

BONDARENKO, N.

Motor vehicles

b. GAZ

The Gor'kiy Motor Vehicle Plant has worked out an awards system whereby 7,000 rubles is paid for every suggestion which reduces the weight of a GAZ-51 truck by one kg, and 8,000 rubles is paid for every suggestion which reduces the weight of the Volga passenger car by one kg. -- N. Bondarenko, Chief Technologist, Gor'kiy Motor Vehicle Plant (Minsk, Sovetskaya Belorussiya, 4 Jul 58) ✓

SOURCE: CIA, FDD #4, 4 Dec 58, Unclassified "USSR Industrial Equipment"

ehcb

BOEDARENKO, N.A.

The LAM-3 machine for removing poles of electric transmission lines.
Transp. stroi. 10 no.11:53-54 N '60. (MIRA 13:11)
(Electric lines--Poles)

BONDARENKO, N.A.

ETN-123 trench excavator. Transp.stroi. 11 no.3:30-31 Mr '61.
(MIRA 14:3)

1. Glavnyy mekhanik tresta Transsvyaz'stroy.
(Excavating machinery)

BONDARENKO, N.A., inzh.; RATNER, A.M., inzh.; SOKOLOV, K.A., inzh.;
GURANOV, N.P., inzh.; SORIN, N.M., inzh.; TARAKANOV, G.P., inzh.;
IVANOV, S.M., inzh.; NIRK, A.D., inzh.; ROVKAKH, S.Ye., kand.tekhn.
nauk; FILIPPOV, V.V., inzh.; KHAYKIS, L.B., kand.tekhn.nauk;
LEBEDEV, V.I., inzh.; VELICHKIN, Ye.A., inzh., red.; KHITROV, P.A.,
tekhn.red.

[Handbook for mechanics of a construction project] Spravochnik
mekhanika stroitel'nogo uchastka. Pod red. K.A.Sokolova. Moskva,
Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshchenia, 1960.
619 p. (MIRA 14:3)
(Mechanical engineering) (Road machinery)
(Railroads--Construction)

BONDARENKO, Nikolay Antipovich; TELYATNIKOV, B.I., inzh., retsenzent;
TIKHONEVICH, B.Z., inzh., retsenzent; NOVIKAS, M.N., red.;
VOROB'YEVA, L.V., tekhn. red.

[Mechanization of work in communications cable-laying operations] Mekhanizatsiia rabot pri prokladke kabelei sviazi.
Moskva, Izd-vo "Transport," 1964. 157 p. (MIRA 17:4)

MENIOVICH, B.I.; BONDARENKO, N.A.; SKIBA, L.P.

Complete automation of the testing of coal and products of coal preparation. Koks i khim. no.1:53-58 '64.

(MIRA 17:2)

1. Dneprodzerzhinskiy koksokhimicheskiy zavod (for Meniovich).
2. Ukrainskiy proyektno-konstruktorskiy i nauchno-issledovatel'skiy institut po obogashcheniyu i briketirovaniyu ugley (for Bondarenko, Skiba).

GANDEL'SMAN, I.M., inzh.; BONDARENKO, N.A., inzh.; BELOSLYUDOV, A.B.,
inzh.

Programmed, multiple-position, charge mixture proportioning device.
Lit. proizv. no.12:14-15 D '65. (MIRA 18:12)

BONDARENKO, N.F.

Use of gramicidin C on the surgeons hands. Nov.khir.arkh. no.3:109
My-Je '58 (MIRA 11:9)

1. Khirurgicheskoye otdeleniye Izmail'skoy gorodskoy bol'nitsy
Chernomorsko-Azovskogo vozdravotdela. Adres avtora: Izmail, Odesskoy
obl., ul. Kutuzova, d. 16, bolnitsa.
(GRAMICIDIN)

SOV/124-58-1-912

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 1, p 122 (USSR)

AUTHORS: Nerpin, S. V., Bondarenko, N. F.

TITLE: Investigation of the Mechanical Properties of Thin Layers of Liquid
by Means of the Filtration Method (Issledovaniye mekhanicheskikh
svoystv tonkikh slojev zhidkosti metodom fil'tratsii)

PERIODICAL: Tr. Leningr. in-ta inzh. vod. transp., 1956, Nr 23, pp 36-42

ABSTRACT: Bibliographic entry

Card 1/1

AUTHORS: Nerpin, S. V., Bondarenko, N. F. 20-134-4-42/63

TITLE: An Investigation of the Mechanical Properties of Thin Liquid Layers in Concentrated Emulsions by the Filtration Method (Issledovaniye mekhanicheskikh svoystv tonkikh sloyev zhidkosti v kontsentrirrovannykh emul'siyakh metodom fil'tratsii)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 114, Nr 4, pp. 833-836 (USSR)

ABSTRACT: Previous investigations have shown that the normal viscosity in low volatile, non-polar liquids is conserved up to the hard surface, while in polar ones this is the case up to the limit of the solvate layers. For the study of the mechanical properties of the volatile liquids (electrolytic aqueous solutions) the authors have used a filtration viscosimeter. As small pore filters they used highly concentrated benzol-water emulsions, stabilized with saponin. The system is well visible in the microscope. If the temperature drops to 0° and +5°C, the benzol drops become hard, while the water layers remain liquid. The computations for saturated concentrated emulsions, prepared with a saponin solution of 10% in water, have shown that the average thickness of the water layers

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An Investigation of the Mechanical Properties of Thin Liquid 20-114-4-42/63
Layers in Concentrated Emulsions by the Filtration Method

is 10^{-5} . The small thickness of the layers assures the low value of the viscosity tensions in the liquid during the filtration at easily measurable drops of pressure. Thus it is made possible to discover minute plastic displacement tensions in the liquids, which do not subordinate themselves fully to Newton's Law; they rather follow the well-known law of Schvedov-Bingham. The principal conclusions of the tests indicate that the water contained in the dropseparating thin layers possesses a normal viscosity which is also proper to a liquid in the volume. Besides that, traces of plasticity may be found. These conclusions are true for the layers which separate the liquid drops and for those which separate the hardened benzol particles from one another. In order to examine the influence of the electrolytic content of the aqueous solution upon the thickness of the layers, a series of tests was made with emulsions which had been prepared with aqueous solutions with different electrolytic content (NaCl), that is from 10^{-4} N to 10^{-1} N. The results show that at an increase of the electrolyte concentration the filtration flow decreased. The dispersion of the system increases. To this corresponds the diminution of the average thickness of

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An Investigation of the Mechanical Properties of Thin Liquid Layers in Concentrated Emulsions by the Filtration Method 20-114-4-42/63

the water layers. The decrease in the permeability of the emulsion samples takes place only up to a certain concentration value of the electrolyte of a quantity of 10^{-2} . At higher concentrations the filtration flow again increases. The explanation is as follows: Beside the decrease in the thickness of the water layers at an increase of the concentration of the electrolyte there also occurs a decrease in the limit value of the splitting pressure developed by them. These two factors deteriorate the conditions for the breaking up of the drops, as the mobility of the liquid decreases with a diminution of the layers in them. This reduces the possibility of the formation of new separation layers between the drops, while the decreasing power barrier which prevents the confluence of the drops limits the degree of dispersion. The deterioration of the emulgation conditions has to bring about a detention of the aqueous solution in "Gibbs' thickenings" and an increase of their share in the filtration, which causes an increase in the permeability of the system. The equilibrium of the layers has a thermodynamical character. There are 3 figures, 1 table, and 8 references, 8 of which

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An Investigation of the Mechanical Properties of Thin Liquid 20-114-4-42/63
Layers in Concentrated Emulsions by the Filtration Method

are Soviet.

