KOROLEV, A.I.---(continued) Card 2.

10. Nizhne-Tagil'skiy metallurgicheskiy kombinat (for Medvedev, Novolodskiy, Vecher). 11. Zavod "Azovstal'" (for Bul'skiy, Slepkanev). 12. TSentral'nyy nauchno-issledovatel'skiy institit chernoy metallurgii (for Trubetskov). 13. Ukrainskiy institut metallov (for Shneyerov, Sladkoshteyev, Kotin). 14. Zavod "Krasnyy Oktyabr'" (for Palant). 15. Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy teplotekhniki (for Kurochkin). 16. Zavod im. Voroshilova (for Sabiyev). 17. Chelyabinskiy politekhnicheskiy institut (for Morozov). 18. Giprostal' (for Garbuz). 19. Ural'skiy institut chernykh metallov (for Pastukhov). 20. Zavod im. Petrovskogo (for Zhigulin). 21. Ministerstvo chernoy metallurgii USSR (for Molotkov, Siverskiy). 22. Glavspetsstal' Ministerstva chernoy metallurgii SSSR (for Nikolayev).

(Open-hearth process)

MOROZOV, Aleksandr Nikolayevich, prof., doktor tekhn. nauk; STEPANOV, N.I., retsenzent; BELIKOV, K.N., inzh.-martenovets, red.; DIKSHTEYN, Ye.I., inzh.-martenovets, red.; KRYUKHOVA, M.L., red. izd-va; TURKINA, Ye.D., tekhn. red.

[Modern open-hearth process] Sovremennyi martenovskii protsess. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1961. 600 p. (MIRA 14:5)

(Open-hearth process)

VECHER, N.A., inzh.; GERMAIDZE, G. Ye., inzh.; PANFILOV, M.I., dotsent; KHIL'KO, M.M., inzh.; MERSHCHIY, N.P., inzh.; ALFEROV, K.S.., inzh.; ANTONOV, S.P.; DIKSHTEYN, Ye.I.; YAGNYUK, M.I.; RELIKOV, K.N.; GONCHAREYSKIY, Ya.A.; TRIFONOV, A.G.; SEDACH, G.A.

"Open-hearth plants with large-capacity furnaces" by D.A. Smoliarenko, N.I. Efanova. Reviewed by N.A. Vecher and others. Stal' 21 no.2:125-126 F '61. (MIRA 14:3)

1. Sverdlovskiy sovet narodnogo khozyaystva (for Vecher, Germaidze, Panfilov).

(Open-hearth furnace--Design and construction)
(Smoliarenko, D.A.) (Efanova, N.I.)

BELIKOV, K.N.

Efficient way of expanding the steel smelting industry. Stal' 23 no.5:408-410 My '63. (MIRA 16:5)

1. Magnitogorskiy metallurgicheskiy kombinat.
(Open-hearth furnaces)
(Oxygen—Industrial applications)

TSIMMERMAN, R.R., inzh.; PORTNOV, A.A., glavnyy red.; GRECHISHKIN, I.I., zamestitel' glavnogo red.; BELIKOV, K.N., red.; POD"YEMSHCHIKOV, N.V., red.; TSITRIN, M.A., red.; STESIN, Ye.L., red.

[Calculation of mine dust removing equipment.] Raschet shakhtnykh pylеotsasyvaiushchikh ustanovok. Moskva, Gosgortekhizdat, 1963. 82 p. (Tula. Podmoskovnyi nauchno-issledovatel'skii i proektno-konstruktorskii ugol'nyi institut. Sbornik nauchnykh trudov, no.8) (MIRA 17:10)

1. BELIKOV, L. A.

2. USSR (600)

7. "The Pancreatic Hydrolyzate of the Siberian Salmon as a Base for Bacteriological Nutrient Media", Trudy Khabarovskogo In-ta Epidemiologii i Mikrobiologii (Works of the Khabarovsk Institute of Epidemiology and Microbiology), Collection 1, 1951, pp 131-135.

9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified.

SMORODINTSEV, Anatoliy Aleksandrovich, laureat Stalinskoy premii, professor; KRIVISKIY, Aleksandr Samsonovich, kandidat biologicheskikh nauk; BELIKOV, L.A., polkovnik meditsinskoy slushby, dotsent, redaktor; KADNER, Ya.M., redaktor; ALYMOV, A.Ya., polkovnik meditsinskoy slushby, professor, redaktor; LEVINSKAYA, N.Z., tekhnicheskiy redaktor.

[The world of microbes] Mir mikrobov. Izd. 2-oe, perer. Moskva, Voen. izd-vo Ministerstva obor. SSSR, 1956. 177 p. (MIRA 9:6)

1.Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Smorodintsev).2. Konsul'tant chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Alymov).
(Micro-organisms)

BELIKOV, L.A.

Toxiinfection from milk caused by Salmonella enteriditis. Zhur. mikrobiol.epid. i immun. 28 no.3:46-47 Mr '57. (MLRA 10:6)
(MILK--BACTERIOLOGY)

BELIKOV, LEONID ARISTARKHOVICH

The Bacteriological Weapon and Methods of Protection from it. New York, USJPRS, 1961.

320 p. Illus., Diagrs., Graphs (JPRS: 7590; CSO; 5595-N)

Translated from the original Russian: Bakteriologicheskoye Oruzhiye I Sonsoby Zashchity of Nego, Moscow, 1960.

ANOKHINA, A.P., epidemiolog; BELIKOV, L.A., dotsent; GORSHKOVA, N.M., epidemiolog; MEZHUYEVA, T.P., sanitarnyy vrach

Water-borne outbreak of dysentery. Gig.i san. 26 no.12:60-62 D '61. (MIRA 15:9)

1. Iz Kuybyshevskoy gorodskoy i Kuybyshevskoy rayonnoy sanitarno-epidemiologicheskoy stantsiy i kafedry infektsionnykh bolezney Kuybyshevskogo meditsinskogo instituta.
(DYSENTERY)

BELIKOV, L.A.

Activity of the Kuybyshev Branch of the Scientific Society of Epidemiologists, Microbiologists and Infectious Disease Spiecialists. Zhur. mikrobiol., epid. i immun. 43 no.1:155-157 Ja '66 (MIRA 19:1)

BELIKOV, L.B., inzh.

Effect of the dimensions of rubber parts on their shock absorbing properties. Vest. TSNII MPS 25 no.1:53-55 '66.

(MIRA 19:2)

LUKANIN, Ye.A., gvardii polkovnik, red.; BELIKOV, M.A., podpolkovnik, red.; SOKOLOVA, G.F., tekhn.red.

[Text book on political studies for senior noncommissioned officers] Uchebnoe posobie po politicheskim zaniatiam dlia serzhantov i starshin. Moskva, Voen.izd-vo M-va obor. SSSR, 1958. 494 p. (MIRA 12:9)

1. Russia (1923- U.S.S.R.) Armiya. Glavnoye politicheskoye upravleniye.

(Russia--Armed forces--Education, Nonmilitary)

MAL'KOV, A.F., podpolkovnik; BELIKOV, M.A., polkovnik, red.; SOLOMONIK, R.L., tekhn.red.

[Striving to achieve a high level of combat readiness; from the experiences of Army and Navy party organizations] V bor'be za vysokuiu boevuiu gotovnost'; iz opyta raboty armeiskikh i flotskikh partiinykh organizatsii. Moskva, Voen.izd-vo M-va obor.SSSR, 1959. 141 p. (MIRA 12:9)

(Russia--Armed forces--Education, Nonmilitary)

BELIKOV, M.A., polkovnik, red.; LUKANIN, Ye.A., gvardii polkovnik, red.; OSIPOV, Z.S., general-mayor, obshchiy red.

[Manual on political studies for soldiers and sailors] Uchebnoe posobie po politicheskim zaniatiiam dlia soldat i matrosov. Moskva, Voen.izd-vo M-va obor.SSSR, 1959. 557 p. (MIRA 12:12)

1. Russia (1923- U.S.S.R.) Ministerstvo oborony. Glavnoye politicheskoye upravleniye.
(Russia--Armed forces--Education, Nonmilitary)

LUKOV, Grigoriy Dem'yanovich, kand.pedagog.nauk, polkovnik; BELIKOV, M.A., polkovnik, red.; VOLKOVA, V.Ye., tekhn.red.

[Psychology; essays on problems in the training and education of Soviet troops] Psikhologiia; ocherki po voprosam obucheniia i vospitaniia sovetskikh voinov. Moskva, Voen.izd-vo M-va obor. SSSR, 1960. 254 p. (MIRA 13:5)
(Psychology, Military) (Military education)

BANNIKOV, A.A., prof.; KHURSHUDYANTS, R.S., dotsent; BELIKOV, M.N., aspirant

Cases of tularemia in sheep in Stavropol Territory. Veterinariia 42 no.5:59-60 My '65. (MIRA 18:6)

1. Stavropol'skiy sel'skokhozyaystvennyy institut.

L 30790-66 EWT(1)/T JK

ACC NR: AP6022090 (A,N) SOURCE CODE: UR/0346/66/000/003/0031/0034

AUTHOR: Belikov, M. N. (Aspirant); Bannikov, A. A. (Scientific supervisor, Professor)

ORG: Stavropol' Agricultural Institute (Stavropol'skiy sel'skokhozyaystvennyy institut)

TITLE: Susceptibility of merino sheep to tularemia 6

SOURCE: Veterinariya, no. 3, 1966, 31-34

TOPIC TAGS: tularemia, antigen, brucellosis, diagnostic medicine, serum, animal

ABSTRACT: The minimum infecting dose for merino lambs 8-10 months old proved to be 100 microbial cells. Doses of one hundred million, one billion, and ten billion cells caused a severe form of tularemia with distinct clinical symptoms. Four-month-old lambs had a milder form of the disease. The height of the serum titer varied with the dose used. The diagnostic titer of the agglutination reaction was 1:25 because lambs infected with the minimum dose (100 cells) had a positive reaction with tularemia antigen in a serum titer of 1:25 and higher between the 15th and 25th days. The complement-fixation reaction to tularemia was positive in 80% of the cases from the 15th day after infection to the end of the experiment. It was negative with brucellosis antigen in all the animals.

