatures above  
6.8 and 10° at the depth of the seed embedment for the  
period from planting until the mass appearance of sprouts.  
The soil temperature above 8° is effective for the germina-  
tion of corn seeds and the heat requirement of corn during

Card: 1/2

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.14, 1958, No. 63359  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : the period between planting and germination is expressed  
in the sum of effective soil temperatures (above 8°) equal  
on an average to 86° at the depth of the embedment of the  
seeds. — G. N. Chernov

Card: 2/2

49

COUNTRY : USSR M  
CATEGORY : Cultivated Plants. Cereals.  
ABS. JOUR. : RZhBiol., No.14, 1958, No. 63352  
AUTHOR : Chirkov, Yu. I.  
INST. : -  
TITLE : Significance of the Follow-up of Leaf Formation in Corn  
in the Agricultural Meteorological Service.  
ORIG. PUB. : Meteorol. and gidrologiya, 1957, No. 7, 33-37  
ABSTRACT : An attempt to determine the connection between the develop-  
ment and growth of corn in non-chernozem belt and temper-  
ature conditions. In the experiments on different varieties  
of corn at the agricultural and meteorological station  
Lenino-Dachnoye (Moscow oblast') and on the indicator plant-  
ings of VSKhV\* in 1955-1956, it was determined that the  
number of leaves is a stable variety trait and that under  
similar conditions the tempo of leaf formation in different  
varieties is identical. For the formation of an identical  
amount of leaves, the same amount of heat is required. The  
\* The All-Union Agricultural Exhibition

Card: 1/3

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COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals. M  
ABS. JOUR. : RZhBiol., No.14, 1958, No. 63352  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : totals of effective temperatures during the periods between the formation of different leaves from the stage of the 3rd leaf and until the emergence of tassels are very close with different variations in the duration of separate periods. A formula is suggested for the determination of an average total of effective temperatures. A check of the obtained relationships at a number of stations in the European part of USSR showed an increase from the north to the south in the average total of effective temperatures in one period between leaf formation. This is connected with the deficit

Card: 2/3

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Cereals.  
ABS. JOUR. : RZhBiol., No.14, 1958, No. 63352 M

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : in the humidity of atmosphere. For southern regions, it is recommended to calculate the sum of temperatures from a wetted thermometer. — I. N. Zaikina

Card: 3/3

45

AUTHOR: Chirkov, Yu. I.

50-1-1/26

TITLE: **Means for More Objective Evaluations of Corn Crops**  
(Puti povysheniya ob"yektivnosti v otsenke  
sostoyaniya posevov kukuruzy).

PERIODICAL: *Meteorologiya i Gidrologiya*, 1958, Nr 1 pp. 3-9 (USSR)

ABSTRACT: The evaluation of the state of the cultivation of corn made every ten days in the stations looking after the agricultural enterprises is of great importance for the active agrometeorological service. According to the existing regulations the general state of the cultivation of every culture is estimated as judged by the eye in comparison with the state of the plants in years of good harvest-yields. According to the data by Bleckmann which are cited by the N. A. Maksimov, Academician, the mass of the plant increases according to the rule of compound interests, in a geometrical progression. The crop is determined by the initial weight of the seed, the quantity of increase in percent according to unit of time as well as by the duration of the vegetation period of the respective plant. The ratio determined by Bleckmann may also be used for the calculation of the average percentage of the increase in green corn mass during the time of foliation as well as for

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**Means for More Objective Evaluations of Corn Crops**

the calculation of the crop of the silo mass in harvesting during the formation of panicles. The above-mentioned dependence is represented by the following formula:

$$A = a ( 1 + r )^t, \quad (1)$$

A represents the final weight (crop), a - the initial weight, r - the average increase in weight during the time of 24 hours (in percent) and t- the duration of the vegetation period (in days). Then the final and initial weight and the duration of the period are known the average increase in mass can percentally be determined:

$$r = \sqrt[t]{A/a} - 1 \quad (2)$$

When the initial weight a and the average percentage of the increase in mass are known the final weight of the plant A can be determined for any days and a curve can be plotted which expresses the speed of the increase in quantity in the crop intended. By comparing the actual increase in the green plant mass with the curve plotted according to formula (2) it

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Means for More Objective Evaluations of Corn Crops

50-1-1/26

may be determined in weight units how far the actual increase differs from the calculated one, which permits (provided that the experimental data will confirm it) to employ these methods for the quantitative estimation of the harvest-yield of the cultivation of corn. The actual increase, however, essentially differs from the calculated one when the agrometeorological conditions are very different from the average of the meteorological values which characterize the growing period of the plant. Table 1 gives the values on the absolute daily average of the increase in the green mass of corn of the sort "Odesskaya 10" and on the average percentage of the increase according to the periods of warming and decrease in temperature which were distinctly observable in the year 1957. As is to be seen from table 1 the values of the increase in the green mass in the daily average increase, constantly and independent of temperature variations, whereas the percentage of the actual daily increase changes according to temperature conditions, decreasing on cooling and increasing on warming. The experimental values confirmed the possibility of applying the

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**Means for More Objective Evaluations of Corn Crops**

50-1-1/26

calculated curve. This curve was plotted according to the index  $r$  for the quantitative estimation of the prospects for the corn crop and permit to draw the following conclusions:

1) In the period of foliation the increase in the green corn mass is on principle determined by the formula of compound interests. The final weight of the plant will in the period of the formation of panicles depend on the average percentage of increase as well as on the duration of the period.

2) When the initial weight in the phase of the third leaf, the given weight of the plant in the phase of panicle formation and the duration of the period from the third leaf to the panicle formation are known, the curve of increase may in time be plotted according to formula (2). This curve represents the calculation of the intended crop.

3) By using the calculated curve of the increase in green plant mass and the average density of the plants according to unit of area it is possible to determine the course of increase in quantity of green mass in hundredweights per hectare.

4) After determining the sum of the effective temperatures in the period from the third leaf to the pushing out of the

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Means for More Objective Evaluations of Corn Crops

50-1-1/26

panicles for a certain sort of corn the duration of the period with regard to the respective district may be calculated according to the climatic values. There are 1 figure, 3 tables, and 6 references, all of which are Slavic.

AVAILABLE: Library of Congress

1. Corn-Crop evaluation-Mathematical analysis

Card 5/5

Chirkov, Yu. I.

3(5,7)

PHASE I BOOK EXPLOITATION

SOV/2112

Tsentral'nyy institut prognozov

Voprosy sel'skokhozyaystvennoy meteorologii (Problems in Agricultural Meteorology) Leningrad, Gidrometeoizdat, 1958. 121 p. (Series: Its: Trudy, vyp. 72) Errata slip inserted for vyp. 53, 1957. 1,200 copies printed.

Sponsoring Agency: USSR. Glavnoye upravleniye gidrometeorologicheskoy sluzhby.

Ed. (Title Page): M.S. Kulik; Ed. (Inside book): L.P. Zhdanova; Tech Eds.: A.A. Soloveychik, and M.I. Braynina.

PURPOSE: This issue of the Institute's Transactions is intended for agrometeorologists and agronomists.

COVERAGE: This collection of articles discusses various aspects of agrometeorology, namely the effect of climatological conditions

Card 1/4

Problems in Agricultural Meteorology

SOV/2112

on various crops. Individual papers discuss the agrometeorological conditions surrounding the growth of spring wheat, clover, corn, millet, and buckwheat. Ye. A. Tsuberbiller discusses "agroklimat", i.e., the modified climatological conditions which prevail over a cultivated area resulting from changes in the thermal balance and vertical distribution of temperature. References accompany each article.