ASSOCIATION: Leningradskiy institut inzhenerov vodnogo transporta
(Leningrad Institute for Water Transport Engineers)

PRESENTED: January 24, 1957, by A. N. Frumkin, Member, Academy of
Sciences, USSR

SUBMITTED: January 22, 1957

Card 4/4

BONDARENKO, N.F., inzh.

Electrosmotic consolidation of soils in the anode zone. Trudy
LIVT no.19:42-47 '61. (MIRA 14:9)
(Electroosmosis) (Soil mechanics)

KOTOV, A.I., kand. tekhn. nauk, dotsent; BONDARENKO, N.F., kand. tekhn.
nauk

Interaction of piles with the earth during the cathodic
protection of the system. Trudy LIVT no.47:34-40 '63.
(MIRA 17:9)

KOTOV, A.I., kand.tekhn.nauk, dotsent; BONDARENKO, N.F., inzh.

Electrosmotic effect on soils during the construction of pile
foundations. Trudy LITV no.19:33-41 '61. (MIRA 14:9)
(Piling (Civil engineering)) (Electroosmosis)

KOTOV, A.I., kand. tekhn. nauk, dotsent; BONDARENKO, N.F., kand. tekhn. nauk; NERPIN, S.V., doktor tekhn. nauk, prof.

Studying the stability of lateral resistance of a pile in electrically stabilized soil. Trudy LIVT no.66:49-56 '64.

(MIRA 19:2)

BR

ACCESSION NR. AP4031189

S/0056/64/046/004/1500/1502

AUTHOR: Bondarenko, N. G.; Yeremina, I. V.; Talanov, V. I.

TITLE: Beam phase structure of a ruby laser

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 4, 1964, 1500-1502

TOPIC TAGS: beam phase structure, phase structure, ruby laser, ruby crystal, dielectric inhomogeneity, transparent dielectric, laser output analysis

ABSTRACT: An experimental method is described which makes possible a visual interpretation of the beam phase structure of any coherent oscillation. The method is based on the wave interference of the original beam and a partly scattered beam after it has passed through a dielectric transparent inhomogeneity whose dimensions are small enough in comparison with the beam width. The interference picture provides reliable information regarding the structural characteristics of a beam phase front. The scattered radiation at a distance $d \gg a^2/\lambda$ from an inhomogeneity (where a is the dimension of the inhomogeneity)

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ACCESSION NR. AP4031189

geneity), represents a spherical wave whose phase center is located in the inhomogeneity. Interference pictures were obtained at various distances (75, 155, and 900 cm) from the external mirrors of a ruby generator ($\lambda=0.694\mu$) with a crystal 7.2 cm long and 0.6 cm in diameter. The experimental results indicate the importance of this method of phase measuring for the study of lasers. Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: Radiofizicheskiy institut gor'kovskogo gosudarstvennogo universiteta. (Institute of Radio Physics, Gorky State University)

SUBMITTED: 09Dec63

DATE ACQ: 07May64

ENCL: 00

SUB CODE: PH

NO REF SOV: 001

OTHER: 002

Card 2/2

ACCESSION NR: AP4039732

S/0141/64/007/002/0313/0327

AUTHOR: Bondarenko, N. G.; Talanov, V. I.

TITLE: Some aspects of the theory of quasi-optical systems

SOURCE: IVUZ. Radiofizika, v.7, no. 2, 1964, 313-327

TOPIC TAGS: quasioptics, waveguide propagation, waveguide diffraction, mirror configuration, wave field, diffraction analysis

ABSTRACT: In order to find a unified approach to the analysis of quasi-optical systems, the diffusion approximation is used to describe wave beams in such systems and to determine the laws of conversion of wave beams by infinite-plane field transformers. Some general laws of propagation of wave beams are derived with the aid of wave beams and with the aid of geometrical optics, and it is shown that the problem of existence of stable (periodic) configuration of wave beams in a specified sequence of converters can be solved on the basis of a purely geometric analysis of the passage of a light beam through a system. A configuration of wave beams that ensures the transfer of energy between two specified apertures of converters with minimum losses is derived. The connection between such optimal configurations and the field distributions in beam waveguides and resonators is investigated.

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ACCESSION NR: AP4039732

Particular attention is paid to systems of confocal converters, and it is shown that at the fundamental mode, such a system has minimum diffraction losses compared with all other phase converters. A method is presented for describing oblique beam propagation in a mirror waveguide, and some characteristics of such waveguides are described. The diffraction of the beam on the open end of a plane waveguide, at frequencies close to cutoff, serves as one example of the equation of transverse diffusion. It is concluded also that the method based on the solution of the equation of transverse diffusion is applicable not only to systems with quasi-plane wave beams, but also to systems in which the wave fronts differ appreciably from quasi-plane in the approximation of geometrical optics. "The authors are grateful to B. Z. Katsenelenbaum for useful discussions and remarks." Orig. art. has: 59 formulas and 6 figures.

ASSOCIATION: Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete (Scientific Research Radio Physics Institute, Gorky University)

SUBMITTED: 02Jul63

ATD PRESS: 3084

ENCL: 00

SUB CODE: OP, EC

NR REF SOV: 005

OTHER: 011

Card: 2/2

BONDARENKO, N.G., inzhener.

Corn planter for precise seeding. Nauka i pered.op. v sel'khoz. 6
no.12:28 D '56. (MIRA 10:1)
(Planters (Agricultural machinery))

SUBJECT:

USSR/Farming

AUTHOR:

Bondarenko, H.G., Senior Scientific Contributor to the
Ukrainian Machine Testing Station

TITLE:

Valuable Improvements (Tsennyye Uovershenstvovaniya)

PERIODICAL:

Nauka i Zhisn' - May 1957, No 5, p 49 (USSR)

ABSTRACT:

Dibbling of corn and similar plants in squares at regular intervals meant a striking progress to the Soviet agriculture, but the process itself remained rather complicated. Preliminary marking of the field was essential and the measuring wire had to be shifted by hand to obtain straight rows. Seven to eight persons were needed to perform the work. Last year an improved system for shifting the measuring wire was successfully introduced in the Ukraine. The wire is no longer shifted in its whole length but in parts. This is done by means of a device attached to the sowing machine. It ensures exact dibbling in 70 x 70 cm squares without special preliminary marking of the field. The simplified method requires only two persons to perform the entire work. In the spring of 1957 this method will be applied for sowing corn in the entire country.

Card 1/2

TITLE: Valuable Improvements (Tsennyye Usovershenstvovaniya) 25-5-20/35
The article contains 4 pictures.

ASSOCIATION:

PRESENTED BY:

SUBMITTED:

AVAILABLE:

Card 2/2

BONDARENKO, N.G.
BONDARENKO, N.G., inzh.

Comparative tests of corn drills. Mekh.i elek.sots.sel'.khoz.
no.6:45-50 '57. (MIRA 10:12)

1. Ukrainskaya mashinoispytatel'naya stantsiya.
(Drill (Agricultural implements))

~~DON TARENKO, N.G.~~
KUKTA, G.M., inzh.; BONDARENKO, N.G., inzh.

Results of testing checkrow corn planters. Sel'khoz mashina
no.11:18-21 N '57. (MIRA 10:12)

1. Ukrainskaya mashinoisputatel'naya stantsiya.
(Planters (Agricultural machinery)--Testing)

KUKTA, G.M., kand.tekhn.nauk; BONDARENKO, N.G., inzh.

Methodology for a comparative evaluation of high-precision planters.
Mekh. i elek. sots. sel'khoz. 20 no.1:13-16 '62. (MIRA 15:2)

1. Ukrainskaya mashinoispytatel'naya stantsiya.
(Planters (Agricultural machinery))

BONDARENKO, Nikolay Grigor'yevich [Bondarenko, M.H.]; SINYAVSKIY,
Yuriy Illarionovich [Syniavs'kyi, IU.I.]; YEROSHENKO,
T.G. [I Eroshenko, T.H.], tekhn. red.