The skin allergy test with tularin in a concentration of one billion microbial cells in 1 ml (dose 0.2 ml) produced a distinct positive reaction in the infected animals during the 45 days of the experiment. In 8-month-old lambs a positive reaction was noted on the 5th day, and in 4-month-old animals, between the 10th and 15th days after infection.

The authors conclude that the skin test with tularin and the complement-fixation reaction are reliable means of diagnosing tularemia in sheep and of differentiating tularemia from brucellosis. Orig. art. has 1 table. [JPRS]

Card 1/1 SUB CODE: 06, 02/SUBM DATE: none UDC: 619:616.981.455-097.37:636.36

0915 0091

IV.

BELIKOV, M., inzh.; GOLDOVSKIY, P., inzh.

Make the work of riveters safe. Okhr.truda i sots.strakh. no.4: 71-75 O '58. (MIRA 12:1)
(Rivets and riveting--Hygienic aspects)

ANDREYEVA-GALANINA, Ye.TS., BELIKOV, M.N.

Hygienic and technical characteristics of new air riveters and holders with reduced recoil and vibration [with summary in English]. Trudy LSGMI 44:177-195 '58 (MIRA 11:12)

1. Kafedra gigiyeny truda s klinikoy profzabolevaniy Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy -prof. Ye. TS. Andreyeva-Galanina).
(INDUSTRIAL HYGIENE,
hyg. & technical aspects of riveting air hammers & holders with reduced recoil & vibration (Rus))
(VIBRATIONS,
reduced vibration & recoil in new riveting air hammers & holders hyg. & technical aspects (Rus))

ZAYTSEV, A.A.; POKROVSKAYA, Ye.V.; BELIKOV, M.N.

Duration of preservation and localization of the tularemia agent i the organism of experimentally infected sheep. Veterinariia 42 no.7:26-27 Jl '65. (MIRA 18:9)

1. Stavropol'skaya krayevaya sanitarno-epidemiologicheskaya stantsiya (for Zaytsev, Pokrovskaya). 2. Stavropol'skiy sel'skokhozyaystvennyy institut (for Belikov).

L 21700-66 EWT(1)/T JK

ACC NR: AP6015821 (A, N) SOURCE CODE: UR/0346/65/000/007/0026/0027

AUTHOR: Zaytsev, A. A.; Pokrovskaya, Ye. V.; Belikov, M. N. 32

ORG: [Zaytsev, Pokrovskaya] Stavropol' Area Sanitary-Epidemiological Station (Stavropol'skaya krayevaya sanitarno-epidemiologicheskaya stantsiya); [Belikov] Stavropol' Agricultural Institute (Stavropol'skiy sel'skokhozyaystvennyy institut) B

TITLE: Length of persistence and localization of the tularemia pathogen in the organism of experimentally infected sheep

SOURCE: Veterinariya, no. 7, 1965, 26-27

TOPIC TAGS: tularemia, commercial animal, animal disease, epidemiology, human ailment

ARSTRACT: The experiments were performed on sheep (28 Soviet Merino lambs 8-10 months old, and 6 Caucasian lambs 4 months old). The lambs were subcutaneously infected with virulent strain No 713 (minimum LD of this strain for white mice and guinea pigs - 1 microbial cell (MC)) in doses of from 1 to 1,000,000,000 MC. Anatomic-pathological dissection of the lambs during the period of acute course of the disease revealed the presence of the pathogen in their parenchymatous organs, which points out the epidemiological danger of slaughtering the animals at that period. In the 8-10 month-old lambs the tularemia pathogen was isolated from the skin at the site of culture injection, whereas in the 4-month-Old lambs it was isolated only from the lymph nodes. Isolation of the pathogen from the lymph nodes of the lambs with tularemia on the 18th and 50th days after the date of infection (period of observation) involves the potential danger of infection to humans during

Card 1/2 UDC: 619.616.981.455-092:636.3

L 24700-66

ACC NR: AP6015821

during slaughter and dressing of sheep with tularemia. The absence of clinical symptoms of the disease the lambs infected with a dose of 100 MC, and the isolation of the pathogen from the skin at the site of injection of the culture (femoral area) points to the possibility of infection of humans during the dressing of skeepskins originating from natural foci of tularemia. Inoculation of sheep with the tularemia pathogen in this dose by meadow ticks is quite possible. The negative results of the investigation of the urine of a lamb that died of tularemia on the 9th day following infection with 10 billion MC, as well as of the investigation of the gall bladders of five lambs killed during the period of the acute course of the disease, and also the fact that the control animals placed in contact with the sick animals remained uninfected, give reason to believe that sick lambs do not eliminate the tularemia pathogen through their urine. Orig. art. has: 1 table. [JPRS]

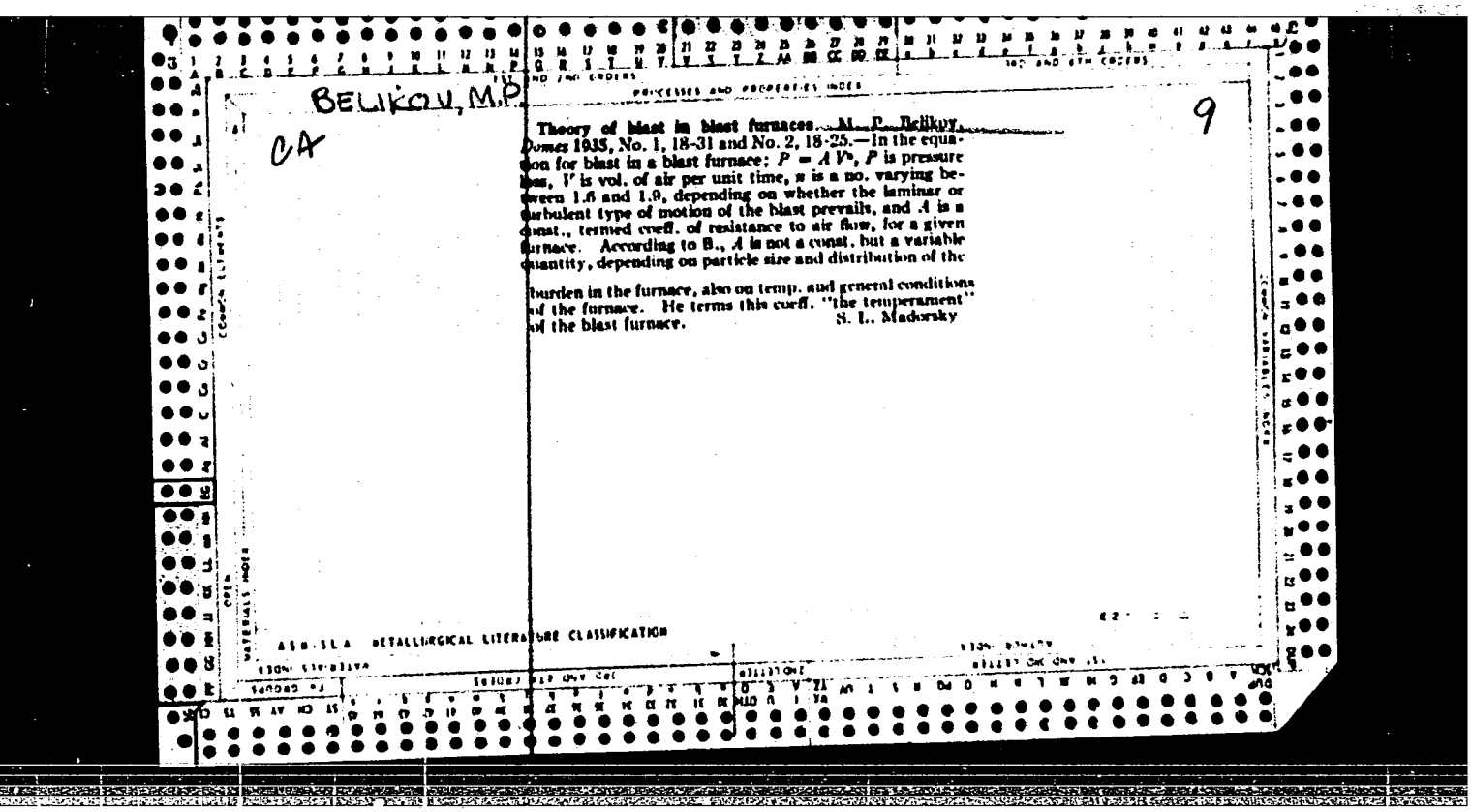
SUB CODE: 06, 02 / SUBM DATE: none

Card 2/2

GRINKEVICH, Petr Stepanovich, dotsent, kand.tekhn.nauk; DOMBROVSKIY, N.G., prof., doktor tekhn.nauk, obshchiy red.; BELIKOV, M.P., dotsent, kand.tekhn.nauk, nauchnyy red.; KROMOSHCH, I.L., inzh., red.izd-va; ZNAMENSKIY, I.I., prof.,doktor tekhn.nauk, retsenzent; KIRIYENKO, I.K., zamestitel' glavnogo mekhanika, retsenzent; SHKUNDIN, B.M., inzh., retsenzent; EL'KINA, E.M., tekhn.red.; SOLNTSEVA, L.M., tekhn.red.