TABLE OF CONTENTS:

Shigolev, A.A., and B.P. Ponomarev. The Relationship Between the Number of Spikelets on a Spring Wheat Spike and Agrometeorological Conditions 3

Verigo, S.A., and Ye. K. Mamchenko. The Agrometeorological Conditions for Singlecut Red Clover Seed Growing in the Central Regions of European USSR, and a Method for Evaluating Them 12

Chirkov, Yu. I. Determining the Weight Increase of the Vegetative Mass of Corn by Measuring the Height and Diameter of Stalk 37

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Tsuberbuller, Ye. A. Developing an "Agroklimat" over a Potato Field	61
Lyubomudrova, S.V. The Use of Information on the Height of Plants in Evaluating the Agrometeorological Conditions Shaping the Growth of the Green Mass of Corn in Kazakhstan	68
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Card 3/4	

Problems in Agricultural Meteorology

SOV/2112

Kirilicheva, K.V. Results of the Investigation of the State of  
Fruit Trees in the Spring of 1956

84

AVAILABLE: Library of Congress

Card 4/4

MM/bg  
8-11-59



GHIBKOV, Yu.I, Cand Geog Sci---(diss) "Agrometeorological conditions of  
growing ~~of~~ (corn) in the central non-chnozem areas of the USSR." Mos, 1958.  
16 pp (Main Administration of Hydrometeorological Service <sup>with</sup> ~~at~~ the Council  
of Ministers USSR. Central/Institute of Forecasts), 150 copies (IL, 44-58, 120)

-15-

3(7),30(1)

AUTHOR:

Chirkov, Yu. I.

SOV/50-58-12-2/20

TITLE:

Agrometeorological Indices of the Increase in Height and Weight of Corn (Agrometeorologicheskiye pokazateli prirosta kukuruzy)

PERIODICAL:

Meteorologiya i gidrologiya, 1958, Nr 12, pp 10-14 (USSR)

ABSTRACT:

The investigations were carried out in 1955-57 in the Moscow area with corn (types: a) Odesskaya 10 and b) gibrid Kransnodarskiy, both can be ensilaged) with respect to the increase of the mass. Since water supply was in most cases sufficient the investigators tried above all to determine the connection between the intensity of the increase (height and weight) and thermal conditions. The following observations were made: The increase in height of corn (Table 1) is not sufficiently connected with the thermal conditions. It also hardly characterizes the intensity of the increase in the vegetative mass of the plants. The (absolute) increase in weight of the mass does not correspond to the course of air temperature: it is largely determined by the size of the leaf which during the time of vegetation changes by the hundred-fold. The relative increase of the mass expresses the agglomeration

Card 1/2

Agrometeorological Indices of the Increase in Height and Weight of Corn SOV/50-58-12-2/20

intensity of organic mass by the plant independent of the phase of development, the absolute dimensions and the typical features of the corn types. The fluctuations of the relative increase are in the case of sufficient water supply in very close connection with thermal conditions. This makes possible to use the heat index for characterizing the crop of vegetative corn mass. The crop of green mass can be roughly precalculated according to heat indices. The whole problem needs further study because it is very complicated. There are 1 figure, 3 tables, and 6 Soviet references.

Card 2/2

~~CHIRKOV, Yu. I.~~

Determining weight gain of the vegetable matter of corn by  
measuring the height and diameter of the stalk. Trudy TSIP  
no. 72:37-42 '58. (MIRA 12:1)  
(Corn (Maize))

CHIRKOV, Yu.I.

Phytoclimate formation in corn fields. Sbor. rab. Mosk.  
gidromet. obser. no.1:51-58 '60. (MIRA 14:11)  
(Corn(Maize))  
(Microclimatology)

CHIRKOV, Yu. I.

Evaluating agrometeorological conditions suitable for the growth  
of corn. Trudy TSIP no.98:6-17 '60. (MIRA 13:11)  
(Corn (Maize)) (Crops and climate)

CHIRKOV, Yu.I.

Securing the heat requirements of high corn yields in the non-Chernozem zone. Meteor. i gidrol. no.11:15-21 N '61.

(Corn (Maize))

(Crops and climate)

(MIRA 14:10)

CHIRKOV, Yu.I.

Agrometeorological indices of the growth of corn established on the  
basis of the surface area of leaves. Trudy TSIP no.107:35-43 '61.  
(MIRA 14:5)

(Corn (Maize)) (Meteorology, Agricultural) (Growth (Plants))



CHIRKOV, Yu.I.; SHABLEVSKAYA, V.A.

Variation of the thermal indicators of the growth of agricultural plants under conditions of vertical zonality. Meteor.i gidrol. no.8:16-21 JI [i.e.Ag.] '62. (MIRA 15:7)

1. Tsentral'nyy institut prognozov.  
(Plants, Effect of temperature on)

CHIRKOV, Yu.I.; BELUKHINA, G.V.

Calculating the moisture supply of corn fields in various  
climatic zones of the U.S.S.R. Trudy TSIP no.131:3-12 '63.  
(MIRA 16:9)

CHIRKOV, Yu.I.

Use of phenological data for characterizing the germination conditions of variety and hybrid corn differing in their time of ripening. Mat. Fen. kom. Geog. ob-va SSSR no.1:21-26 '62. (MIRA 17:3)

AL'TSHULER, O.V.; VINOGRADOVA, O.M.; ROGINSKIY, S.Z.; CHIRKOV, Yu.N.

Possibility of chromatographic separation in gas-liquid columns  
without the use of an inert gas carrier. Dokl. AN SSSR 152  
no.4:892-895 0 '63. (MIRA 16:11)

1. Institut khimicheskoy fiziki AN SSSR. 2. Chlen-korrespondent  
AN SSSR (for Roginskiy).

SHCHEGLOVA, O.P.; CHIRKOVA, A.A.

Roughness coefficients of rivers in the Chirchik Basin. Trudy  
Sred.-Az.nauch.-issl.gidrometeor.inst. no.7:92-102 '61.

(MIRA 15:3)

(Chirchik Valley--Hydrology)

CHIRKOVA, A.F.

"The fox in Bulgaria" [in Bulgarian] by Neno Atanasov. Reviewed  
by A.F.Chirkova. Zool.shur. 39 no.1:153-155 Ja '60.  
(MIRA 13:5)

(Bulgaria--Foxes) (Atanasov, Neno)

CHIRKOVA, A. F.

Hydrophobia .

Rabies in foxes. Veterinaria 29 No. 5, 1952.

Monthly List of Russian Accessions, Library of Congress,  
August 1952. UNCLASSIFIED.

CHIRKOVA, A.F.

Materials on the dynamics of the fox population in the Voronezh  
Province in connection with forecasts of their issue. Trudy VNIIO  
no.13:20-31 '53. (MLRA 7:5)  
(Voronezh Province--Foxes) (Foxes--Voronezh Province)



CHIRKOVA, A. F. (Moscow)

"Terms of Fox Reproduction."

report presented at a Phenological Conference, Leningrad, Nov 1957,  
by the USSR Geographical Soc.

CHIRKOVA, A.F.

SARCOPTES

"The Spreading of Mange among Foxes in the USSR, in Relation to Geographic Factors", by A.F. Chirkova, Zoologicheskii Zhurnal, No 5, May 1957, pp 773-786.

According to the author, the first cases of mange in foxes in the south-western steppe of the USSR were recorded in 1919. This disease then spread to both the steppe and forest-steppe zones, invaded the zone of deciduous forests and the prevalent part of the mixed forest zone, but never penetrated into the semidesert belt. The author says that the agent of this disease is "one of the forms of the genus *Acarus* - *Sarcoptes* adjusted to the life of many species of both domesticated and wild animals" 1). During the 35 years since the first cases of mange in foxes were reported, the distribution of this infection increased simultaneously with other infections in the USSR.

The article concludes that immediate and continuing measures are needed in order to control the infection of mange.