[Problems in the study of agricultural machinery] Zadachnyk
po sil'skohospodars'kii tekhnitsi. Kyiv, Derzhsil'hospvydav
URSR, 1962. 197 p. (MIRA 16:5)
(Agricultural machinery—Problems, exercises, etc.)

BONDARENKO, N.G.; TALANOV, V.I.

Some problems in the theory of quasi-optical systems. Izv. vys.
ucheb. zav. radiofiz. 7 no.2:313-327 '64 (MIRA 18:1)

1. Nauchno-issledovatel'skiy radiofizicheskiy institut pri
Gor'kovskom universitete.

BONDARENKO, N. I.

Bondarenko, N. I. -- "Lombardy Poplar and New Forms of It." Min Higher Education USSR, Ukrainian Order of Labor Red Banner Agricultural Acad, Kiev, 1955 (Dissertation for the Degree of Candidate in Agricultural Sciences)

SO: Knizhnaya Letopis', No. 24, Moscow, Jun 55, pp 91-104

M

Country : USSR
Category: Cultivated Plants. Grains.

Abstr Jour: RZhBiol., No 22, 1958, No 100238

Author : Bondarenko, N.I.
Inst : Moscow Agric. Academy im. K.I. Timiryazev
Title : Effect of Under-the-Root Cultivation of the
Sowings on the Yield of Wheat.

Orig Pub: Dokl. Mosk. s.-kh. akad. im. K.I. Timiryazeva,
1957, vyp. 28, 83-89.

Abstract: Under-the-root cultivation of the sowings
of winter and spring wheats and wheat-quack
grass hybrids with tractor cultivators equipped
with flat-cutting claws, to the depth of 20
centimeters, improves the water cycle and
nitrogen-phosphorus nutrition of the plants;

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Bondarenko, N.I.

SOV/19-58-7-149/392

5(3)

AUTHORS: Bondarenko, N.I., and Kurachinskiy, L.I.

TITLE: ~~Method of Eliminating Salt and Water from Crude Oil~~
(Sposob obessolivaniya i obezvozhivaniya nefti)

PERIODICAL: Byulleten' izobreteniy, 1958, Nr 7, p 36 (USSR)

ABSTRACT: Class 23b, 105. Nr 114109 (587546 of 10 December 1957).
Method of eliminating salt and water from crude oil by using de-emulsifiers and heat, with a water solution of trisodiumphosphate used for de-emulsifier to cut the costs of the process and increase its effectiveness.

Card 1/1

KOMAROV, I.M., inzh.; BONDARENKO, N.I., inzh.; FOMITSKIY, I.V., mekhanik

TKZM-3,5 tractor-drawn mower for green crops. Mekh. sil'. hosp.
10 no.3:25-26 Mr '59. (MIRA 12:6)
(Mowing machines)

BONDARENKO, N.I., kand.khim.nauk

Polarographic study of thiocyanate complexes of cadmium in water-ethyl alcohol solutions. Trudy Kish.sel'khoz.inst. 26:81-87 '62.
(MIRA 16:5)

(Cadmium thiocyanate) (Polarography)

MITROFANOV, M.G.; BONDARENKO, N.I.; MAKAR'YEV, S.V.

Technological process of dewaxing diesel fuels with crystal
carbide. Trudy GrozNII no. 15:137-142 '63. (MIRA 17:5)

MITROFANOV, M.G.; BONDARENKO, N.I.; KOZHEVNIKOV, G.S.

Operation of an industrial electric cleaning plant. Trudy
GrozNII no. 15:143-147 '63. (MIRA 17:5)

SERGIYENKO, I.N., prof.; BONDARENKO, N.I.

Treatment of thyrotoxicosis with merdazolyl. Uch. zap. Stavv.
gos. med. inst. 12:326-327 '63. (MIRA 17:9)

1. Klinika gospital'noy terapii (zav. prof. I.N. Sergiyenko)
Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

BONDARENKO, N. I.

BONDARENKO, N. I.: "The polarographic behavior of the hydrogen ion in individual and mixed solvents." Min Higher Education USSR. Kishinev State U. Chair of Physical Chemistry. Kishivev, 1956. (Dissertation for the Degree of Candidate in Chemical Sciences.)

SO: Knizhnaya Letopis', No. 26, 1956

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~~CONDARENKO~~

Polarographic behavior of the hydrogen ion in different individual and mixed solvents. I. Solutions in water, in methyl alcohol and in mixtures of methyl alcohol and water. P. I. Migal, Ya. I. Tur'yan, and N. I. Bondarenko (State Univ. Mashmet). *Zhur. Fiz. Khim.* 36: 2003-10 (1960). The polarographic waves for H^+ were studied in MeOH, H_2O , and MeOH + H_2O solns. of HCl in the following inert electrolytes: KCl, LiCl, NH_4Cl , KCNS, $NaClO_4$. The diffusion current, i_d , was proportional to the H^+ concn., c_{H^+} , in aq. solns. (concn. of inert electrolyte 0.1 and 1M) and in MeOH solns. (1M concn. of electrolyte). The proportionality was not observed in MeOH solns. which are 0.1M with respect to the electrolyte. The curve for the const. of the diffusion current vs. compn. of mixed solvent shows a min. for small H_2O concn. (2-5% by vol.). The mobility of the H_3O^+ ion was calcd. for the MeOH solns. The exptl. results show that the half-wave potential does not depend on c_{H^+} in either H_2O or MeOH solns.

J. Rovnar Lench

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Bondarenko, N. I.

I. Polarographic behavior of hydrogen peroxide in various pure and mixed solvents. II. Solutions in ethanol, butanol, acetone, and their mixtures with water. U. K. Migal, Ya. I. Tur'yan, and N. I. Bondarenko (State Univ., Rostov). *Zhurn. Fiz. Khim.*, 36, 2301 (1962), Vol. C.A. 51, 7180g. — The polarographic behavior of HCl in EtOH, BuOH, Me₂CO, and their mixts. with H₂O was investigated in the presence of various concns. of LiCl, NaClO₄, KCNS (in EtOH), and LiCl (in BuOH and Me₂CO) as supporting electrolytes. The diffusion current was found to be proportional to the HCl concn. (C_{HCl}) in EtOH and BuOH,

when $C > 1$ mole/l.; in Me₂CO the diffusion current was larger in higher C_{HCl} at all HCl concns. A min. was found in the diffusion current-mixed solvent curve. The mobility of H₃O⁺ ions in EtOH was equal to the K⁺ and Na⁺ mobilities at the min. diffusion current. In BuOH, HCl behaved like a weak acid in the presence of 0.1M LiCl. In EtOH, with the supporting electrolytes present, the half-wave potential was independent of C_{HCl}. The "polarographic H-overvoltage" (the half-wave H potential against H electrode) (Vitek, C.A. 49, 5139g) in BuOH and MeOH in the presence of all the supporting electrolytes except KCNS was lower than in H₂O by 0.1-0.2 v., while it was higher in EtOH than in water in the presence of KCNS.