[Building machinery] Stroitel'nye mashiny. Pod red. N.G.Dombrovskogo. Moskva, Gos.izd-vo lit-ry po stroit., arkhit.i stroit.materialam, 1958. 495 p. (MIRA 12:3)

1. Kuybyshevgidrostroy (for Kiriyenko).
(Building machinery)



BELIKOV, M.P.

CA

9

Theory of blast in blast furnaces. M. P. Belikov. *Domes* 1935, No. 1, 18-31 and No. 2, 18-25.—In the equation for blast in a blast furnace: $P = AV^n$, P is pressure loss, V is vol. of air per unit time, n is a no. varying between 1.6 and 1.9, depending on whether the laminar or turbulent type of motion of the blast prevails, and A is a const., termed coeff. of resistance to air flow, for a given furnace. According to B., A is not a const. but a variable quantity, depending on particle size and distribution of the burden in the furnace, also on temp. and general conditions of the furnace. He terms this coeff. "the temperament" of the blast furnace.

S. L. Madorsky

BELIKOV, M.P., kand.tekhn.nauk

Comparing possible methods of air blast feed to the blast furnace. Trudy Inst.tepl.AN URSR no.10:73-82 '53. (MIRA 13:5)
(Blast furnaces--Design and construction)

BELIKOV, M. P.

"The Problem of the Rational Production of Blast-Furnace Blasts." Min Higher Education USSR, Dnepropetrovsk Order of Labor Red Banner Metallurgical Inst imeni I. V. Stalin, Dnepropetrovsk, 1952
(Dissertation for the Degree of Doctor of Technical Sciences)

SO: Knizhnaya Letopis', No. 32, 6 Aug 55

BELIKOV, M.P.

MILOVICH, Aleksandr Yakovlevich, doktor tekhnicheskikh nauk, professor; BELIKOV, M.P., redaktor; SAFONOV, P.V., redaktor; MEDVEDEV, L. [illegible], tekhnicheskiy redaktor.

[Theory of dynamic relationships of solids and fluids] Teoriia dinamicheskogo vzaimodeistviia tel i shidkosti. 2-e izd., ispr. i dop. Moskva, Gos.izd-vo lit-ry po stroit. iarkhitekture, 1955. 309 p. [Microfilm] (MLRA 8:5)

(Solids) (Fluids)

3(5), 30(1) SOV/99-59-10-8/11

AUTHOR: Belikov, M.P. Candidate of Engineering Sciences

TITLE: Coordinating Conference on the Most Important Research Work on Hydro-melioration Construction

PERIODICAL: Gidrotekhnika i melioratsiya, 1959, Nr 10, pp 61-62 (USSR)

ABSTRACT: The Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii (All-Union Research Institute for Hydraulic Engineering and Melioration) together with the Gosstroy SSSR and the Akademiya po stroitel'stvu i arkhitekture (Academy of Civil Engineering andArchitecture), urged by a special decree promulgated by the Gosstroy, the Gosplan and the Ministerstvo finansov soyuza SSR (Ministry of Finances of the USSR), held a conference from 22-28 June 1959 to coordinate and organize their respective research work on hydro-melioration in the period 1959-1961. Research was to cover the following problems: 1) methods of designing and building meliorative systems

Card 1/3

Coordinating Conference on the Most Important Research Work on Hydro-melioration Construction

and increasing their efficiency through the use of the latest equipment, 2) methods of organizing and performing meliorative work and developing meliorative machinery and 3) water supply and sewerage for rural areas. The Conference was attended by 57 representatives of 23 research and production organizations concerned with melioration engineering. SANIIRI, UkrNIIGiM, Giprovodkhoz, AzNIIGiM, TurkmenNIIGiM, ArmNIIGiM, LatvNIIGiM, LitNIIGiM, YuzhNIIGiM, Rosgiprovodkhoz, Lengiprovodkhoz, Glavgolodnostepstroy, Institut vodnykh problem Uzbekskoy akademii nauk (Institute of Hydraulic Problems of the Uzbek Academy of Sciences), Turkmengidrostroy, the Vodgeo Institute, Institut santekhniki (Institute of Sanitation Engineering), etc. The Plenary Session heard a paper by the Director of VNIIGiM A.M. Tsarevskiy on "Raising the Major Scientific Problems and Effecting Coordination of Scienti-

Coordination Conference on the Most Important Research Work on Hydro-melioration Construction

fic Research in Meliorative Engineering". The Conference pointed out shortcomings in scientific cooperation in the past and indicated ways in which research might be coordinated.

ASSOCIATION: VNIIGiM

Card 3/3

BELIKOV, M.P.; YEMEL'YANOV, V.A.; NESTEROV, V.Ye.; CHURAYEV, N.V., kand. tekhn. nauk, nauchnyy red.; SAFONOV, P.V., red.izd-va; GOL'BERG, T.M., tekhn. red.

[Using radioisotopes in hydraulic engineering] Primenenie radioaktivnykh izotopov v gidrotekhnicheskom stroitel'stve. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 162 p. (MIRA 14:9)

(Radioisotopes—Industrial applications)

BELIKOV, M.P., doktor tekhn.nauk; TEVEROVSKIY, B.Z., inzh.

Using power-metal filters in dry cleaning of blast-furnace gases.
Prom.energ. 16 no.9:28-31 S '61. (MIRA 14:8)
(Gas purification)

MARKVARTDE, V.M., kand. tekhn. nauk; BELIKOV, M.P., kand. tekhn. nauk

Modern designs of sprinkling apparatus. Gidr. i mel. 16 no.6: 21-27 Je '64. (MIRA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii imeni A.N. Kostyakova.

ACC NR: AP5025313 SOURCE CODE: UR/0193/65/000/009/0028/0031

AUTHOR: Belikov, M.P. (Candidate of technical sciences); Guber, K.V.

ORG: none

TITLE: New equipment for agricultural irrigation

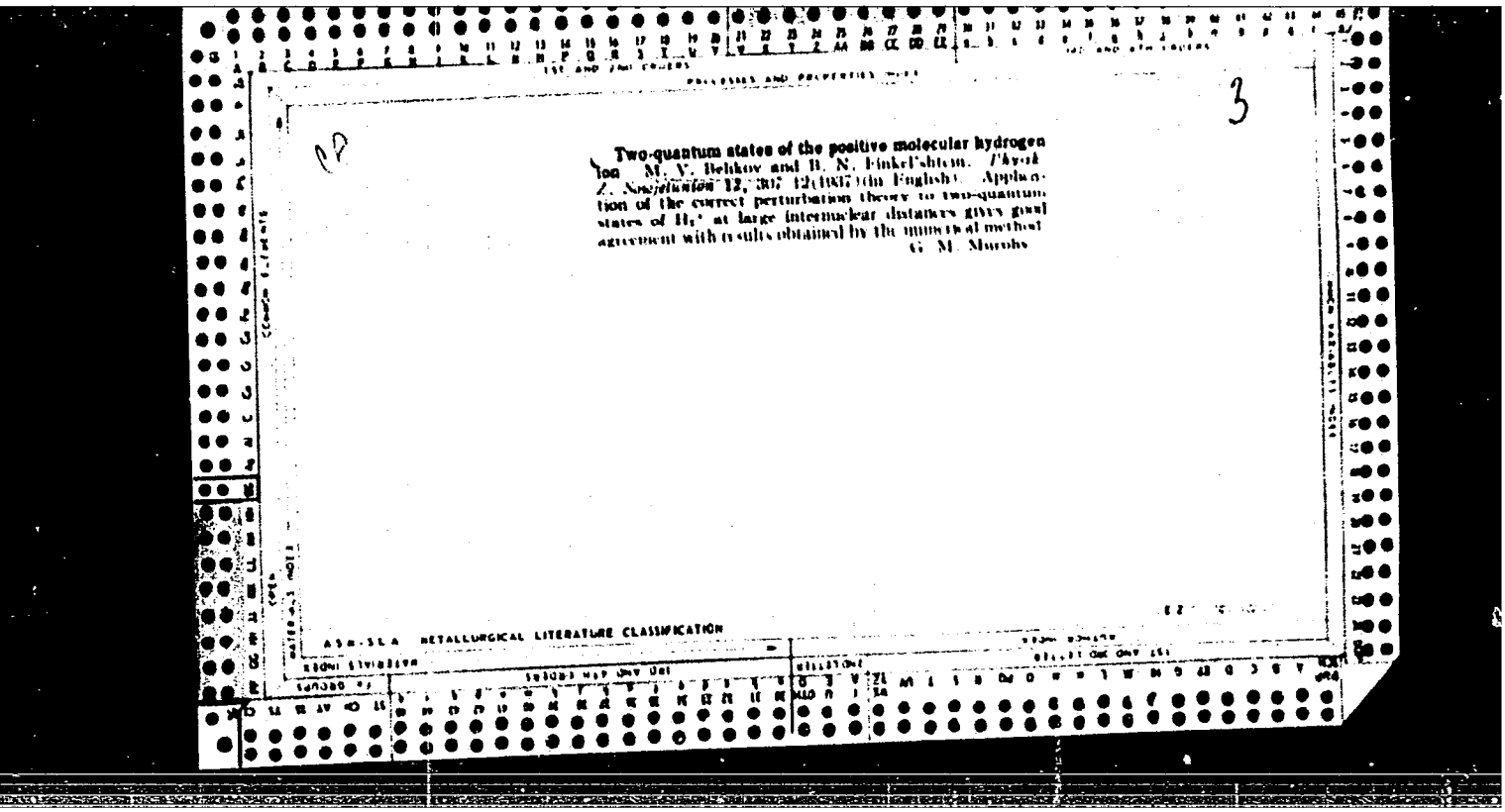
SOURCE: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 9, 1965, 28-31