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SARCOPTES

1) [ Humans may transmit mange to foxes (cf. B.G. Averin, "On Foxes and Hares Suffering from Mange", Ukrayins'kyi Myslyvets' ta Rybalka, No 1, January 1928). The transmission of itch mites of the family of Sarcoptidae to man is also possible.]

*Institut geografii AN SSSR*

Card 2/2

- 65 -

CHIRKOVA, A.F., ROMANOVA, N.P., SEMAL'GAUZEN, V.I.

The epidemiology of alveolar echinococcosis in the tundra zone  
of European Russia. Med. parazit. i parazit. bol. 27 no.2:150-152  
Mr-Apr '58 (MIRA 11:5)

1. Iz Vsesoyuznogo nauchno- issledovatel'skogo instituta  
zhivotnogo syr'ya i pushniny TSentrosoyusa.  
(ECHINOCOCCOSIS, epidemiology  
alveolar echinococcosis in Russia (Rus))  
(LUNGS, diseases  
alveolar echinococcosis, epidemiol. in Russia (Rus))

CHIRKOVA, A.N.

KALITA, N.

Useful manual for workers ("Methodic instructions for establishing technical standards in enterprises of the meat and dairy products industry" by I.D. Eliseev, A.N. Chirkova, L.M. Mironov. Reviewed by N. Kalita). *Mias.ind.SSSR* 28 no.4:60 '57. (MLRA 10:7)

1. Moskovskiy tekhnologicheskii institut myasnoy i molochnoy promyshlennosti.  
(Meat industry) (Eliseev, I.D.) (Chirkova, A.N.) (Mironov, L.M.)

FEOKTISTOV, Aleksandr Mikhaylovich, kand. ekon. nauk; CHIRKOVA, A.N.,  
spets. red.; NOZDRINA, V.A., red.; SATAROVA, A.M., tekhn. red.

[Organization of wages in the dairy industry] Organizatsiia truda  
i zarabotnoi platy v molochnoi promyshlennosti. Moskva, Pishche-  
promizdat, 1962. 199 p. (MIRA 15:7)  
(Wages--Dairy industry)

FEOKISTOV, Aleksandr Mikhaylovich; VASIL'YEVA, Aleksandra Fedorovna;  
CHIRKOVA, A.N., retsenzent; BOGATAYA, L.M., red.; KISINA,  
Ye.I., tekhn. red.

[Establishing the level of mechanization and automation of  
production operations in the dairy industry] Raschet urov-  
nia mekhanizatsii i avtomatizatsii proizvodstvennykh pro-  
tseessov v molochnoi promyshlennosti. Moskva, Pishcheprom-  
izdat, 1963. 26 p. (MIRA 16:6)

(Dairy industry--Equipment and supplies)  
(Automation)

GONCHAROV, Gerasim Ivanovich; PANCHURIN, Pavel Nikolayevich;  
CHIRKOVA, Antonina Nikitichna

[Composition of assembly drawings of instruments] Sostav-  
lenie sborochnykh chertszhei priborov; uchebnoe posobie.  
Leningrad, Leningr. elektrotekhn. in-t, 1964. 119 p.  
(MIRA 18:12)



CHIRKOVA, A.S.

Use of biostimulin to prevent separation of sutures of the perineum.  
Akt.vop.perel.krovi no.7:193-194 '59. (MIRA 13:1)

1. Institut akusherstva i ginekologii AMN SSSR.  
(BLOOD AS FOOD OR MEDICINE) (SUTURES) (PERINEUM)

CHIRKOVA, G.A.

Improved limiters for cutting-off machines. Obm.tekh.opyt. [MLP]  
no.26:38-39 '56. (MIRA 11:11)  
(Cutting machines)

YERMOLENKO, I.N.; CHIRKOVA, G.N.

Quantitative microdetermination of carboxyl groups in cellulosic materials by the luminescent method. Zhur.anal.khim. 18 no.8: 994-998 Ag '63. (MIRA 16:12)

1. Institute of General and Inorganic Chemistry, Academy of Sciences, Byelorussian S.S.R., Minsk.

**CHIRKOVA Kh.**

**F**

2336. THE PRESENCE OF TWO DINANTIAN COAL BEARING FORMATIONS IN THE URALS. Chirkova H F (Doklady Akad Sci U.R.S.S. 1944 44, 289-291). The stratigraphy and palaeontology of the deposits are described. A table correlating the Lower Carboniferous of the Western and Eastern slopes of the Urals is included.

ABR-SLA METALLURGICAL LITERATURE CLASSIFICATION

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SOV/137-58-7-14014

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p4 (USSR)

AUTHOR: Chirkova, K. I.

TITLE: ~~Beneficiation of Iron Ores of the Pudozhgorskoye Deposit (Obogashcheniye zheleznykh rud Pudozhgorskogo mestorozhdeniya)~~

PERIODICAL: [Tr.] Vses. n.-i. i proyekt. in-ta mekhan. obrabotki poleznykh iskopayemykh, 1957, Nr 102, pp 134-141

ABSTRACT: The Fe ores of this deposit are complex, containing not only 23-29% Fe, but 6-7%  $TiO_2$  and 0.28-0.40%  $V_2O_5$ . The dissemination of the ore and gangue minerals is fine or minute. Magnetic concentration of the raw ore in two stages at an initial size of 2-0 mm and a final size of 0.2-0 mm makes it possible to separate a combined Fe-Ti-V concentrate containing  $\geq 50\%$  Fe, 12.6%  $TiO_2$  and 0.9%  $V_2O_5$ , subsequent recovery being, respectively, 66-67, 72, and 77%. Sintering of the resultant concentrate is readily accomplished on the pallet belt, with air suction through the layer of charge. The sintering rate is 14 mm/min. The Ti and V may be extracted as separate products by further metallurgical and perhaps hydrometallurgical treatment. 1. Iron ores--Processing 2. Sintering--Applications

A.Sh.

Card 1/1

ASHITKOV, Yu.R.; SMIRNOV, Ye.A.; CHIRKOVA, K.I.

Industrial flotation tests of oxidized Krivoy Rog iron ores. Obog.  
rud 6 no.4:13-18 '61. (MIRA 15:1)  
(Krivoy Rog Basin--Flotation)