N. I. Bondarenko

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SOV/67-59-4-18/19

AUTHORS:

Bondarenko, N. I., Engineer, Kalinin, V. V., Engineer,
Samarin, B. P., Engineer, Vagin, Ye. V., Candidate of Chemical
Sciences, Petukhov, S. S., Candidate of Technical Sciences

TITLE:

Answers to Readers

PERIODICAL:

Kislodod, 1959, Nr 4, p 53 (USSR)

ABSTRACT:

Question (A. Ye. Bykov, Tekeli, Kazakhskaya SSR): How do you explain the pressure increase in the second stage of the air compressor in the SK-05 apparatus? Answer (N. I. Bondarenko): By the resistance increasing with the passage of air through the decarbonizer. Question (L. G. Konyukh, Kemerovo): Does the USSR manufacture oxygen compressors with capacities of 150 - 200 m³/hour? Answer (V. V. Kalinin): Yes, the types 2RK-2/4 (120 m³/hour) and 2RK-4/5 (220 m³/hour). Question (N. V. Volodina, Stalinogorsk, Tula oblast'): Is oxygen stored in wet gas containers? Answer (B. P. Samarin): Yes, according to the plan of the GPI "Proyektstal'konstruktsiya" and the GIAP, since 1957. 1st Question (V. N. Ol'khovik, Pervomayskiy, Tula oblast'): Which are the purifying methods used today for

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Answers to Readers

SOV/67-59-4-18/19

raw crypton? Answer (Ye. V. Vagin, S. S. Petukhov): The principal methods are enumerated and explained. 2nd Question: Is it possible to use NaOH instead of KOH to dry the crypton concentrate? Answer: It is, but under certain conditions.

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5(4)

SOV/78-4-5-21/46

AUTHORS: Tur'yan, Ya. I., Bondarenko, N. I.

TITLE: The Polarographical Investigation of the Thiocyanate Complex of Cadmium in Aqueous and Aqueous-methanolic Solutions (Polyarograficheskoye issledovaniye rodanistykh kompleksov kadmiya v vodnom i vodno-metanol'nykh rastvorakh)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 5, pp 1070-1076 (USSR)

ABSTRACT: The composition and the stoichiometric stability constants of the thiocyanate complexes of cadmium in aqueous and aqueous-methanolic solutions were investigated by the polarographic method at various CH_3OH -concentrations and an ionic strength 2. The polarographical character of cadmium in aqueous and aqueous-methanolic solutions with 2 molar $\text{NH}_4\text{NO}_3 + \text{NH}_4\text{CNS}$ is shown in table 1. In an aqueous solution the following four cadmium-thiocyanate complexes were found: $[\text{Cd}(\text{CNS})]^{+}$, $[\text{Cd}(\text{CNS})_2]^{+}$, $[\text{Cd}(\text{CNS})_3]^{-}$ and $[\text{Cd}(\text{CNS})_4]^{2-}$. The stability constants of these complexes agree well with the data of reference 8. Table 2 shows the angle coefficient of the straight line $\varphi = \log \frac{i}{i_d - i}$

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SOV/78-4-5-21/46

The Polarographical Investigation of the Thiocyanate Complex of Cadmium in Aqueous and Aqueous-methanolic Solutions

in an aqueous and aqueous-methanolic solution in 2-molar $\text{NH}_4\text{NO}_3 + \text{NH}_4\text{CNS}$. The dependence of the diffusion current of cadmium upon the level of the mercury reservoir in 2-molar NH_4CNS was investigated, and the results are given by table 2. The dependence of the potential of the cadmium-semiwave on the logarithm of the concentration of addenda in an aqueous and aqueous-methanolic solution is shown by figure 1. It was shown that with an increase of the methanol concentration the stability of the complex ions increases. The dependence $\text{pK} \sim \frac{1}{\epsilon}$ of the complex $\text{Cd}(\text{CNS})$, $\text{Cd}(\text{CNS})_2$ and $\text{Cd}(\text{CNS})_3$ is indicated by a line, the inclination of which increases with an increase of the coordination number. The dependence of the logarithm of the stoichiometric stability constants in the cadmium-thiocyanate complexes $\text{Cd}(\text{CNS})$, $\text{Cd}(\text{CNS})_2$ and $\text{Cd}(\text{CNS})_3$ upon the reciprocal value of the dielectric constant of the aqueous-methanolic solution is given by figure 2. The composition and the stability constants of the thiocyanate complexes of cadmium in an aqueous and aqueous-methanolic solution with an ionic strength

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SOV/78-4-5-21/46

The Polarographical Investigation of the Thiocyanate Complex of Cadmium in Aqueous and Aqueous-methanolic Solutions

2 are shown by table 2. The composition of the cadmium-thiocyanate complexes in an aqueous solution is given by table 5. There are 2 figures, 5 tables, and 17 references, 10 of which are Soviet.

ASSOCIATION: Kishinevskiy gosudarstvennyy universitet
(Kishinev State University).
Kishinevskiy sel'skokhozyaystvennyy institut
(Kishinev Agricultural Institute)

SUBMITTED: February 15, 1958

Card 3/3

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S/064/60/000/02/01/025
B022/B005

5.3300

AUTHORS: Fridshteyn, I. L., Podol'skaya, F. I., Bondarenko, N. I.,
Vaynshteyn, G. I., Chechik, Ye. I.

TITLE: Single-step Method of Producing Isoprene From Isopentane and
Isopentane-isocamylene Mixtures

PERIODICAL: Khimicheskaya promyshlennost'; 1960, No. 2, pp. 89 - 95

TEXT: Isoprene can be produced from isopentane by catalytic dehydrogenation according to the one- and two-step method. The characteristics and the execution of the two-step method of producing isoprene from isopentane are described, the composition of catalysts, and of the complex product mixtures is indicated. The dehydrogenation of isopentane and of the isopentane-isocamylene mixtures to isoprene was carried out on an industrial catalyst for dehydrogenation of n-butane developed by the VNIISK (All-Union Scientific Research Institute of Synthetic Rubber) with the use of a negative pressure attained by the introduction of a rarefying gas (nitrogen, benzene, methane, etc.). The compounds used as initial products are indicated, and the ЦИАТИМ-51 (TsIATIM-51) apparatus for low-temperature fractionation of the

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Single-step Method of Producing Isoprene From
Isopentane and Isopentane-isoamylene Mixtures

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contact gas is mentioned. The equilibrium content of isopentane, isoamylenes, and isoprene at various temperatures and pressures (Table 1, Fig. 1), the influence of temperature on the dehydrogenation of isopentane (Table 2, Fig. 2), and the equilibrium content of isopentane, isoamylenes, and isoprene at various temperatures and compositions of the initial mixture, and a pressure of 2 at (Table 3, Fig. 3), are indicated. Besides, the composition of the decomposition products of isopentane is given in the form of a table. The equilibrium content of isopentane, isoamylenes, and isoprene at 0.3 at (Table 4), the equilibrium content of isopentane, isoamylenes, and isoprene for a mixture $C_5H_{10} + C_5H_{12}$ (30:70) (Fig. 4), the influence of temperature on the isoprene yield (Table 5), the influence of dilution with nitrogen on the dehydrogenation of the mentioned isoamylene-isopentane mixture (Fig. 5), and the influence of temperature on the yield in diene hydrocarbons (Fig. 6), were observed. The dehydrogenation of isoamylene-isopentane mixtures containing different quantities of isoamylenes (Table 6), the influence of volume velocity on the dehydrogenation of an isoamylene-isopentane mixture (30:70) (Table 7), the influence of contact time on the dehydrogenation of the corresponding isoamylene-isopentane

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mixture (Fig. 7), and the influence of hydrogen on the dehydrogenation of the mixture mentioned (Fig. 8), are shown. The catalyzate obtained by dehydrogenation of the isoamylene-isopentane mixture was fractionated on a periodic fractionating column with an efficiency of 70 theoretical plates to narrow fractions, the composition of which is indicated (Table 8). The influence of various rarefying gases on the dehydrogenation of the isoamylene-isopentane mixture is shown in Table 9. The results mentioned in the paper suggest that it is possible to carry out the dehydrogenation of isopentane and its mixtures with isoamylenes and isoprene at reduced pressure (in the presence of various rarefying gases). The isoprene yield of this method, computed for the decomposed isopentane, is 67-75% by weight. There are 8 figures, 9 tables, and 17 references: 6 Soviet and 11 American.