TOPIC TAGS: agricultural engineering, agricultural machinery, pipeline

ABSTRACT: The authors describe new machines and pipeline equipment for mechanization of sprinkler and channel irrigation. A table is given showing the basic technical characteristics of both production and experimental sprinkler machines. Data are also given on pumping machines as well as flexible and rigid pipelines. Some figures are given on the savings achieved by use of the new irrigation equipment for various crops in various regions of the Soviet Union. Recommendations are given for economizing on production by using light alloys and plastics. Orig. art. has: 3 tables.

SUB CODE: 02, 13 / SUBM DATE: none

Card 1/1 UDC 631.347.2.003.1



Two-quantum states of the positive molecular hydrogen ion. M. V. Belikov and B. N. Finkel'shtein. *Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki*, 12, 387–92 (1942) (in English). Application of the correct perturbation theory to two-quantum states of H_2^+ at large internuclear distances gives good agreement with results obtained by the numerical method.
G. M. Murphy

3

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

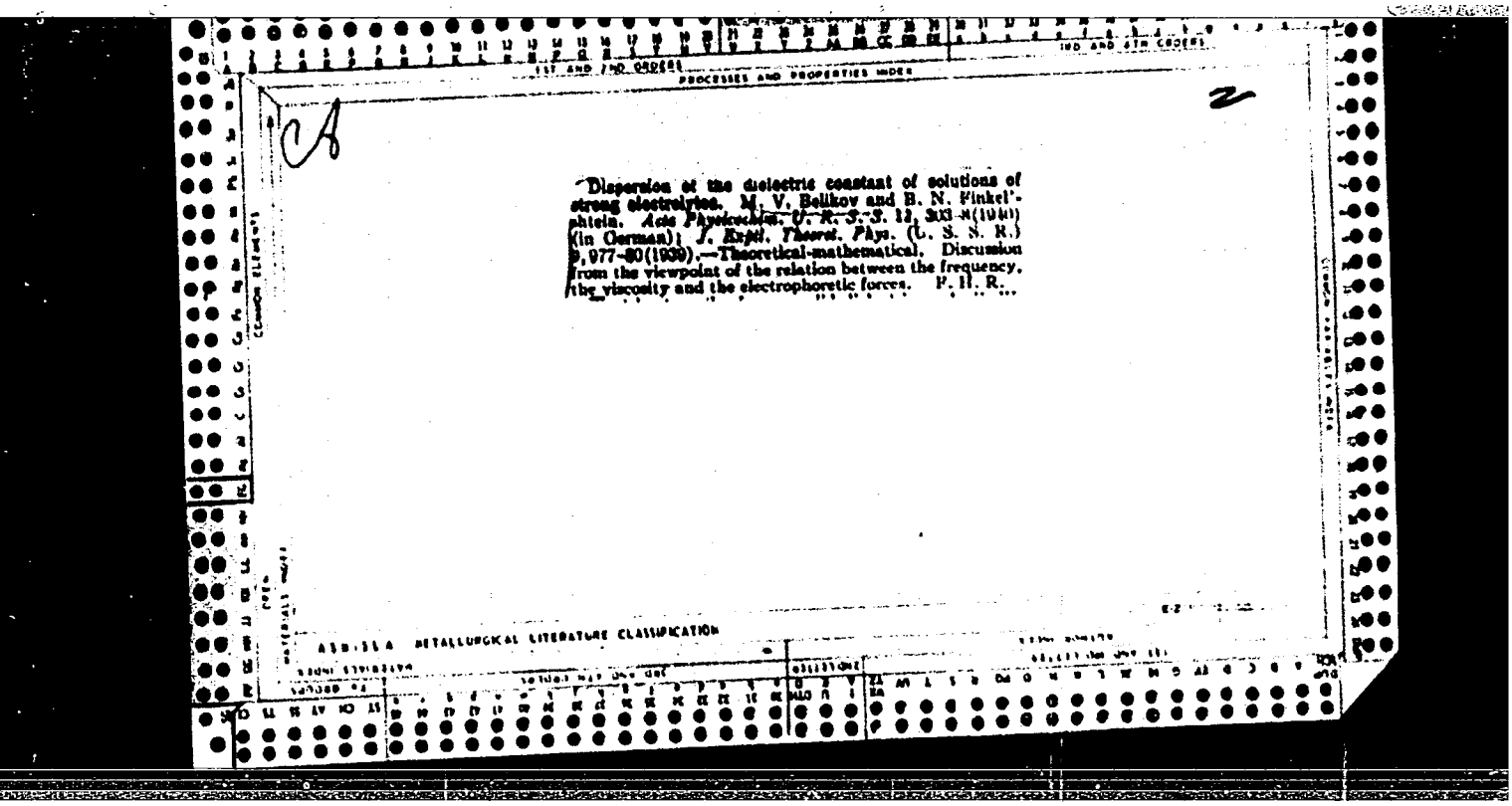
CA

2

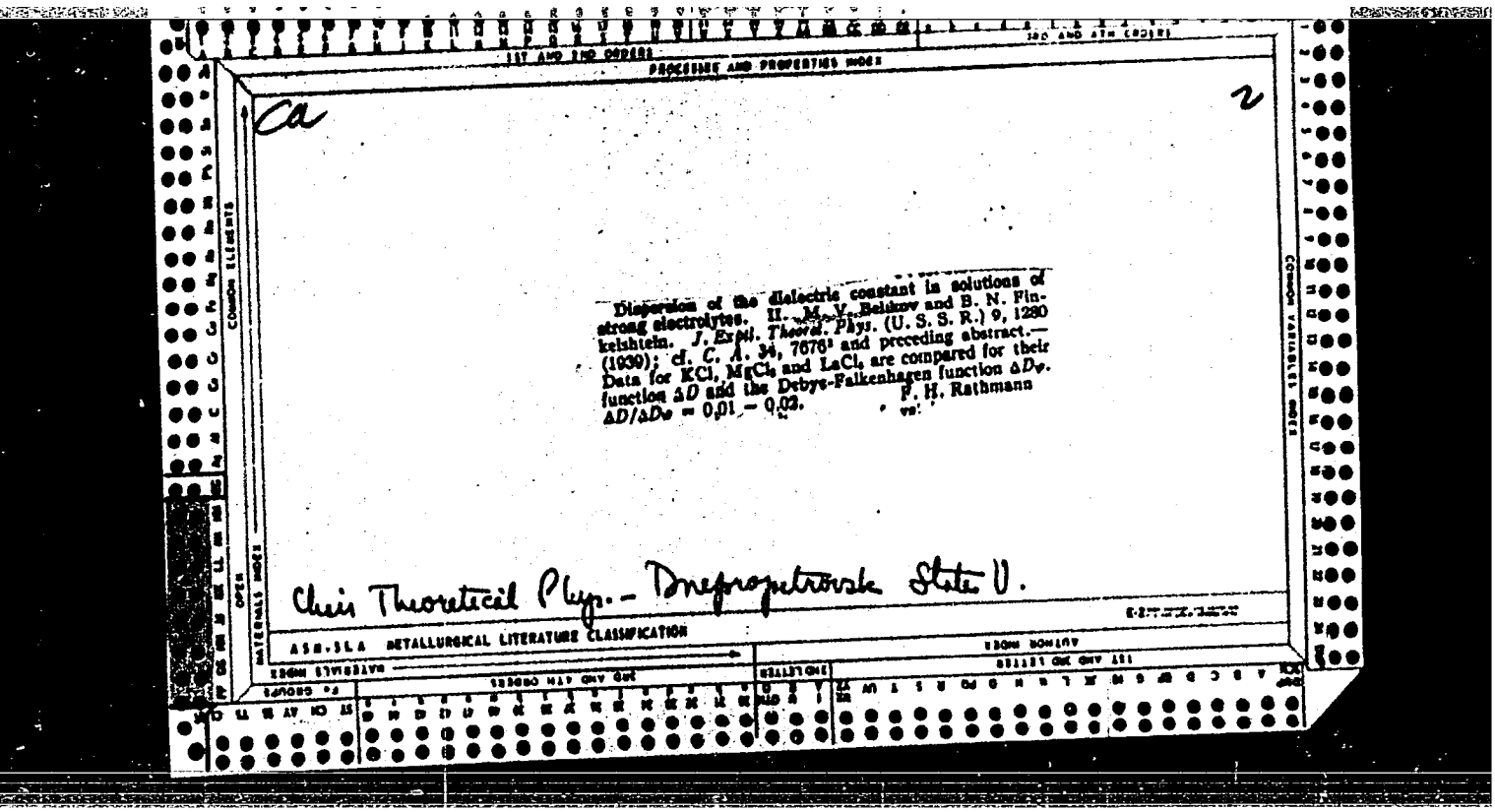
Dispersion of the electrophoretic force in solutions of strong electrolytes. M. V. [illegible]. *J. Exptl. Theoret. Phys.* (U. S. S. R.) 9, [illegible]-70(1930).—Theoret.-math. B. gives an exact solution of the linear equation of hydrodynamics for an ion moving in a soln. of a strong electrolyte under the influence of an alternating current and obtains the dependence of the electrophoretic forces on the frequency.