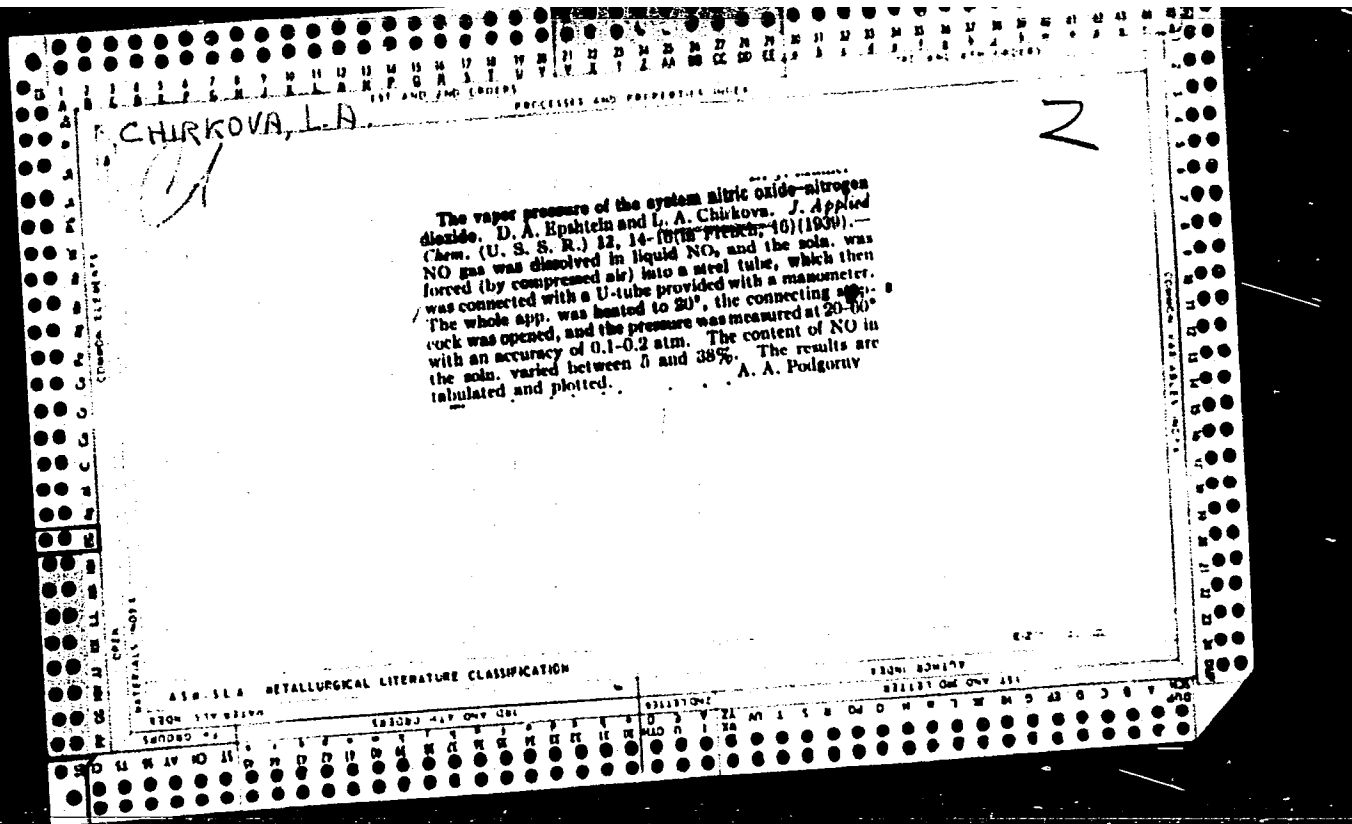


CHIRKOVA, K. V.

Chirkova, K. V.

"Auxiliary screening methods as one way of visual aid in history lessons in the fifth through seventh classes of intermediate school." Min Education RSFSR. Leningrad State Pedagogical Inst imeni A. I. Gertsen. Leningrad, 1956 (Dissertation for the Degree of Candidate in Pedagogical Sciences.)

Knizhnaya letopis'  
No. 21, 1956. Moscow.



CHIRKOVA, L. A.

Apr 1947

USSR/Chemistry - Chlorides  
Chemistry - Nitrates

"Topochemical Conversion of Sodium Chloride and Potassium Chlorides Into Nitrates," Prof  
D. A. Epshteyn, Dr Tech Sci; L. A. Chirkova, Candidate Chem Sci; I. N. Papulova, 5 pp

"Khim Prom" No 4, 101-105, 1947

Describes results of studies on speed of interrelation of gaseous form and liquid form  
of nitrogen dioxide with solid chlorides, and studies which have been conducted on model  
apparatus. Data obtained for kinetic similarities, operated by chain reactions. No study  
of qualitative characteristics made.

PA 58T15

BIRKOVSKIY, Yu.Ye., red.; GRIGORASHCHENKO, A.Ye., red.; GRISHCHENKO,  
I.I., red.; GUTMAN, L.B., red.; KOROVITSKIY, L.K., red.;  
MEL'NIK, M.N., red.; PAVLOV, A.V., red.; PAP, A.G., red.;  
CHIRKOVA, L.A., red.

[Toxoplasmosis; transactions of the scientific conferences  
in Kiev, December 21 - 23, 1962, and in Odessa, April  
25 - 27, 1963] Toksoplazmoz; trudy nauchnykh konferentsii,  
sostoiavshikhsia v g. Kieve 21-23 dekabria 1962 g. i v  
g. Odesse 25-27 apreliia 1963 g. Pod red. M.N.Mel'nika i  
A.G.Pap. Kiev, (MIRA 18:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut okhrany  
materinstva i detstva im. P.M.Buyko.

KOGAN, B.S.; KRASNOV, B.I.; RAYEVSKAYA, M.A.; CHIRKOVA, L.P.; YARTSEVA,  
L.A.; SHUKHARDIN, S.V., red.; UL'YANOVA, O.G., tekhn. red.

[History of technology; a bibliography of works published in  
1956] Istorija tekhniki; bibliograficheskii ukazatel' 1956.  
Pod red. S.V.Shukhardina. Moskva, Izd-vo Akad. nauk SSSR,  
1963. 141 p.

(Bibliography--Technology)

(MIRA 16:7)

CHIRKOVA, MA.

U.S.

Composition of fir oil from the branches of the Siberian fir,  
 M. A. Chirkova, L. I. Sukhomakova, and  
 P. Kuznetsov. *Trudy Khim.-Mikr. Leti. Akad. Nauk  
 S.S.S.R. Zapadno-Sibirskii Filial*, No. 7, 33-51 (1953) -  
 Fir oil I obtained in 1.2-2.2% yield (calcd. on wt. of  
 branches) by steam distn. of young branches of Siberian fir,  
 is the only raw material used for the synthesis of optically  
 active medicinal camphor (II). I contains 30-44% bornyl  
 acetate, yielding by sapon. borneol. The latter oxidized or  
 dehydrated yields levorotatory II. The compn. of I  
 was studied. The following compds. and their cryst. derivs.  
 were isolated: camphor 1.9-3.3, *l*-pinene 18.6-29.7, *l*-cam-  
 phene 9.4-15.7, *β*-carene 4.1-9.5, *l*-*β*-phillandrene 3.6-7.3,  
 terpinolene 0.6-1.4, sesquiterpene and sesquiterpeneol 2.5-  
 4.8, *l*-borneol 1.2-3.0, and bornyl acetate 20.4-31.5%.

Elizabeth Burabash

*CHIRKOVA, M.A.*

USSR/Chemical Technology - Chemical Products and Their I-9  
Application. Wood Chemistry Products, Hydrolysis Industry

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2665  
Author : Pentegov, A.P., Chirkova, M.A.  
Inst : Academy of Sciences USSR  
Title : Utilization of the Needles of Siberian Fir for the Production of Fir Oil and Camphor.  
Orig Pub : Sb. statey po rezul'tatam issled. v obl. lesn. kh-va i lesn. prom-sti v tayezhn. zone SSSR. M.-L., AN SSSR, 1957, 283-288  
Abstract : Yield of fir oil from needles and bark of different fir species amounts ot 0.20-2.20% and 1.4-2.0%, respectively. Content of bornyl acetate in the needle oil is 29.4-37.4%, in the bark oil 17.9-20.2%. The composition of fir oil was investigated and its physico-chemical characteristics

Card 1/2

USSR/Chemical Technology - Chemical Products and Their Application. Wood Chemistry Products. Hydrolysis Industry I-9

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2665

as well as its components are described. Composition of fir bark oil differs from that of the oil derived from the needles only in quantitative proportions of the components. Oil from the bark of freshly cut trees contains more bornyl acetate than the oil derived from bark that has been stored.

Card 2/2



PENTEBOV, A.P. [deceased]; CHIRKOVA, M.A.

Composition and properties of fir oil from the bark of Siberian fir.  
Trudy Khim.-met. inst. Sib. otd. AN SSSR no. 13:11-18 '59.

(MIRA 14:1)

(Fir)

(Oils and fats)

PENTEGOV, A.P. [deceased]; PENTEGOVA, V.A.; CHIRKOVA, M.A.

Composition of the resin of Siberian fir (*Abies sibirica*).  
Trudy Khim.-met. inst. Sib. otd. AN SSSR no. 13:5-10 '59.

(MIRA 14:1)

(Oleoresins)

(Fir)

PENTEGOVA, V.A.; GHIRKOVA, M.A.