Card 3/3

BONDARENKO, N.I.

Feed distributor of the RSH-3 screw-conveyor type. Zhivotnovodstvo
24 no.9:86 S '62. (MIRA 15:12)

1. Rukovoditel' laboratorii mekhanizatsii rabot v zhitovnovodstve
Ukrainskogo nauchno-issledovatel'skogo instituta sel'khoz mashino-
stroyeniya.

(Ukraine--Cattle--Feeding and feeds)

BONDARENKO, N.I. [translator]; KUDRYAVTSEV, V.A. [translator];
MITBREYT, B.A. [translator]; SOKOLOV, D.S., red.;
ROMANOVICH, G.P., red.; BELEVA, M.A., tekhn. red.

[Stratigraphy of China by regions] Regional'naia stratigra-
fiia Kitaia. Moskva, Izd-vo inostr. lit-ry. No.2. 1963. 272 p.
Translated from the Chinese. (MIRA 16:6)
(China--Geology, Stratigraphic)

MARKEVICH, S.V.; KHARAMONENKO, S.S. [Kharamonenka, S.S.]; GOREBUNOV, P.T.
(Harbunou, P. TS.); STAKHOVSKIY, Ye.V. [Stakhouski, IA.V.];
VOLOKHANOVICH, A.I. [Valakhanovich, A.I.]; BONDARENKO, N.T.
[Bandarenka, M.TS.]

Radiolysis of polyglukin solution. Vestsi AN BSSR Ser. bial.
nav. no.3:107-113 '64 (MIRA 18:1)

VOLODIN, G.A.; BONDARENKO, N.I.

The Novo-Uzlovskaya Central Coal Preparation Plant is an enterprise of communist labor. Ugol' 39 no.5:12-15 My '64. (MIRA 17:8)

1. Upravlyayushchiy trestom Donetskugleobogashcheniye (for Volodin). 2. Direktor Novo-Uzlovskoy tsentral'noy obogatitel'noy fabriki (for Bondarenko).

I 45721-66 EWT(m)/T WE

ACC NR: AP6026498 (A)

SOURCE CODE: UR/0318/66/000/005/0007/0009

AUTHOR: Bondarenko, N. I.; Poplavskaya, A. V.; Bashkirova, L. I.; Lisitsina, N.

ORG: Groznyy Petroleum Refinery (Groznenkiy neftepererabatyvayushchiy zavod) 33

TITLE: Coke solar stock for producing gas-turbine fuels B

SOURCE: Neftepererabotka i neftekhimiya, no. 5, 1966, 7-9

TOPIC TAGS: coke, solar oil, gas turbine fuel

ABSTRACT: Coke solar oil was obtained from the residue of thermal cracking of mazuts, and its potential as a source of gas-turbine fuel was investigated along the following lines: (1) separation from the coke solar oil of a fraction meeting the requirements of GOST 10433-63 for gas-turbine fuel; (2) expanding the resources of gas-turbine fuel by widening the boiling range, this being accomplished by introducing coke-solar oil fractions boiling above 410° and depressing the solification temperature by adding a depressor; (3) decreasing the content of high-melting components of the coke solar oil by their decomposition as a result of secondary distillation of the solar oil. It was found that a standard gas-turbine fuel could be obtained in the amount of ~48%. The addition of the depressor permitted an 81-85% expansion of the resources of the fuel. Gas-turbine fuel of standard quality can be obtained both by distilling coke solar oil and by direct separation in coking stills. Orig. art. has: 2 tables.

SUB CODE: 11/ SUBM DATE: none

Card 1/1 ULR

UDC: 665.642.4-404.002.3:665.637.6

S/016/60/000/06/11/051

AUTHORS: Bondarenko, N.K., Gorchakova, Yu.P. and Zhuravleva, Ye.D.

TITLE: Changes in the Antigenic Structure of the Parenchymatous Organs in White Mice and Kittens Infected With Shigella Dysenteriae 6

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1960, No. 6, pp. 43 - 46

TEXT: Experiments were performed to study the formation of foreign antigens in the liver, kidneys, spleen and intestines of white mice and kittens, infected with *Shigella flexneri* with or without treatment. Foreign antigens, which did not normally appear in the organs, were in fact detected in the parenchymatous organs of mice and kittens suffering from experimental dysentery. Synthomycin-phthalazol treatment retarded the formation of foreign antigens in the parenchymatous organs. There are 3 tables and 5 Soviet references. ✓

ASSOCIATION: Voronezhskiy meditsinskiy institut (Voronezh Medical Institute)

SUBMITTED: June 27, 1959

Card 1/1

BONDARENKO, N.M.

"Pollen and spore complexes of the Lower Cretaceous of western and central parts of the Soviet arctic and their value for the correlation of marine and continental division.

Report to be submitted for the Intl. Conf. on Palynology Tucson, Arizona. 23-27 Apr '62.

Geological Inst. for the Arctic Regions, Leningrad.

L 51510-65 EWT(1)/EMP(e)/EPA(s)-2/EWT(m)/EPF(c)/EWP(1)/EPR/EPA(w)-2/T/EEC(b)-2/
 EPA(bb)-2/ENR(h) Pab-10/Pr-4/Ps-4/Pt-7/P1-4 LJP(c) WW/GS/WH
 UR/0286/65/000/009/0074/0074
 531.717.11

ACCESSION NR: AP5015315

AUTHOR: Svistunov, I. V.; Bondarenko, N. I. 73
B

TITLE: An instrument for measuring the thickness of thin nonmagnetic and non-metallic coatings on a ferromagnetic base. Class 42, No. 170695 15

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 74

TOPIC TAGS: electronic measuring device, nonmetallic material, thin film, thickness gauge 21

ABSTRACT: This Author's Certificate introduces an instrument for measuring the thickness of thin nonmagnetic and nonmetallic coatings on a ferromagnetic base. The device contains an oscillator, measuring and compensation bridges, a resonance amplifier, a differential stage, two detectors, a summation unit and a meter. The effect of changes in permeability of the base on the accuracy of measurements is eliminated by connecting the measuring bridge with inductive pickups and balancing elements to the inputs of a two channel resonance amplifier. The first channel of the amplifier is tuned to the third harmonic of the oscillator frequency, and the

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ACCESSION NR: AP5015315

0

second channel is tuned to the fundamental frequency.

ASSOCIATION: none

SUBMITTED: 26Oct63

ENCL: 01

SUB CODE: EC

NO REF SOV: 000

OTHER: 000

Card 2/3

L 51510-65

ACCESSION NR: AP5015315

ENCLOSURE: 01

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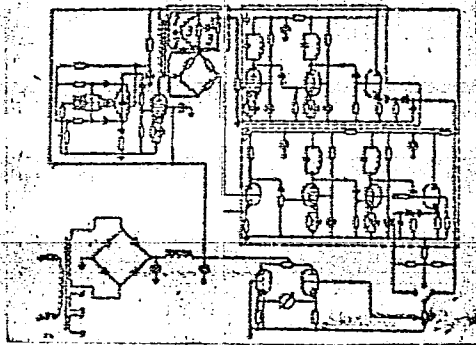


Fig. 1. 1--measuring bridge; 2--inductive pickups; 3--balancing elements; 4--first channel of the two-channel resonance amplifier; 5--second channel of the amplifier

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SAKS, Vladimir Nikolayevich; RONKINA, Zinaida Zinov'yevna; SHUL'GINA, Natal'ya Iosifovna; BASOV, Valeriy Aleksandrovich; BONDARENKO, Nina Matveyevna; KRYMGOL'TS, G.Ya., otv. red.; PETROVSKAYA, T.I., red.izd-va; VINOGRADOVA, N.F., tekhn. red.