F. H. Rathmann

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Dispersion of the dielectric constant of solutions of strong electrolytes. M. V. Belikov and B. N. Finkel'shtein. *Acta Physicochim. U. R. S. S.* 12, 313-8(1940) (in German); *J. Expll. Theoret. Phys.* (U. S. S. R.) 9, 977-80(1939).—Theoretical-mathematical. Discussion from the viewpoint of the relation between the frequency, the viscosity and the electrophoretic forces. P. H. R.



BELIKOV, M. V.

"The Question of the Dispersion of the Dielectric Constant in a Stronger Electrolyte," Acta Phys., 12, No.2, 1940

Dnepropetrovsk State U.

BELIKOV, N.

Belikov, N. - "Stakhanov methods for finishing jobs," Proizvod. obucheniye, 1948, No. 12, p. 25-26

SO: U-3600, 10 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 6, 1949).

1. BELIKOV, N. A.

2. USSR (600)

4. House Painting

7. Over-all mechanization of painting. Gor.khoz.Mosk. 26 no. 12 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

BAULIN, Ya.N.; BELIKOV, N.A.; SOSHIN, A.V., professor, redaktor.

[N.A.Belikov's method for over-all mechanization of plastering work] Kompleksnaia mekhanizatsiia shtukaturnykh rabot po metody N.A.Belikova. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1953. 18 p. (MLRA 7:6)

(Plastering)

BELIKOV, N.A., MOVCHAN, F.F.; KRYUGER, Yu.V., redaktor; CHEBYSHEVA, Ye.A. tekhnicheskiy redaktor.

[Use of machinery in painting] Mekhanizatsiia maliarnykh rabot. Moskva, Gos.izd-vo lit-ry po stroitel'stvu i arkhitekture, 1953. 151 p. [Microfilm]
(Painting, Industrial)

BELIKOV, N., instruktor peredovykh metodov truda

New puttying unit. Stroitel' no.8:23 Ag '60. (MIRA 13:8)

(Putty)

BELIKOV, N.A.

Unutilized possibilities in car operation on the Gor'kiy Railroad. Zhel.dor.transp. 47 no.12:39-41 D '65.
(MIRA 18:12)

1. Zamestitel' nachal'nika otdela ekspluatatsii Glavnogo upravleniya vagonnogo khozyaystva.

BELIKOV, N.F. [Bielikov, N.F.], mekhanik

Cart for moving the front part of a tractor. Mekh. sil'. hosp. 11 no.7:15 Jl '60. (MIRA 13:10)

1. Kolkhoz "Vitchizna," Staro-Beshevskogo rayona, Stalinskoy oblasti.
(Tractors--Maintenance and repair)

BELIKOV, Nikolay Mikhaylovich; ZAYTSEV, V.S., red.; TIKHONOVA, I.M., tekhn. red.

[Man's glory is his work] Chelovek slaven trudom. Leningrad, Lenizdat, 1961. 56 p. (MIRA 15:2)

1. Sekretar' partiynoy organizatsii ordena Lenina zavoda "Krasnyy vyborzhets" (for Belikov).
(Leningrad--Socialist competition)

[illegible] and PROKHOROVA, A.A.

"Honey inspection and determination of its quality."

Veterinariya, Vol. 37, No. 5, 1960, p. 82

Leningrad City Vet.-Bacteriol. Lab.

BELIKOV, N.V

BELIKOV, N.V.

Flat hearth traveling oven with gas heating. Khleb. i kond. prom. 1 no.9:3-5 S '57. (MIRA 10:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khlebopekarnoy promyshlennosti.

(Ovens)

BELIKOV, N.V.; LAGUZINA, I.M.; FOGEL', V.O.

Experimental heat measuring apparatus for investigating the baking process of hearth baked products. Trudy TSNIIKHP no.8:37-50 '60. (MIRA 15:8)
(Heat—Transmission) (Baking)

BELIKOV, O.A.

Shaping gear cams in machining low-module globoid worms. Trudy SNTO MVTU no.3:23-30 '57. (MLRA 10:9)
(Gear cutting)

BELIKOV, O.A., inzh.

Designing an efficient individual hydraulic drive for molding presses. Izv.vys.ucheb.zav.; mashinostr. no.4:148-155 '60. (MIRA 14:4)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche im. Baumana.
(Molding machines--Hydraulic driving)

BELIKOV, O.A., kand.tekhn.nauk

Increasing the productivity of molding machines.
Vest.mashinostr. 46 no.1:63-66 Ja '66.

(MIRA 19:1)

BELIKOV, P.F.

GEYER, V.G., inzhener; BELIKOV, P.F., inzhener; REZNIKOV, A.L., inzhener.

Automatization of water drainage in mines. Mekh.trud.rab. 7 no.5:16-18 My '53. (MLRA 6:5)
(Mine drainage)

GEYYER, V.G., prof.; BORUMENSKIY, A.G., dotsent; HELIKOV, P.F., inzh.; TIMOSHENKO, G.I., inzh.

Automatizing pumping stations for hydraulic mining. Nauch. dokl. vys. shkoly; gor. dele no.1:139-145 '58. (MIRA 11:6)

1.Predstavlena kafedroy gornoy mekhaniki Donetskogo industrial'nogo instituta.

(Excavating machinery--Electric driving)

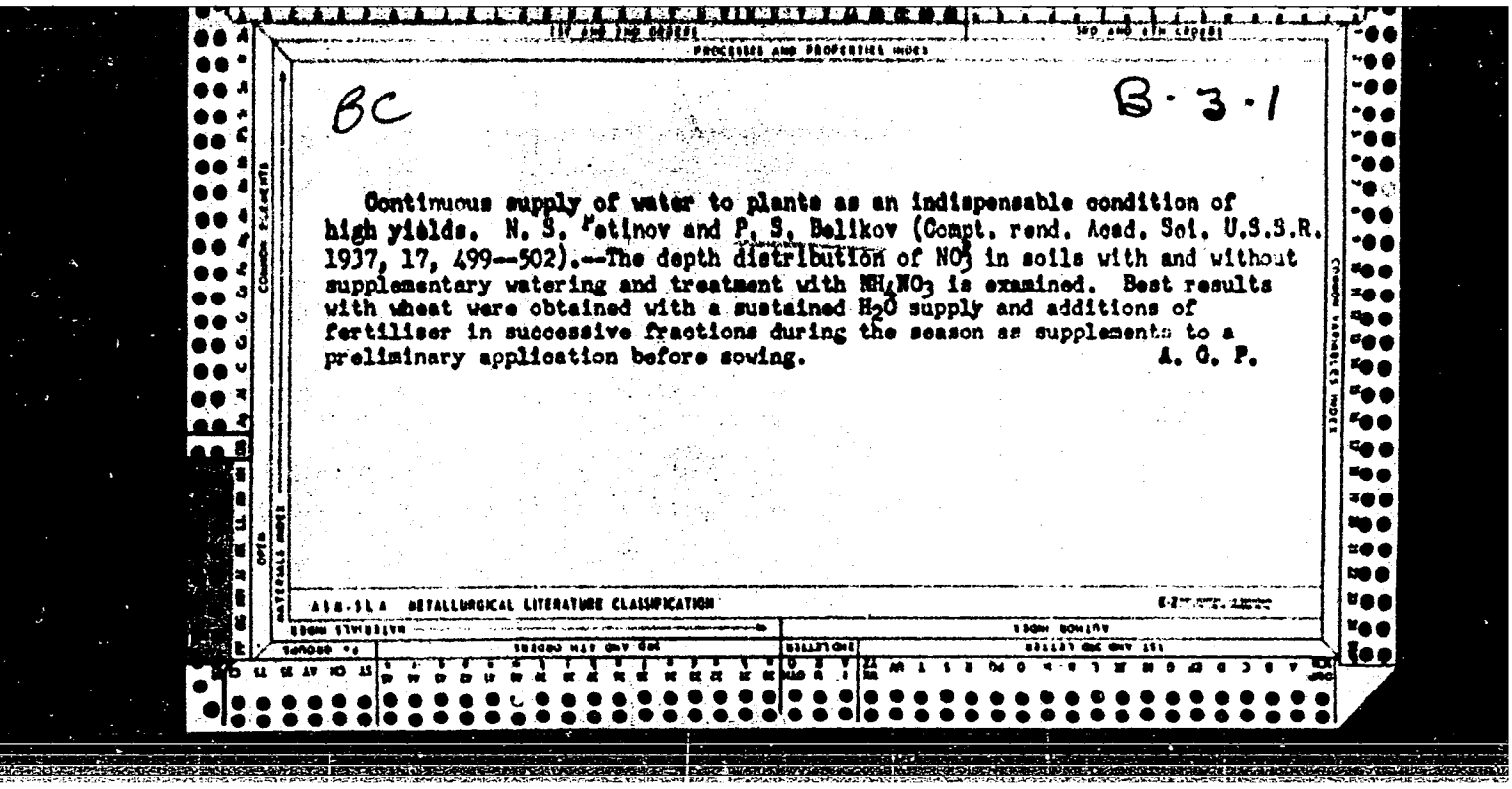
BELIKOV, P.F., inzh.; RUTMAN, R.A., inzh.