Composition of a heavy cedar oil. Trudy Khim.-met. inst. Sib. otd.  
AN SSSR no. 13:47-53 '59. (MIRA 14:1)  
(Cedar) (Oils and fats)

FERDINAND, Ya.M. (Rostov-na-Donu); Prinsipalni uchastiye: MARISOVA, A.P.;  
BRAYNINA, R.A.; MARGULIS, L.A.; MYASNENKO, A.M.; KOVALEVSKAYA,  
I.L.; TELESHEVSKAYA, E.A.; SOBOLEVA, S.V.; KALININA, K.I.;  
KOVALEVA, N.S.; IVANOVA, M.K.; ARENDER, B.A.; KUCHERENKO, R.A.;  
MANATSKOVA, K.S.; GLEYNIKOVA, L.T.; KIBARDINA, Yu.A.;  
GRIGOR'YEVA, K.S.; SEMENIKHINA, L.G.; CHERNYKH E.I.; DOROFEYEVA,  
V.M.; SHEVCHENKO, Ye.N.; ABRAMOVA, O.K.; SKUL'SKAYA, S.D.;  
PETROVA, Z.I.; MAKHLINOVSKIY, L.I.; KUZ'MINA, A.I.; AL'TMAN, R.Sh.;  
MARDERER, R.G.; YENGALYCHEVSKAYA, L.N.; CHIRKOVA, M.N.; TERESHCHENKO,  
N.I.; SHELKOVNIKOVA, M.A.; PROKOPENKO, V.V.; BEKLEMESHEVA, Ye.;  
BARANOVA, T.V.

Effectiveness of specific prophylaxis with alcohol divaccine  
against typhoid and paratyphoid B fever in school-age children.  
Zhur. mikrobiol., epid. i immun. 41 no.1:23-27 Ja '64.

(MIRA 18:2)

CHIRKOVA, N.

ca

27

Composition and origin of the "esters" in distilled glycerol. Jl. N. Tyutunikov, Z. Pleshkova, and N. Chirkova. Trudy Khark'kov. Khim.-Tekhnol. Inst. im. S. M. Kirova 5, 61-64(1946).—The esters present in distd. glycerol were identified as glycerides of both higher, water-insol., and of lower fatty acids, including  $HCO_2H$ . These so-called "esters" actually include, in addn. to true esters, also Ca and alkali metal salts of these fatty acids and of lactic acid and its derivs.; these salts are carried over mechanically by the glycerol vapors, and are responsible for the yellowish color of distd. glycerol. The  $HCO_2H$  is formed by reaction between acrolein and  $H_2O$  vapor; formates and lactates may be formed by reaction between boiling glycerol and alkali. Owing to alcoholysis, fatty acids, from  $AcOH$  up, are also present in the free state. The depressing effect of excess caustic alkali in crude glycerol on the "ester" content of distd. glycerol is due to a depression of the alcoholysis of the fatty acid salts, to a binding of volatile acids and to transformation of aldehydes into nonvolatile compds.

N. Thon

KAMINSKAYA, P.A.; inzh.; CHIRKOVA, N.A., inzh.

Processing sunflower oil of high acidity. Masl.-zhir.prom. 27 no.1:  
30 Ja '61. (MIRA 14:1)

1. Khar'kovskiy shirovoy kombinat.  
(Sunflower seed oil)

*CHIRKOVA, N. N.*

USSR/Virology. Virus of Man and Animals

E

Abs Jour : Ref Zhur-Biol., No 13, 1958, 57417

Author : ~~Chirkova N. N.~~

Inst : Ufa Scientific-Research Institute of Vaccines  
and Sera

Title : Comparative Characteristics of Different Anti-  
gens of Measles in the Neutralization Reac-  
tion Under the Control of AVB.

Orig Pub : Tr. Ufimsk. n.-i. in-ta vaktzin i syrovorotok,  
1957, vyp. 4, 217-224

Abstract : No abstract.

Card 1/1

12

Chirkova, N.P.

137-58-5-9324

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 76 (USSR)

AUTHORS: Manchenko, L.V., Chelokhsayev, L.S., ~~Chirkova, N.P.~~

TITLE: Thallium Distribution in the Dust Collecting System of a Lead Plant (Raspredeleniye talliya po tsekhu pyleulavlivaniya svintsovogo zavoda)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 11-12, pp 51-53

ABSTRACT: Tl losses, as well as the distribution of this element in the dust-collecting system, were investigated. It was established that total Tl losses throughout the dust-collecting section of a lead plant may attain 24.9%, but that they can be reduced by one-half by means of extracting Tl from the drain water and by discontinuing the practice of discharging gases into the atmosphere without preliminary purification. It is essential that roasted dust from electrofilters be systematically processed in the cadmium shop. This will sharply increase the proportion of Tl in the finished products.

G.S.

Card 1/1

1. Thallium--Determination
2. Thallium--Separation
3. Lead--Production



137-58-6-11983

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 113 (USSR)

AUTHOR: Manchenko, L.V., Chirkova, N.P.

TITLE Recovery of Mercury at the Leninogorsk Complex Metals Kombinat (Polucheniye rtuti na Leninogorskom polimetallicheskom kombinat)

PERIODICAL Byul. tsvetn. metallurgii, 1957, Nr 23, pp 18-20

ABSTRACT A method was developed for processing of sublimates containing Hg, Se, and Tl. The process is based on the difference in vapor pressure of these elements and their compounds and consists of the following procedures: After mixing the sublimates with  $\text{Na}_2\text{CO}_3$  (40% of the dust by weight) the Hg is distilled out of the mixture at a temperature of 400-500°C. The  $\text{SeO}_2$  reacts with the  $\text{Na}_2\text{SO}_3$  to form a nonvolatile sodium selenate. the basic bulk of the Tl does not undergo sublimation at that temperature. An installation consisting of a retort furnace is employed in this process; the temperature of the furnace is maintained automatically. Metallic Tl flows along an inclined condenser tube into a collector and then into a sump where it is preserved under water until the condenser has been

Card 1/2

137-58-6-11983

Recovery of Mercury at the Leninogorsk Complex Metals Kombinat

completely drained. Sublimates processed in this installation contain an average amount of 3.5% Hg. The content of Hg in the cinder varies from traces to 0.1% and constitutes 0.019% on the average; this corresponds to an extraction of 97.18%. 85-98% of the Se and 81-100% of the Tl remain in the cinder.

G.S.

1. Mercury--Recovery    2. Minerals--Separation    3. Sodium compounds--Chemical reactions  
4. Selenium oxides--Chemical reactions

Card 2/2

SOV/136-58-8-7/27

**AUTHORS:** Manchenko, L.V. and Chirkova, N.P.

**TITLE:** Production of Mercury at the Lead Works of the Leninogorsk Polymetallic Kombinat (Polucheniye rtuti na svintsovom zavode Leninogorskogo polimetallicheskogo kombinata).

**PERIODICAL:** Tsvetnyye Metally, 1958, Nr.8, pp.28-34 (USSR)

**ABSTRACT:** At the Leninogorsk Kombinat mercury was detected in appreciable quantities in various process by-products (sinter dust, etc.), and during a laboratory investigation of thallium distillation (Table 1). Temperature was found to have a great effect on the distillation of mercury (Fig.1 and Table 2). The work was continued on a larger scale (Fig.2): in one series of tests 700 g charges of sublimate were distilled at 450-470°C; in a second, 500 g charges were heated with 40% by weight of soda at 500°C. There is now a full-scale mercury-distilling installation, designed on the results of the above experiments, at the Leninogorskiy combine, and operating experience has been accumulated. The optimal conditions were found to be:

Card 1/2

SOV/936-58-8-7/27

Production of Mercury at the Lead Works of the Leninogorskiy  
Polymetallic Kombinat

40 and 3%, respectively, of soda and saltpetre, of the weight of sublimate; gas-space temperature in retorts, 450°C; duration of roasting 12 hours; suction after the retorts 8-12 mm water; exit-gas temperature not over 20°C. Under these conditions the mercury recovery was 95.5%; mercury loss in the cinder 0.4% (0.01% Hg in the cinder), the Tl and Se recovery in the cinder 95.5 and 99%, respectively. There are 2 figures, 4 tables and 5 Soviet references.