[Stratigraphy of Jurassic and Cretaceous systems in the North of the U.S.S.R.] Stratigrafiia iurskoi i melovoi sistem Severa SSSE. [By] V.N.Saks i dr. Moskva, Izd-vo AN SSSR, 1963. 226 p.
(MIRA 16:12)

(Russia, Northern--Geology, Stratigraphic)

BONDARENKO, N.M.

Paritonsillitis in children. Vestn. otorinolaring. 25 no.3:
64-71 '63 (MIRA 17:1)

1. Iz kafedry ukha, nosa i gorla (zav. - prof. I.I.Shcherbator)
pediatricheskogo fakul'teta II Moskovskogo meditsinskogo insti-
tuta imeni N.I.Pirogova i otorinolaringologicheskogo otdeleniya
bol'nitsy imeni N.F.Filatova, Moskva.

PEREKHOV, P.G.; KOSHTOYANTS, Kh.S., otvetstvennyy redaktor; BONDARENKO, N.P., redaktor; MOLCHANOVA, O.P., redaktor; SOBOKIN, Yu.N., redaktor; FIGUROVSKIY, N.A., redaktor; SHAPIRO, F.B., redaktor izdatel'stva; SIMKINA, Ye.N., tekhnicheskiiy redaktor

[Heritage of science] Nauchnoe nasledstvo. Moskva. Vol.3. [Ivan Mikhailovich Sechenov; unpublished works, notes and papers] Ivan Mikhailovich Sechenov; neopublikovannyye raboty, perepiska i dokumenty. 1956. 280 p. (MLRA 9:8)

1. Akademiya nauk SSSR. Institut istoriiyestestvoznaniya i tekhniki. (Sechenov, Ivan Mikhailovich, 1829-1905)

BONDARENKO, N.P.

Our experience in carrying out measures for lowering disease incidence and mortality among children. Zdravookhranenie 3 no.3:50-51 My-Je '60. (MIRA 13:7)

1. Glavnyy vrach uchastkovoy bol'nitsy sela Raspopeny Resinskogo rayona.

(RASPOPENY--CHILDREN--CARE AND HYGIENE)

BONDARENKO, N.P.

Workers of the Krasnodar telegraph exchange have won the right to be called "an enterprise of communist labor." Vest. sviazi 25 no. 11:15-17 N '65. (MIRA 18:12)

1. Nachal'nik Krasnodarskogo telegrafa.

BONDARENKO N.S.

BONDARENKO, N.S.

Treatment of epiphysiolysis of the hip. Ortop.travm. i protez.
no.4:57-59 J1-Ag.'55. (MLBA 8:10)

1. Iz 2-go khirurgicheskogo otdeleniya (zav.-zasluzhennyy vrach
RSFSR A.N.Chegletsov) Barnaul'skoy gorodskoy bol'nitsy (glavnyy
vrach R.I.Vas'kova)

(FEMUR, diseases,
epiphysiolysis, ther.)

(EPIPHYSES, diseases,
epiphysiolysis of hip, ther.)

BONDARENKO, N.S.

Some experience in the use of intra-articular anesthesia on the
extremities. Ortop., travm. i protez. no. 2:66 '62. (MIRA 15:3)

1. Iz 1-y khirurgicheskoy kliniki (zav. - prof. G.I. Podoprigora)
Zaporozhskogo instituta usovershenstvovaniya vrachey im. M. Gor'-
kogo na baze 2-y gorodskoy bol'nitsy (glavnyy vrach - V.S. Smetanka).
(LOCAL ANESTHESIA) (EXTREMITIES—SURGERY)

BONDARENKO, N.S.

Problem of hemophilic arthropathies (personal clinical observations). Ortop., travm.i protez. 21 no.1:21-24 Ja '60. (MIRA 13:12)

(HEMOPHILIA) (JOINTS—DISEASES)

BONDARENKO, N.S.

Use of ditilin in traumatology. Ortop.travm.i protez. 21 no.3:
22-24 Mr '60. (MIRA 14:3)

1. Iz 1-y khirurgicheskoy kliniki (zav. - prof. G.I.Podoprigora)
Zaporozhskogo instituta usovershenstvovaniya vrachey imeni M.Gor'kogo
na baze 2-y gorodskoy bol'nitsy (glavnyy vrach - V.S.Smetanka).
(CURARELIKE SUBSTANCES) (CHOLINE)

BONDARENKO, N.S. (Zaporozh'ye, 4, ul. Bryullova, d.12, kv.53)

Some problems of surgical tactics in perforating injuries of
the chest. Klin.khir. no.11:31-35 N '62. (MIRA 16:2)

1. Kafedra khirurgii (zav. - prof. G.I. Podoprigora) Zapo-
rozhskego instituta usovershenstvovaniya vrachey na baze 2-y
gorodskoy bol'nitsy.

(CHEST--WOUNDS AND INJURIES) (CHEST--SURGERY)

BONDARENKO, N.S. (Khar'kov 3, Moskovskiy prospekt, d. 19-23, kv.51)

Electrophysiological study of the skin in evaluating the
methods of its preservation. Ortop., travm. i protez. 26
no.11:74-78 N '65. (MIRA 18:12)

1. Iz kafedry travmatologii i ortopedii (zav.- chlen-korrespondent
AMN SSSR prof. N.P. Novachenko) Ukrainского instituta usovershen-
stvovaniya vrachey (rektor - dotsent V.I. Ovsiyenko) i Khar'-
kovskogo instituta protezirovaniya, ortopedii i travmatologii
imeni M.I. Sitenko.

BONDARENKO, N.T., kandidat meditsinskikh nauk

Closed complete dislocation of the posterior part of the 2nd, 3rd, 4th and 5th metacarpal bone and of the carpometacarpal joint. Khirurgiia no.4:81 Ap '54. (MLEA 7:6)

1. Iz Kolpinakoy gorodskoy bol'nitsy. (DISLOCATIONS, *wrist)
(WRIST, dislocations, *)

S/078/62/007/006/012/024
B106/B180AUTHOR: Bondarenko, N. V.TITLE: Phase diagram of the system $MgCl_2-NaCl-BaCl_2$

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 7, no. 6, 1962, 1387-1393

TEXT: The phase diagrams of the binary systems $MgCl_2-BaCl_2$ and $MgCl_2-NaCl$ and of the ternary system $MgCl_2-NaCl-BaCl_2$ were studied by differential thermal analysis, optical crystal examination according to the immersion method, and X-ray phase analysis. Melts of this ternary system can be used for the electrolytic refining of magnesium and as a flux when melting light metals. Cooling curves were taken in dry hydrogen chloride atmosphere to avoid hydrolysis of magnesium chloride. Results: In the system $MgCl_2-BaCl_2$ the chemical compound $MgCl_2 \cdot 2BaCl_2$ is formed, which melts at $600^\circ C$ and decomposes; the eutectic melts at $558^\circ C$ (62.5 wt% $BaCl_2$), the transition point lies at 28 wt% $MgCl_2$. In the system $MgCl_2-NaCl$ the two unstable chemical compounds $MgCl_2 \cdot NaCl$ and $MgCl_2 \cdot 2NaCl$

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Phase diagram of the system ...