Electrode water level indicator housed in a protective pipe.
Sbor. trud. Inst. gor. dela AN URSR no.12:98-105 '61. (MIRA 15:11)
(Liquid level indicators)

BELIKOV, P.F. DECEASED 1962/6
C' 1961

SEE ILC

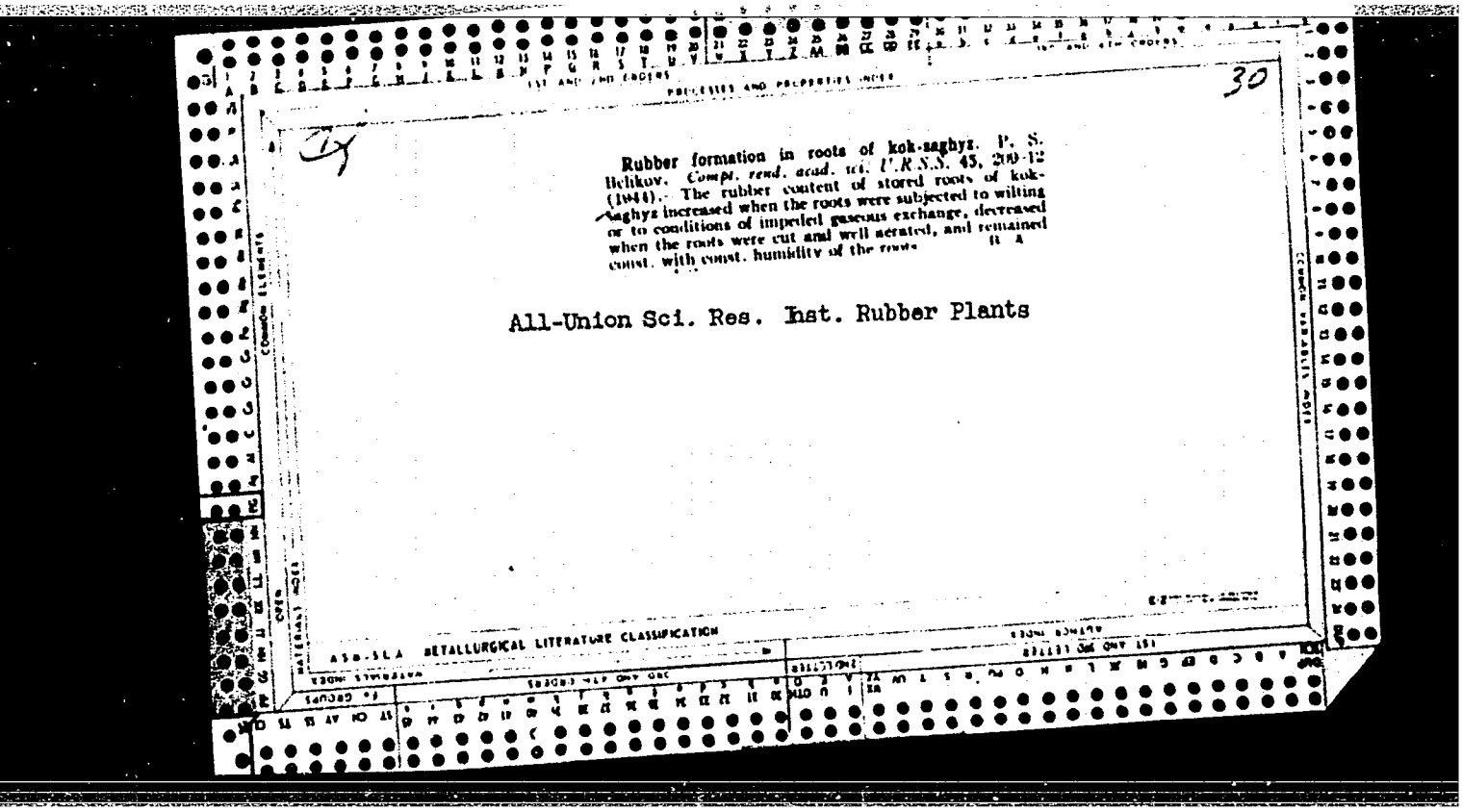
MEDICINE



BC

B-3-1

Continuous supply of water to plants as an indispensable condition of high yields. N. S. Petinov and P. S. Belikov (Compt. rend. Acad. Sci. U.S.S.R. 1937, 17, 499--502).--The depth distribution of NO_3 in soils with and without supplementary watering and treatment with NH_4NO_3 is examined. Best results with wheat were obtained with a sustained H_2O supply and additions of fertiliser in successive fractions during the season as supplements to a preliminary application before sowing. A. C. P.

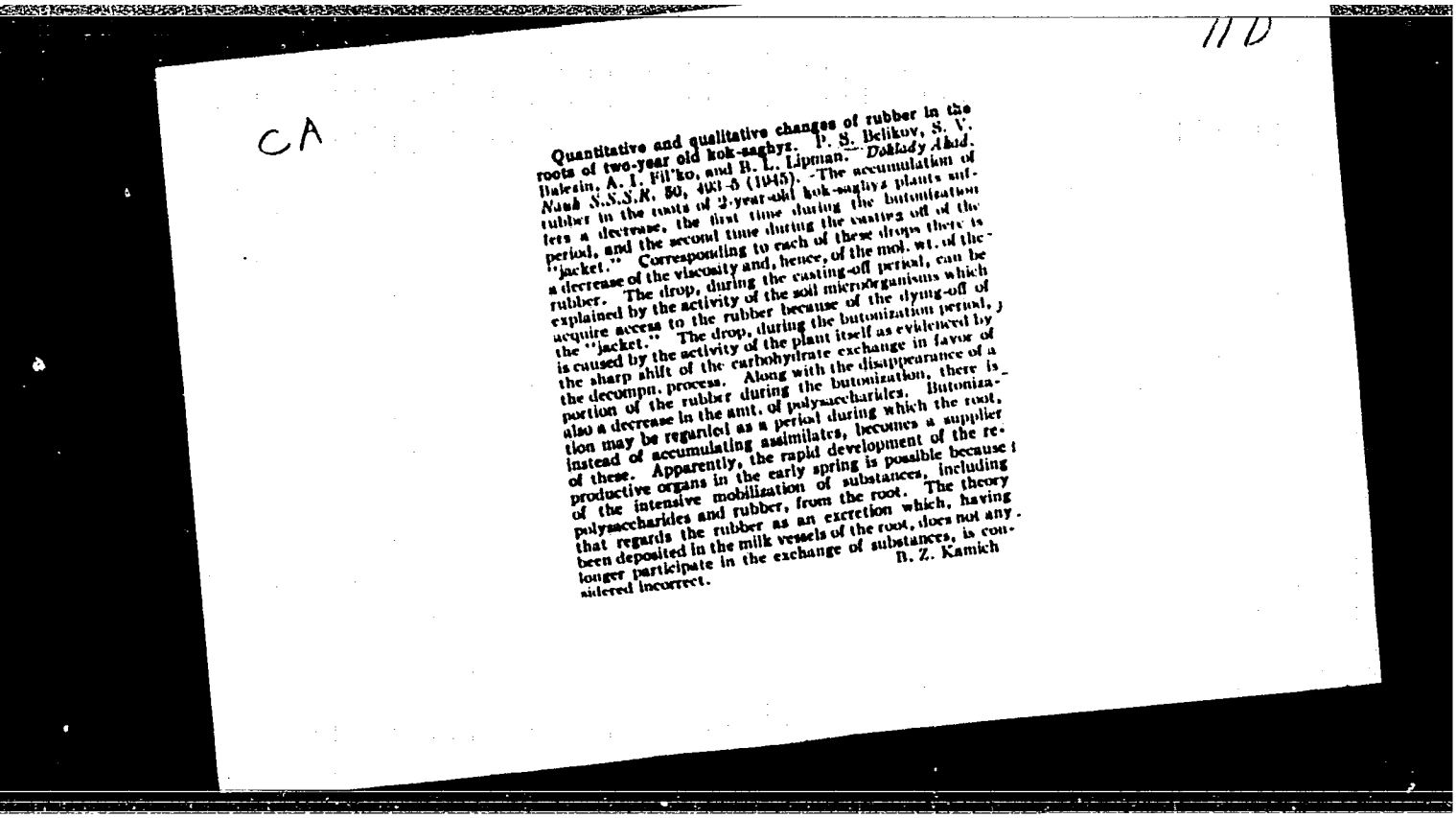


30

Rubber formation in roots of kok-saghyz. P. S. Ilchikov. *Compt. rend. acad. sci. U.R.S.S.* 45, 209-12 (1944).- The rubber content of stored roots of kok-saghyz increased when the roots were subjected to wilting or to conditions of impeded gaseous exchange, decreased when the roots were cut and well aerated, and remained const. with const. humidity of the roots. H. A.