1. Mercury--Production
2. Mercury--Temperature factors
3. Mercury --Test results

Card 2/2

CHIRKOVA, N. P.

18.3100

TITLES  
SOV/149-60-1-11/21

AUTHORS: Sushkov, K. V., Kurda, V. T., Ganchenko, V. M., Neiman, V. G., Putilin, Yu. M., Sashin, Yu. G., Chirkova, N. P., Yalozs, V. G.

TITLE: Experimental Electromelting of Lead Concentrates With Soda Under Semi-Industrial Conditions

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Tavstnaya metallurgiya, 1960, Nr 1, pp 84-90 (USSR)

ABSTRACT: This article describes the application of an experimental method of lead smelting with soda under semi-industrial conditions developed by K. V. Sushkov, Cand. of Techn. Sciences, (Collection of Scientific Works, KAZOMI, Nos 10, 12, 16, 1955). Tests were carried out by the experimental shop and lead plant (svintotsvyvy zavod) of Leninogorsk Combine (Leninogorskii Kombinat) and by Kazakh Mining and Metallurgical Institute (Kazakhskiy gornometallurgicheskiy institut). Smelting was done in a single-phase electrical furnace with a 0.8 m<sup>2</sup> bottom area, 250 kv transformer

Card 1/9

ASSOCIATION: Kazakh Mining and Metallurgical Institute. Chair of General Metallurgy and Metallurgical Furnaces  
Card 8/9

(Kazakhskiy gornometallurgicheskiy institut. Kafedra obshchey metallurgii i metallurgicheskikh pechey)

SUBMITTED: June 8, 1959

CHIRKOVA, N.P.

Brief results of operations by the research department of the  
Leninogorsk Lead Plant. Trudy Ak. GIMII AN Kazakh.SSR 9:245-246  
'60 (MIRA 14:6)

1. Leninogorskiy polimetallicheskiy kombinat.  
(Leninogorsk--Lead--Metallurgy)

MALKIN, I.M.; CHIRKOVA, M.P.; NEYMAN, V.G.; KARLINSKAYA, L.S.; GANCHENKO,  
V.M.; POKIDYSHEV, M.I.; CHERNYSEV, Yu.P.; PLATONOV, G.F.;  
MIKHAYLOV, N.I.; ABDEYEV, M.A.; MILLER, O.G.; BUTENKO, N.S.;  
DYUYSEKIN, Ye.K.

Treatment of zinc-bearing slags in electric furnaces with coke  
conductivity. TSvet. met 33 no. 12:15-23 D '60. (MIRA 13:12)

1. Leninogorskiy polimetallicheskiy kombinat (for Malkin, Chirkova,  
Neyman, Karlinskaya, Ganchenko, Pokidyshev, Chernyshev). 2. Altay-  
skiy gorno-metallurgicheskiy institut AN KazSSR (for Platonov,  
Mikhaylov, Abdeyev, Miller, Butenko, Dyuysekin).  
(Zinc--Electrometallurgy) (Electric furnaces)

PLATONOV, G.F.; ABDEYEV, M.A.; BUTENKO, N.S.; SIZOV, Yu.M.; VERSHIHINA, V.V.;  
MIKHAYLOV, N.I.; SIDORENKO, T.A.; DYUYSEKIN, Ye.K.; PRIMETOV, M.D.;  
KUZHAKHMETOV, E.I.; GANCHENKO, V.M.; SHISHKIN, V.I.; CHIRKOVA, N.P.;  
IL'INA, I.I.; BERDUS, Yu.M.

Two-stage method of treating slag and sinter cake in electric furnaces.  
Trudy Akad. Nauk Kazakh. SSR 14:4-13 '63. (MIRA 16:9)  
(Nonferrous metals--Electrometallurgy)



CHIRKOVA, O.F.

Unit for automatic welding of the upper framework of the gondola-  
car body. Biul. tekhn.ekon.inform.Gos.nauch.-issl.inst.nauch.i tekhn.  
inform 17 no.11:32-33 N '64. (MIRA 18:3)

GRIGOR'YEVA-BERESHTEIN, A. G., kand. med. nauk; KARAPETYAN, A. Ye.,  
podpolkovnik meditsinskoy sluzhby, kand. med. nauk; SHCHERBAKOV,  
I. F., podpolkovnik meditsinskoy sluzhby; CHIRKOVA, O. O.;  
ZASYPKIN, V. Ya., starshiy leytenant meditsinskoy sluzhby

Effectiveness of immunisation with live vaccine against parotitis  
in the focus of infection. Voen.-med. zhur. no.12:63 D '61.  
(MIRA 15:7)

(MUMPS—PREVENTIVE INOCULATION)

SHIKINA, Ye.S.; MESHALOVA, V.N.; PEYSEL', S.G.; CHIRKOVA, O.O.

Experience in the production of antimeasles horse serums and  
gamma globulin. Trudy Len.inst.epid.i mikrobiol. 22:55-63 '61.  
(MIRA 16:2)

1. Iz virusologicheskoy laboratorii Leningradskogo instituta  
epidemiologii i mikrobiologii (rukovoditel' - chlen-korrespondent  
AMN SSSR prof. A.A. Smorodintsev) i immunologicheskoy laboratorii  
Leningradskogo instituta vaktsin i syvorotok (rukovoditel' -  
prof. A.V. Ponomarev).

(GAMMA GLOBULIN)      (SERUM)      (MEASLES)

DUMOVA, A.M.; CHIRKOVA, O.O.

Use of antibiotics of the tetracycline series in experimental radiation sickness. Antibiotiki 8 no.8:723-728 Ag '63.

(MIRA 17:5)

1. Laboratoriya farmakologii i fiziologii (zav. A.V. Loginov)  
Leningradskogo nauchno-issledovatel'skogo instituta antibiotikov.

ACCESSION NR: AP4003199

S/0241/63/008/012/0050/0055

AUTHOR: Dumova, A. M.; Chirkova, O. O.

TITLE: Experimental data on increasing rat resistance to radiation sickness by preirradiation administration of tetracyclines

SOURCE: Meditsinskaya radiologiya, v. 8, no. 12, 1963, 50-55

TOPIC TAGS: antibiotic, tetracycline, oxytetracycline, radiation sickness, radioresistance, radioprotector

ABSTRACT: The radioprotective effects of antibiotics in the form of tetracycline preparations were studied in 3 groups of white male rats. Before irradiation, growth rates and leukocyte levels of the animals were determined. The first group was the control group, the second group received oxytetracycline orally in doses of 150 mg/kg twice daily for 15-18 days, and the third group received tetracycline in the same doses and for the same length of time. Animals taken from all groups were X-irradiated after 24 hrs, after 3 days, and after 5 days with single 700-r doses (RUM-11 unit, 15 ma, 180 kv, focal length 30 cm, 68 r/min). Bacteriological investigations of organs, leukocyte counts, and autopsies were made. Life expectancy

ACCESSION NR: AP4003199

was also determined. Results show that oral administration of oxytetracycline and tetracycline in daily doses of 300 mg/kg for 15-18 days before irradiation increases survival of animals and weakens basic radiation sickness symptoms. No significant quantitative differences are found between the microflora of animals with antibiotics administered before irradiation and of those without antibiotics. Prolonged administration (15-18 days) of oxytetracycline to healthy animals is accompanied by qualitative changes in the microflora of the lungs and intestines. The increased radioresistance of the animals cannot be explained by the effect of the antibiotics on bacteremia because radioresistance can still be found in the animals irradiated 3 and 5 days after the antibiotics were last administered. Preliminary administration of tetracyclines appears to strengthen the protective mechanisms of the organism to various pathogenic factors of radiation sickness resulting in less severe radiation sickness symptoms and earlier regeneration. Orig. art. has: 1 table, 1 figure.