S/078/62/007/006/012/024
B106/B180

are formed; this agrees with published data. The eutectic resulting from these two compounds melts at 442°C (44 wt% NaCl). To analyze the system $\text{MgCl}_2\text{-NaCl-BaCl}_2$, 30 polythermal sections, in all, about 300 melts of different compositions, were studied. Besides the phases which also form in binary systems, a new ternary compound, $\text{BaCl}_2 \cdot 2\text{MgCl}_2 \cdot 3\text{NaCl}$, was observed, which melts with decomposition. The ternary eutectic of the system melts at 418°C (40.5% MgCl_2 , 30.7% BaCl_2 , 28.8% NaCl). There are 5 transition points in the system, which correspond to peritectic four-phase transitions. It may be seen from the liquidus surface of the system $\text{MgCl}_2\text{-NaCl-BaCl}_2$ that a large number of fusible mixtures are present, which facilitates the choice of melts for practical purposes. The author thanks P. Ya. Sal'd and Kh. L. Strelets for valuable advice in discussing the results. There are 6 figures and 6 tables.

ASSOCIATION: Vsesoyuznyy alyuminiyevo-magniyevyy institut
(All-Union Aluminum and Magnesium Institute)

SUBMITTED: June 24, 1961
Card 2/2

ZHDANOV, A.K.; KHADEYEV, V.A.; KUBRAKOVA, A.I.; BONDARENKO, N.V.

Amperometric titration of some reducing agents by means of iodine chloride in an apparatus with a rotating platinum microelectrode. Uzb.khim.zhur. no.2:44-50 '61. (MIRA 14:10)

1. Tashkentskiy gosuniversitet imeni Lenina.
(Conductometric analysis) (Iodine chloride)

BONDARENKO, N.V.; STRELETS, Kh.L.

Specific weight, conductance, and surface tension of melts in
the system $MgCl_2 - NaCl - BaCl_2$. Zhur.prikl.khim. 35 no.6:
1271-1276 Je '62. (MIRA 15:7)

1. Vsesoyuznyy alyuminiyevo-magniyevyy institut.
(Systems (Chemistry)) (Chlorides)

BONDARENKO, N.V., dotsent

Mites on fruits. Zashch. rast. ot vred. i bol. 9 no.6847-42'64
(MIRA 1988)

1. Leningradskiy sel'skokhozyaystvennyy institut.

BONDARENKO, N.S.; STEPLETS, Kh.I.

Viscosity of melts of the system $MgCl_2 - NaCl - BaCl_2$. Zhur. prikl. (MIRA 18:10)
Mira. 38 no.6:1273-1279 1965.

1. Vsesoyuznyy alyuminiyevomagnalyevyy institut.

BONDARENKO, N. V.

"The Effect of the Shortened Day on the Annual Cycle of Development
of the Common Tetranychus Urticae Koch," Dokl. AN SSSR, 70, No.6, 1950

Leningrad Instl of Agriculture

BONDARENKO, N.V.

[Spider mites and their control in hotbeds and greenhouses]
Pautinnyi kleshchik i bor'ba s nim v parnikakh i teplitsakh.
Moskva, Akad. nauk, 1952. 52 p. (Vsesoiuznoe Entomologicheskoe
obshchestvo. Nauchno-populiarnaia seriia, 1) (MLRA 7:6)
(Red spider)

10
BONDARENKO, N. V.

N. V. Bondarenko, Vrediteli ovoshchnykh kul'tur v parnikakh i teplytsakh (Vermin of Seed-Bed and Hot-House Vegetable Cultivation), Sel'khozgiz, 6 sheets. 1953

An aid for combatting vegetable vermin in seed beds and hot houses, the booklet gives a survey of various methods and equipment employed in fighting vegetable pests on protected soil, gives brief information on the principal vegetable vermin of seed beds and hot houses, and analyses in detail the methods and means of fighting each pest.

The booklet is intended for vegetable growers, sovkhos section heads, and other specialists in the field of protected soil vegetable growing.

SO: U-6472, 18 Nov 1954

USSR/General and Special Zoology. Insects

P

Abs Jour : Ref Zhur - Biol., No 6, 1958, No 25737

Author : ~~Bondarenko N.V.~~

Inst : ~~Not Given~~

Title : The Diapause Characteristic of the Cobweb Ticks and Methods of Managing their Numbers under Conditions of a Protected Ground. (Osobennosti diapauzy pautinnogo kleshcha i puti upravleniya ego chislennost'yu v usloviyakh zashchishchennogo grunta.)

Orig Pub : Sb. tr. po zashchite rast., Riga, AN LatvSSR, 1956, 127-132.

Abstract : A shorter light day explained the appearance of diapause females of the cobweb tick *Tetranychus urticae* under conditions of a protected ground in Leningrad region. However the photoperiodic reaction of the cobweb tick changed with the temperature. Not even one tick female in diapause appeared at an average daily high temperature (34 deg.) in spite of the shorter 12 hour day, while at 15 deg 98.5%

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USSR/General and Special Zoology. Insects

P

Abs Jour : Ref Zhur - Biol., No 6, 1958, No 25737

appeared. The stopping of diapause and the passing to nourishment and egg-laying of the cobweb tick occurred only under the influence of lower temperatures during a definite period. Mass emergence from the diapause was observed in tick females after 55 days of lower temperatures (3-6 deg) action. Relative humidity--about 100%--was, apparently, needed for favorable hibernation of ticks in horhouses. To decrease the cobweb tick's numbers in horhouses it was necessary to change the length of day (taking into account the temperatures and the changes in the relative humidity.).

Card : 2/2

BONDARENKO, N.V.

Specific features of diapause in the spider mite *Tetranychus urticae* Koch [with summary in English]. Zool. zhur. 37 no.7: 1012-1023 J1 '58. (MIRA 11:8)

1. Leningradskiy sel'skokhozyaystvennyy institut.
(Red spider) (Insects--Development)

20-119-6-54/56

AUTHORS: Bondarenko, N. V., Kuan Khay-Yuan'

TITLE: Peculiar Traits in the Beginning of Diapause in Different Geographical Populations of Tetranychus urticae Koch (Osobennosti vzniknoveniya diapauzy u razlichnykh geograficheskikh populyatsiy pavtinnogo kleshcha).

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 119, Nr 6, pp. 1247-1250 (USSR)

ABSTRACT: In the temperate and northern latitudes the autumn diapause is a characteristic trait in the annual cycle of the Tetranychus urticae Koch. The females preparing for the diapause arrive a long time before the beginning of the unfavorable conditions. It is known that the short daylight (near Leningrad) (Ref 3) has a decisive influence upon the arrival of diapausing females; also the temperature and the quality of food can have a certain influence (Ref 4). The causes of the beginning and of the end of diapause are among others of practical importance in predicting the arrival of the mites, in planning plant protective measures, etc. Be-

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20-119-6-54/56

Peculiar Traits in the Beginning of Diapause in Different Geographical
Populations of Tetranychus urticae Koch

cause the problem, e.g. in the cotton cultivation regions, has been neglected, the authors set themselves the task to investigate the influence of temperature and of the shortened day upon the beginning of diapause in different geographical latitudes. The work was performed by the Chair of General Entomology (Kafedra obshchey entomologii, Director G. Ya. Bey-Biyenko). The material was taken from 59°44' northern latitude (Pushkino, Leningrad oblast, glass houses), 44°53' (Stanitsa Krymskaya, Krasnodarskiy Kray), 41°43' (Tbilisi) and 41°20' (Tashkent). After slipping out of the eggs the mite larvae were placed into thermostat chambers for a corresponding period of exposure. For the purpose of proving the common membership of species of individual populations they were crossed with each other and fertile offspring was obtained. Results showed that (contrary to Ref 6) the diapause in the *Tetranychus urticae* Koch begins in the North, as well as in the South, under the influence of the shortened day. There is also a connection between the period of exposure and temperature (Ref 2): increased temperature in all regions considerably weakens the influence of the short day

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20-119-6-54/56

Peculiar Traits in the Beginning of Diapause in Different Geographical Populations of Tetranychus urticae Koch

and prevents the diapause. However, these reactions vary with individual geographical populations. The shortening of the critical period of exposure amounted to about 1 hour in movement from north to south per 3° each. It is not surprising that the more southern populations show a facultative diapause. There, up to 10% and more mites can develop without diapause (Table 1), if winter is warm and sufficient food is available. There are 1 figure, 2 tables, and 10 references, 9 of which are Soviet.