All-Union Sci. Res. Inst. Rubber Plants

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

11 D

Quantitative and qualitative changes of rubber in the roots of two-year old kok-saghyz. P. S. Belikov, S. V. Bakrain, A. I. Fil'ko, and B. L. Lipman. *Doklady Akad. Nauk S.S.S.R.* 50, 403-5 (1945). The accumulation of rubber in the roots of 2-year-old kok-saghyz plants suffers a decrease, the first time during the butonization period, and the second time during the casting off of the "jacket." Corresponding to each of these drops there is a decrease of the viscosity and, hence, of the mol. wt. of the rubber. The drop, during the casting-off period, can be explained by the activity of the soil microorganisms which acquire access to the rubber because of the dying-off of the "jacket." The drop, during the butonization period, is caused by the activity of the plant itself as evidenced by the sharp shift of the carbohydrate exchange in favor of the decompn. process. Along with the disappearance of a portion of the rubber during the butonization, there is also a decrease in the amt. of polysaccharides. Butonization may be regarded as a period during which the root, instead of accumulating assimilatrs, becomes a supplier of these. Apparently, the rapid development of the reproductive organs in the early spring is possible because of the intensive mobilization of substances, including polysaccharides and rubber, from the root. The theory that regards the rubber as an excretion which, having been deposited in the milk vessels of the root, does not any longer participate in the exchange of substances, is considered incorrect.

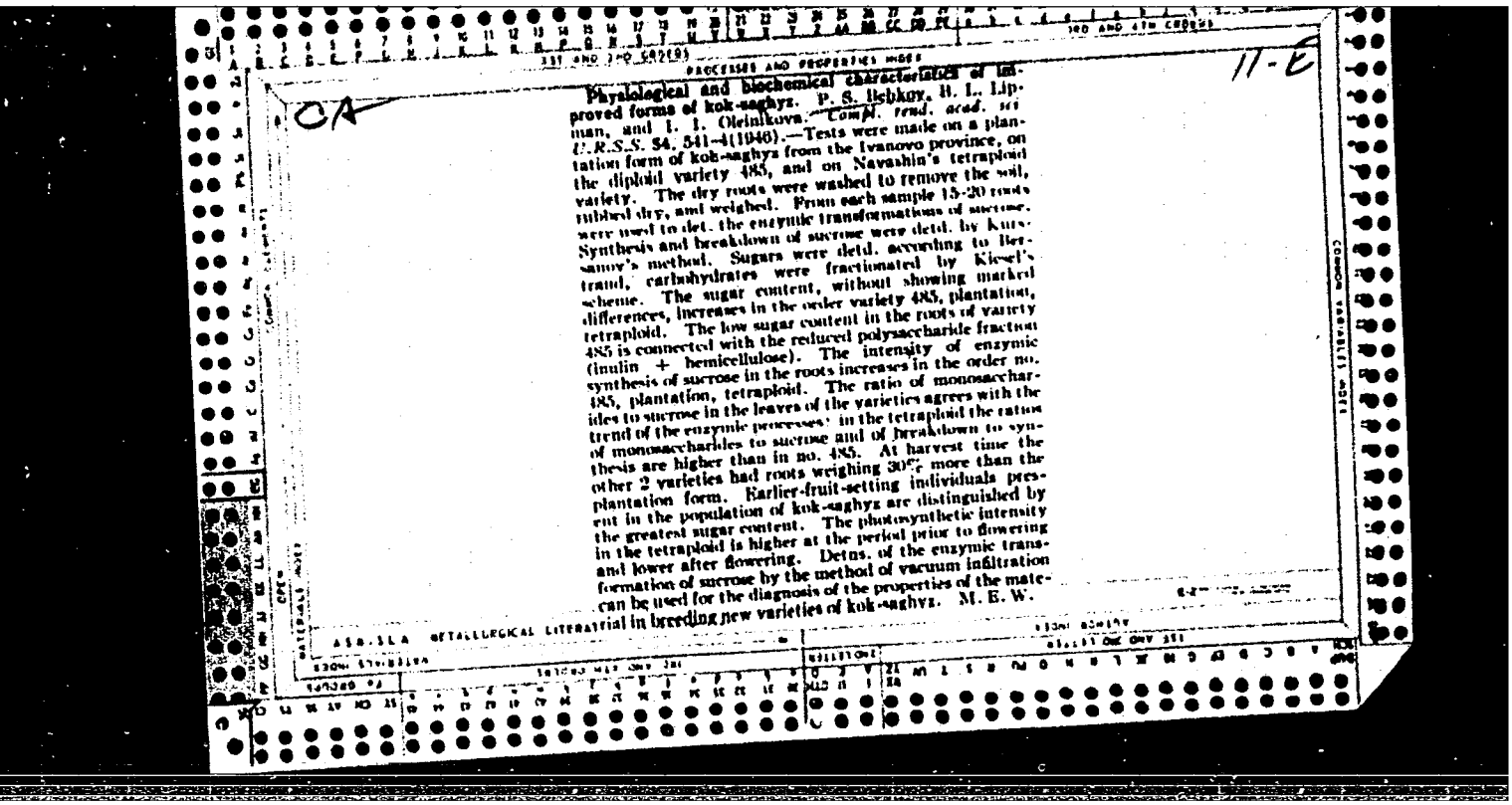
B. Z. Kamich

CA

11 D

Post-harvest accumulation of rubber in the roots of krym-saghyz. P. S. Belikov and B. L. Lipman. *Doklady Akad. Nauk S.S.S.R.* 50, 407-9(1945); cf. C.A. 40, 5291[9].—Tests were conducted with 2-year old plants. The rubber content increased with wilting; when loss of wt. reached 20% of the original wt., the formation of addnl. rubber ceased. Wilting tests were also performed during the whole vegetation period of the plant. As the intensity of the growth processes decreases, the capacity of the root to synthesize rubber in the post-harvest period also decreases gradually. For roots picked during the period of intensive growth, the amt. of polysaccharides consumed was much more than for those picked during summer dormancy. In the latter there is the synthesis of sucrose resulting from the decompn. of the polysaccharides while in the former the content of sucrose, under the same conditions, does not change. The more intensive the wilting of roots picked during the period of summer dormancy, the more sucrose is accumulated therein. Despite the intensive decompn. of inulin, the accumulation of sucrose does not take place always, an exception being the period of intensive growth of the plant and of the most intensive post-harvest synthesis of rubber. It is possible that in this case, because of the intensive post-harvest synthesis of rubber, the monoses, which are formed as a result of the decompn. of the polysaccharides, are consumed in forming the rubber; as a result of this, there is no accumulation of sucrose. Conclusion: The post-harvest synthesis of rubber in the roots of krym-saghyz is indissolubly bound with the transformation of the carbohydrate complex.

B. Z. Kamich



CA

11-E

Physiological and biochemical characteristics of improved forms of kok-saghyz. P. S. Ilebkov, B. L. Lipman, and I. I. Orlnikova. *Compt. rend. acad. sci. U.R.S.S.* 54, 541–4(1946).—Tests were made on a plantation form of kok-saghyz from the Ivanovo province, on the diploid variety 485, and on Navashin's tetraploid variety. The dry roots were washed to remove the soil, rubbed dry, and weighed. From each sample 15–20 roots were used to det. the enzymic transformations of sucrose. Synthesis and breakdown of sucrose were detd. by Kursanov's method. Sugars were detd. according to Bertrand, carbohydrates were fractionated by Kiesel's scheme. The sugar content, without showing marked differences, increases in the order variety 485, plantation, tetraploid. The low sugar content in the roots of variety 485 is connected with the reduced polysaccharide fraction (inulin + hemicellulose). The intensity of enzymic synthesis of sucrose in the roots increases in the order no. 485, plantation, tetraploid. The ratio of monosaccharides to sucrose in the leaves of the varieties agrees with the trend of the enzymic processes: in the tetraploid the ratios of monosaccharides to sucrose and of breakdown to synthesis are higher than in no. 485. At harvest time the other 2 varieties had roots weighing 30% more than the plantation form. Earlier-fruit-setting individuals present in the population of kok-saghyz are distinguished by the greatest sugar content. The photosynthetic intensity in the tetraploid is higher at the period prior to flowering and lower after flowering. Detns. of the enzymic transformation of sucrose by the method of vacuum infiltration can be used for the diagnosis of the properties of the material in breeding new varieties of kok-saghyz. M. E. W.

BELIKOV, P. S.

PA 52T50

USSR/Medicine - Botany Oct 1947
Medicine - Growth

"The Influence of Heteroauxin on Implanting and the Frost Resistance of Kok-saghyz Grafts," P. S. Belikov, Sci Res Inst of Rubber Plants, 2½ pp

"Dok Akad Nauk SSSR" Vol LVIII, No 1, 143-45

Concludes from experiment that heteroauxin in kok-saghyz grafts lowers frost resistance of tissue growths. This is a particular action, not merely growth promotion. Present level of knowledge does not permit sufficiently clear presentation of the mechanism of the action of growth substances. It

52T50

USSR/Medicine - Botany (Contd) Oct 1947

can be said only that together with a stimulation of the root formation there is a lowering of frost resistance under the influence of heteroauxin.