ASSOCIATION: Laboratoriya farmakologii i fiziologii Leningradskogo nauchno-issledovatel'skogo instituta antibiotikov (Pharmacology and

Card 2/3

ACCESSION NR: AP4003199

Physiology Laboratory of the Leningrad Scientific-Research Institute  
of Antibiotics)

SUBMITTED: 29Jan63

DATE ACQ: .09Jan64

ENCL: 00

SUB CODE: AM

NO REF SOV: .008

OTHER: 001

Card 3/3

LOGINOV, A. V.; DUMOVA, A. M.; CHIRKOVA, O. O.; VOLINSKAYA, S. L.

"Increased nonspecific resistance of the organism, caused by antibiotics."

report submitted for Antibiotics Cong, Prague, 15-19 Jun 64.

Sci Res Inst of Antibiotics, Leningrad.



CHIRKOVA, C.O.

Effect of oxytetracycline on the absorption function of the  
reticuloendothelial system. Antibiotiki 10 no.8:730-733  
Ag '65. (MIRA 18:9)

1. Laboratoriya farmakologii (zav.- A.V. Loginov) Leningradskogo  
nauchno-issledovatel'skogo instituta antibiotikov.

LOGINOV, A.V.; CHIRKOVA, O.O.

Distribution and excretion of oxytetracycline in adapted and nonadapted animals. Antibiotiki 10 no.6:526-531 Je '65. (MIRA 18:7)

1. Laboratoriya farmakologii (zav. A.V.Loginov) Leningradskogo nauchno-issledovatel'skogo instituta antibiotikov

CHIRKOVA, R.A.; ILYALETDINOV, A.N.

Use of Aktyubinsk phosphorites as fertilizers. Vest. AN Kazakh. SSR  
21 no.6:76-80 Je 65. (MIRA 18:7)

CHIRKOVA, R.M.

Partial solar eclipse of December 14, 1955, as observed in Ashkhabad.  
Astron. tsir. no. 166:4 Ja '56. (MLRA 917)

1. Astrofizicheskaya laboratoriya, Ashkhabad.  
(Eclipses, Solar--1955)

S/035/62/000/010/037/128  
A001/A101

AUTHORS: Krisenko, L. I., Chirkova, R. M.

TITLE: Spectrophotometry of the K-line of Ca<sup>+</sup> in the flare of August 30, 1960

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 10, 1962, 51-52, abstract 10A363 ("Tsirkulyar Astron. observ. Khar'kovsk. un-t", 1961, no. 24, 25 - 30)

TEXT: A flare of class I in the region of a sunspot was observed on August 30, 1960, with a spectrograph of the Khar'kov Observatory (diameter of the solar image on the slit was 34 mm, dispersion was 4 Å/mm). The line K of Ca II was studied photometrically. The authors note small displacements of flare emissions close to the sunspot, and also the presence in some spectra of an additional emission displaced to the wing and belonging, apparently, to a surge. The line wings are markedly raised. Central intensities and equivalent widths of emission reversal in the flare are presented.

E. G.

[Abstracter's note: Complete translation]  
Card 1/1

3.1770

41818  
S/835/61/000/024/002/002  
EO32/E114

AUTHORS: Barabashov, N.P., Ivanchenko, V.M., and Chirkova, R.M.  
TITLE: Radio observations of the partial solar eclipse of  
February 15, 1961, at the wavelength  $\lambda \approx 1.5$  m  
SOURCE: Khar'kov. Universytet. Astronomichna observatoriya.  
Tsirkulyar. no.24, 1961, 36-38

TEXT: On February 15, 1961, the Khar'kovskaya astronomicheskaya observatoriya (Khar'kov Astronomical Observatory) carried out radio observations of the solar eclipse in the 1.5 m range. The aim was to obtain the distribution of radio intensity over the solar disc and then use it to obtain information about the nature of solar radio emission. The measurements were carried out by a compensation method using a 6 m diameter parabolic mirror. The high frequency amplifier included the low-noise 6H14П (6N14P) tube in a cascade circuit and the five-stage intermediate frequency amplifier incorporated 6Ж4 (6Zh4) tubes. The intermediate frequency was 31 Mc/s and the bandwidth was  $\Delta f_{0.5} = 4$  Mc/s. 2x

In the figure, curve II shows the intensity of solar radio emission as a function of time; curve I shows the ratio of the unclipped  
Card 1/0 2

Radio observations of the partial... S/835/61/000/024/002/002  
E032/E114

area of the solar disc to the area of the entire disc as a function of time. Because of unfavourable weather conditions no spectro-heliographic observations were possible and use was therefore made of data supplied by M.N. Gnevyshev of the Kislovodskaya Gornaya stantsiya (Kislovodsk Mountain Station). Inspection of the emission curve showed that a group of plages and sunspots on the disc was recorded during the eclipse in the form of a rapid reduction in the intensity, which confirms an enhanced radio emission from them. The partial eclipse at Khar'kov began at 10 hours 0.2 minutes, Moscow time. At 10 hours 17 minutes, three plages were covered. The region of these plages also included three groups of sunspots. After this the intensity remained constant until 10 hours 47.3 minutes. The eclipse of a central plage which did not include sunspots apparently had no effect on the radio emission. At 11 hours 33.6 minutes, the western active regions re-appeared and there was a simultaneous increase in the radio intensity. If the interval between 10 hours 17 minutes and 10 hours 46 minutes is ignored, then the variation in the radio emission is very similar to curve I. There is 1 figure.

Card 2/8 2

YEZERSKAYA, V.A.; KRISENKO, L.I.; CHIRKOVA, R.M.

Changes in the intensity of chromospheric flocculi during  
the development of active areas on the sun. TSir. Astron.  
obser. Khar. un. no.26:20-34 '63. (MIRA 17:5)



ACC NR: AF7000659

(A)

SOURCE CODE: UR/0126/66/022/005/0766/0771

AUTHORS: Panfilova, L. M.; Gol'dshteyn, M. I.; Susloparov, G. D.; Chirkova, S. N.

ORG: Ural NII of Ferrous Metals (Ural'skiy NII chernykh metalloov)

TITLE: Investigation of processes of dispersion hardening of steel caused by precipitation of nitride phases

SOURCE: Fizika metalloov i metallovedeniye, v. 22, no. 5, 1966, 766-771

TOPIC TAGS: alloy steel, nitrogen, vanadium, chromium, aluminum / 30Kh2 steel, 30Kh2A steel, 30Kh2AF steel, 30Kh2AYu steel, 30Kh2AYuF steel

ABSTRACT: A study of the nitride phases precipitated during quenching of steel 30Kh2 containing additions of nitrogen, vanadium, and aluminum was carried out. The study supplements the results of L. M. Panfilova and M. I. Gol'dshteyn (Sb. Problemy vanadiya v chernoy metallurgii, Trudy UralNIICHM, Sverdlovsk, 1966, str. 231). The specimens were prepared in an induction furnace of 100-kg capacity. The chemical analysis of the specimens was carried out after the method of N. M. Popova and A. F. Platonova (Zavodskaya laboratoriya, 1953, No. 7, 28). The results are presented in graphs and tables (see Fig. 1). The strength limit of the specimens as a function of the quenching temperature was determined, and the results are tabulated. Photographs of the microstructure of specimens are presented. It was found that additions of vanadium and aluminum to steel 30Kh2 alloyed with nitrogen increase the strength

Card 1/3

UDC: 669.15-194:539.4

ACC NR: AP7000659

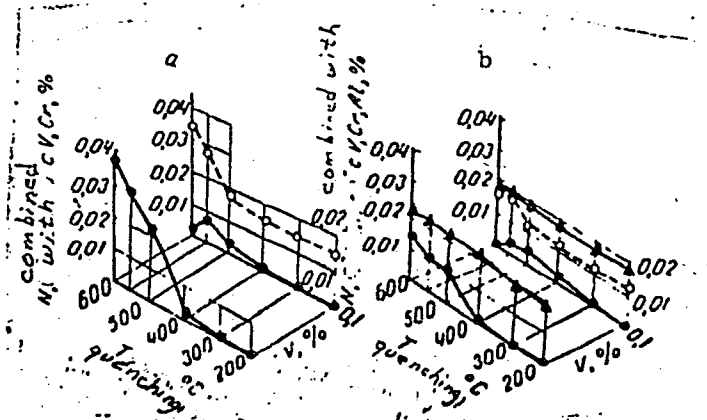


Fig. 1.