ASSOCIATION: Leningradskiy sel'skokhozyaystvennyy institut (Leningrad Agricultural Institute)

PRESENTED: February 3, 1958, by Ye. N. Pavlovskiy, Member, Academy of Sciences, USSR

SUBMITTED: February 3, 1958

Card 3/3

STRELETS, Kh.L.; BONDARENKO, N.V.

New composition of electrolyte for magnesium baths. *Tsvet. met.* 33
no.9:63-66 S '60. (MIRA 13:10)
(Magnesium--Electrometallurgy)

BONDARENKO, Nikolay Vasil'yevich; REUTSKAYA, O.Ye., red.; CHUNAYEVA, Z.V.,
tekhn. red.

[Manual on field work in beekeeping] Rukovodstvo k prakticheskim za-
natiyam po pchelovodstvu. Leningrad, Gos. izd-vo sel'khoz. lit-ry,
1961. 182 p. (MIRA 14:6)

(Bee culture)

ZHIKHAREV, Fedor Petrovich; BONDARENKO, N.V., starshiy nauchnyy sotrudnik;
FIL'CHENKO, R.D., red.; STEPANOV, N.S., tekhn. red.

[Developing the forms of wage payment on the collective farms of the
Chuvash A.S.S.R.] Razvitie form oplaty truda v kolkhozakh Chuvashskoi
ASSR. Cheboksary, Chuvashskoe gos. izd-vo, 1960. 145 p.

(MIRA 14:9)

1. Chuvashskiy nauchno-issledovatel'skiy institut yazyka, literatury,
istorii i ekonomiki pri Sovete Ministrov Chuvashskoy ASSR (for Bon-
darenko).

(Chuvashia—Collective farms—Income distribution)

BONDARENKO, N.V.

Training specialists in plant protection. Zashch.rast.ot vred,
i bol. 7 no.4:62 Ap '62. (MIRA 15:12)

1. Dekan fakul'teta zashchity rasteniy Leningradskogo sel'skokho-
zyaystvennogo instituta.
(Plants, Protection of—Study and teaching)

STRELETS, Kh.L.; BONDARENKO, N.V.

Effect of certain factors on sludge formation in magnesium
electrolytic cells. TSvet. met. 35 no.9:56-61 S '62.

(MIRA 16:1)

(Magnesium—Electrometallurgy)

BONDARENKO, N.V., dotsent

Methods of estimating the abundance of the red orchard mite.
Zashch. rast. ot vred. i bol. 6 no.9:45-46 S '61. (MIRA 16:5)

1. Leningradskiy sel'skokhozyaystvennyy institut.
(Red spider)

BONDARENKO, N.V.

Problems of the ecology of spider mites in the non-Chernozem zone of
the U.S.S.R. Vop. ekol. 7:15-17 '62. (MIRA 16:5)

1. Sel'skokhozyaystvennyy institut, Leningrad.
(Red spider)

BONDARENKO, N.V.

How we organized field training of students. Zashch. rast. ot
vred. i bol. 8 no.1:15-17 Ja '63. (MIRA 16:5)

1. Dekan fakul'teta zashchity rasteniy Leningradskogo sel'skokhozyaystven-
nogo instituta.

(Leningrad Province--Plants, Protection of--Study and teaching)

BOEDARENKO, N.V.; ISMAYLOV, A.V.; SHCHERBINOVSKIY, N.S.; DEKANOIDZE, G.I.,
dotsent

Anniversaries of our specialists. Zashch. rast. ot vred. i
bol. 8 no.6:61-62 Je '63. (MIRA 16:8)

1. Dekan fakul'teta zashchity rasteniy Leningradskogo sel'skokhozyatst-
vennogo instituta (for Bondarenko). 2. Chlen-korrespondent
Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. Lenina
(for Shcherbinovskiy).

(Bei-Bienko, Grigori Iakovlevich, 1903-)

(Aleksandrov, Nikolai Vasil'evich, 1903-)

(Batiashvili, Iraklii Dmitrievich, 1903-)

BANDYUKOVA, V.A.; BONDARENKO, N.V.

Helenien from the African marigold cultivated in the Northern
Caucasus. Nauch. dokl. vys. shkoly; biol. nauki no.1:168-170
'65. (MIRA 18:2)

1. Rekomendovana kafedroy organicheskoy i biologicheskoy khimii
Pyatigorskogo farmatsevticheskogo instituta.

KARNAUKHOV, Ivan Prokof'yevich, dots.; IVANKIN, Vasilii Kirillovich, prof.; VERESOV, Konstantin Nikolayevich, dots.; BONDARENKO, Nikolay Vasil'yevich, dots.; NIKISHIN, Konstantin Georgiyevich, dots.; LANGE, K.P., kand. sel'khoz. nauk, dots. retsenzent; MERKULOV, M.P., kand. sel'khoz. nauk, dots., retsenzent; NOVIKOV, A.A., kand. sel'khoz. nauk, dots., retsenzent; NOSUL'KO, I.M., st. prepod., retsenzent; SAFRONOVA, O.G., st. prepod., retsenzent; YEFIMOV, A.L., red.

[Fundamentals of agriculture] Osnovy sel'skogo khoziaistva.
3. perer. izd. Moskva, Prosveshchenie, 1965. 646 p.

(MIRA 18:3)

1. Kuybyshevskiy pedagogicheskiy institut (for Lange, Merkulov).
2. Orlovskiy pedagogicheskiy institut (for Novikov, Nosul'ko, Safronova).

KONONCHUK, T.I.; PRUKHODCHENKO, V.G.; BONDARENKO, N.V.

Photochemical dechlorination of analyte. Khim. prom. no. 6:429-
431. Je '64. (MIRA 28:7)

KONONCHUK, T.I.; RED'KO, L.P.; KORCHEV, M.A.; FUSTOVIT, V.T.;
BONDARENKO, N.V.

Effect of the addition of polyacrylamide to the brine on the
electrolysis process with a mercury cathode. Khim. prom. 41
no.8:599-600 Ag '65. (MIRA 18:9)

STRELETS, Kh.L.; BONDARENKO, N.V.

Reaction of magnesium chloride with calcium oxide in chloride
melts. Zhur. neorg. khim. 8 no.7:1706-1709 J1 '63.
(MIRA 16:7)

(Magnesium chloride) (Calcium oxides)
(Fused salts)

Country : USSR
CATEGORY : Forestry, General Problems.
ASS. JOUR. : REBiol., No. 2, 1959, No. 6122
AUTHOR : Leadenko, N.Ya.
INST. : Not given
TITLE : The State of Stands in Beshtaugorskiy Forest Range.
ORIG. PUB. : Sb. rabot po lesn. kn-vu Sev. Kavkaza. Vyp. 5, Maykop, 1958, 69-77.
ABSTRACT : The fact is emphasized that Beshtaugorskiy Forest Range with an area of 6437 hectares is of significance for its water retentive, soil protective and esthetic and sanitary features. Large scale desiccation of the trees has been observed here since 1950-1951. The extent of desiccation has comprised 27.3 percent for oak, 44.8% for hornbeam and 50.4% for the European ash. Trees of all ages dry out, inasmuch as the

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