Change in the nitrogen content combined with chromium, vanadium, and aluminum during the quenching process of chromium steels: (a) steel 30Kh2A and 30Kh2AF, open circles - V(CN), shaded circles - CrN; (b) steels 30Kh2AYu and 30Kh2AYuF, open circles - V(CN), shaded circles - CrN, triangles - AlN

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ACC NR: AP7000659

limit of the steel by 28%. It is concluded that the presence of vanadium and aluminum causes a finely dispersed precipitate of vanadium nitride in the steel. Orig. art. has: 2 tables and 3 graphs.

SUB CODE: 11/ SUBM DATE: 26Mar66/ ORIG REF: 003/ OTH REF: 001

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PETROV, K.M.; DYAKONOV, V.I.; FADEYEV, I.G.; SEMENENKO, P.P.; KRYUKOV, L.G.;  
Prinimali uchastiye: PASTUKHOV, A.I.; SHISHKINA, N.I.;  
PAZDNIKOVA, T.S.; CHIRKOVA, S.N.; KAREL'SKAYA, T.A.; LOPTEV, A.A.;  
DZEMYAN, S.K.; ISUPOV, V.F.; BELYAKOV, A.I.; GUDOV, V.I.;  
SUKHMAN, L.Ya.; SLESAREV, S.G.; GOLOVANOV, M.M.; GLAGOLENKO, V.V.;  
ISUPOVA, T.A.; ZYABLITSEVA, M.A.; KAMENSKAYA, G.A.; POMUKHIN, M.G.;  
UTKINA, V.A.; MANEVICH, L.G.

Vacuum treatment of alloyed open hearth steel. Stal' 22 no.2:113-  
117 F '62. (MIRA 15:2)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov  
(for Pastukhov, Shishkina, Pazdnikova, Chirkova, Karel'skaya,  
Loptev, Dzemyan). 2. Metallurgicheskiy kombinat im. A.K. Serova  
(for Isupov, Belyakov, Gudov, Sukhman, Slesarev, Golovanov,  
Glagolenko, Isupova, Zyablitseva, Kamenskaya). 3. 6-y Gosudar-  
stvennyy podshipnikovyy zavod (for Pomukhin, Utkina, Manevich).  
(Steel—Metallurgy)  
(Vacuum metallurgy)

GOL'DFARB, Ya.L.; TAYTS, S.Z.; CHIRKOVA, T.S.; BELEN'KIY, L.I.

New method of synthesizing macrocyclic compounds. Report No.6:  
Some transformations of [10]- $\alpha$ -cyclo-1-thienone. Izv. AN SSSR  
Ser. khim. no.11:2055-2060 N '64 (MIRA 18:1)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

CHIRKOVA, T. V. and KATKOV, B. P.

"Cultivation of Ensilage Sunflower on Irrigated Land," Korm. baza, 3, No.4,  
1952

M

Country : USSR  
Category: Cultivated Plants. Fodders.

Abs Jour: RZhBiol., No 11, 1958, No 49001.

Author : Katkov, B.P.; Chirkova, T.V.  
Inst : Chkalovskiy Sci. Res. Inst. of Dairy and Meat  
Cattle Raising.  
Title : Biological Characteristics in the Development of  
Pumpkin and Feed Water Melon.

Orig Pub: Tr. Chkalovskiy n.-i. in-t molochno-myasn.  
skotovodstva, 1956, vyp. 10, 109-115.

Abstract: This article describes a study of diurnal growth increment in length in the vines of water melon and pumpkin of Pepo and Maxim species. The fruit setting and increase in the weight of the fruit were also studied. In the Pepo pumpkin, a relatively early

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Country : USSR

Category: Cultivated Plants. Fodders.

M

Abs Jour: RZhDiol., No 11, 1958, No 49001

intensive blossoming and fruit setting is noted;  
a later blossoming and fruit setting, in the Maxin  
pumpkin, and the latest - in feed water melon.  
Difference in the development of reproductive organs  
is noted. To obtain high yields of the pumpkin of  
the Pepo species, denser sowings are recommended  
(2 x 1 m), for the Maxin species - 3 x 1 m. --  
Ye. T. Zhukovskaya

Card : 2/2



Country : USSR

M

Category: Cultivated Plants. Fodders.

Abs Jour: RZhDiol., No 11, 1958, No 49000

Author : Chirkova, T.V.

Inst : Chkalovskiy Sci. Res. Inst of Dairy and Meat  
Cattle Raising.

Title : The Agrotechny for Fodder Beets With Irrigation in  
the Arid Regions of Chkalovskaya Oblast.

Orig Pub: Tr. Chkalovskiy n.-i. in-t molochno-myasn. skotovodstva,  
1956, vyp. 10, 121-136

Abstract: According to the data of many years (1937-1945), the  
most productive varieties in Chkalovskaya Oblast  
are Barres and Elkendorfskaya yellow (700-800 cwt/  
/ha.). Method of growing and of transplanting the

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Cultivated Plants. Fodders.  
Abs Jour: RZhDiol., No 11, 1958, No 49000

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seedlings has a great effect on the yield. Pre-sowing watering is recommended, and after transplanting the seedlings - regular waterings every 4-5 days until the plants have taken root firmly. Later, waterings should be carried out every 15-20 days (the irrigation rate is 400-500 m<sup>3</sup>/ha). The greatest fodder beet crop was obtained with a root bed of 45 x 20 cm (1456 cwt/ha.). With regard to fertilizers, manure produced the best results. From mineral fertilizers, good results were obtained that N be applied during all periods of the growth of the beet., K - during the period of vegetation, P - during the second

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: 2/3

M-94

M

Country : USSR  
Category: Cultivated Plants. Fodders.

Abs Jour: RZhBiol., No 11, 1958, No 49000

half of the vegetation. Some attention is devoted  
to the beet seed growing in Chkalovskaya Oblast. --  
Ye. G. Zhukovskaya

Card : 3/3

J

Country : USSR  
Category: Soil Science. Mineral Fertilizers

Abs Jour: RZhBiol., No 14, 1958, No 63068

Author : Katkov, B.P.; Chirkova, T.V.  
Inst : Chkalov Scientific-Research Institute of  
Milk-Meat Animal Husbandry.

Title : On the Problem of the Effectiveness of Mineral and  
Organic Fertilizers in the Steppe Zone of Zavelzh'ya

Orig Pub: Tr. Chkalovskiy n -i. in-t molochno-myasn skoto-  
vodstva, 1956, vyp. 10, 157-162

Abstract: In 1953 on the experimental farm of the Chkalov  
Scientific-Research Institute of Milk-Meat Animal  
Husbandry, a study was made of the effectiveness  
of various doses of mineral and organic fertilizers  
on the harvest of the green mass and the yield of

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