Submitted by Academician N. A. Maksimov, 28 Apr 1947.

52T50

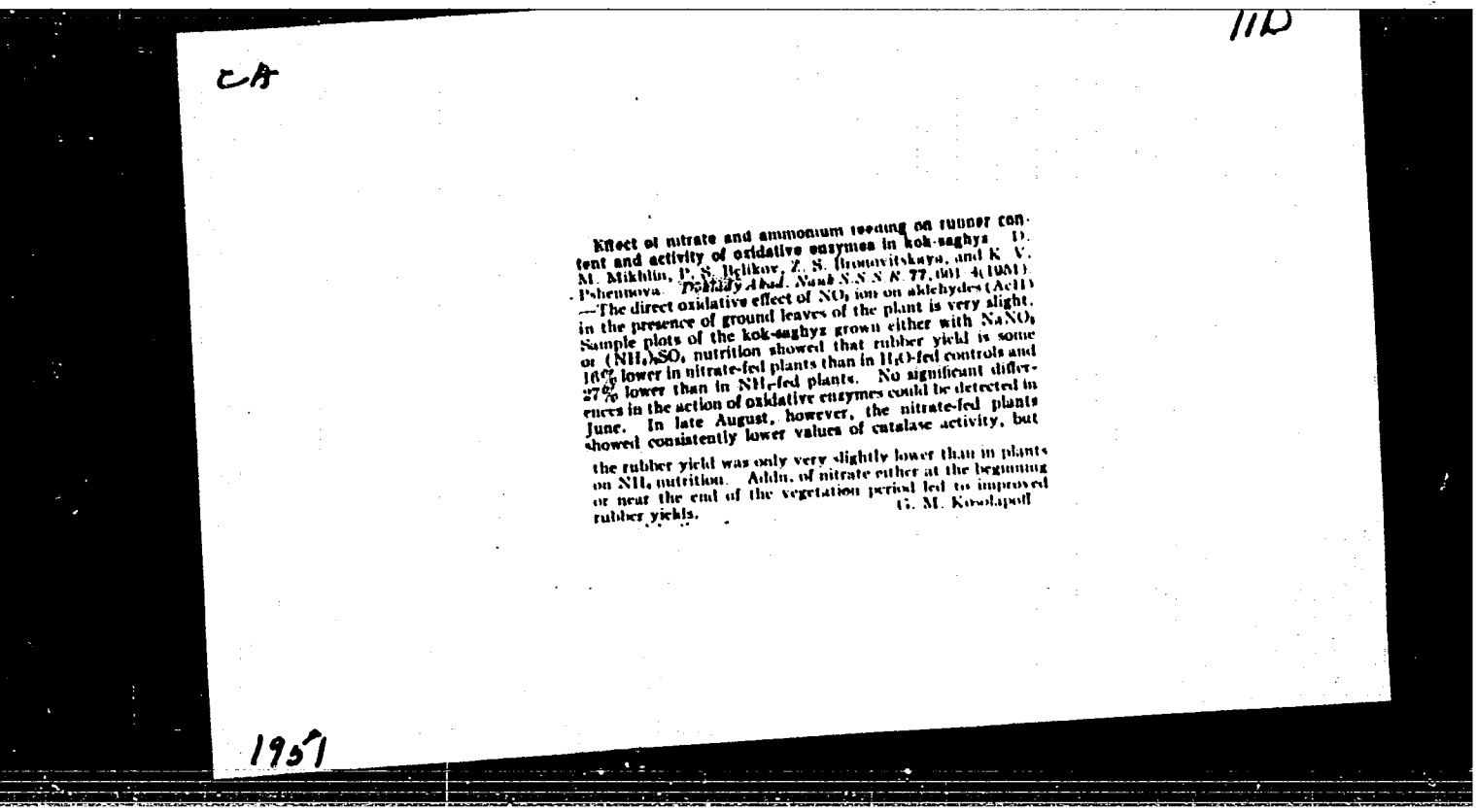
~~Research Bases.~~
~~Bark Rubber Mfrs.~~
Rubber Abstracts

PLANTING

(Physiology of the accumulation of rubber in the roots of kok-saghiz.) P. S. BELIKOV and W. I. OLEINIKOVA (Compt. Rend. Acad. Sci. U.S.S.R., 1947, 58, 1101-5; Chem. Zentr., 1948, 119, 1138; Rev. Gén. Caout., 1949, 26, 51D).—The study compares the cultivation of a selected form of kok-saghiz and a tetraploid form. The maximum accumulation of rubber occurs at different times in each type. In the selected form (No. 485) it is produced later and lasts longer than in the tetraploid form. The authors estimate that No. 485 is the more interesting type. 1228.32

Physiology Lab., All-Union Sci. Res. Inst. Rubber Plants

1949



CA

11D

Effect of nitrate and ammonium feeding on rubber content and activity of oxidative enzymes in kok-saghyz. D. M. Mikhlin, P. S. Ilchkov, Z. S. Ivanovitskaya, and K. V. Pshennova. *Doklady Akad. Nauk S.S.S.R.* 77, 101–4 (1951).—The direct oxidative effect of NO_3 ion on aldehydes (AcH) in the presence of ground leaves of the plant is very slight. Sample plots of the kok-saghyz grown either with $NaNO_3$ or $(NH_4)_2SO_4$ nutrition showed that rubber yield is some 16% lower in nitrate-fed plants than in H_2O-fed controls and 27% lower than in NH_4-fed plants. No significant differences in the action of oxidative enzymes could be detected in June. In late August, however, the nitrate-fed plants showed consistently lower values of catalase activity, but the rubber yield was only very slightly lower than in plants on NH_4 nutrition. Addn. of nitrate either at the beginning or near the end of the vegetation period led to improved rubber yields. G. M. Kondratieff

1951

BELIKOV, Pyëtr Sergeyevich

(Moscow Order of Lenin Agricultural Academy imeni Timiryazev), Academic degree of Doctor of Biological Sciences, based on his defense, 20 May 1955, in the Council of the Inst of Physiology of Plants imeni Timiryazev, Acad Sci USSR, of his dissertation entitled: "Formation and accumulation of rubber in Russian dandelions."

Academic degree and/or title: Doctor of Biological Sciences

SO: Decisions of VAK, List no. 18, 10 Sep 55, Byulleten' MVO SSR, No. 17, Sep 56, Moscow, pp 9-16, Uncl. JPRS/NY-435

Belikov, P.S.

2
2 mag

The formation and accumulation of rubber hydrocarbon (Caoutchouc) in kok-saghyz. P. S. Belikov. *Izvest. Timiryazev. Sel'skokhoz. Akad.* 1955, ~~No. 2, 211-28~~.—(1) A plant-compn. study indicates that the rubber from kok-saghyz and that of *Hevea* plants are identical. The presence of heavy metals in kok-saghyz rubber is due to the content of these metals in other tissues of the plant. (2) The methods of detg. the rubber-carrying capacity of kok-saghyz (details of the operation are given) are somewhat differe..t from standard methods. (3) The question of rubber-hydrocarbon formation is discussed, with observations on the relative viscosities in benzene soln. of rubber hydrocarbons from various sections of the root. Away from the neck of the root, the viscosity increases, with a max. at 20–25 cm., after which it decreases. (4) Formation of rubber hydrocarbon after harvesting is detd. by the growth of the globules which takes place in young parts of the plant and by decompn. of the reserve polysaccharides. (5) The relation of rubber accumulation to growth and development, and the problem of selection are discussed. (6) The relation of rubber accumulation to conditions of growing the plants, including the factor of light, moisture, N and P nutrition, and geographic region are discussed. (7) The biol. role of rubber hydrocarbon, and the question of the biol. significance of the rubber in plants are also discussed. 22 references.

J. S. Joffe

(1)

BELIKOV, P.S.

BELIKOV, P.S.

"Plant nutrition through the use of light and carbon (photosynthesis)" by A.A. Nichiporovich. Reviewed by P.S. Belikov. Fiziol. rast. 4 no.5:487-488 S-O '57. (MIRA 10:11)
(Photosynthesis) (Nichiporovich, A.A.)

BELIKOV, P.S., doktor biol. nauk, prof.; KIRILLOVA, T.V., laborant.

Intensity of excretion as a factor in determining the functional state of plant cells [with summary in English]. Izv. TSKhA no.2: 21-38 '58. (MIRA 11:6)

(Botany--Physiology) (Cells)

BELIKOV, P.S.; IORDANOV, I.T.

"A practical manual of plant physiology" [in Bulgarian] by K.Iord and others. Reviewed by P.S. Belikov, I.T. Iordanov. Fiziol.rast. 5 no.6 N-D '58. (MIRA 11:12)
(Plant physiology) (Iord, K.)

17(1)

AUTHORS: Belikov, P. S., Motorina, M. V. SOV/20-123-1-50/56

TITLE: On the Day and Night Rhythm in Photosynthesis (O sutochnykh ritmakh fotosinteza)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 1, pp 185 - 188 (USSR)

ABSTRACT: 30 years ago, simultaneously and independently from each other, the leningradskaya and the kiyevskaya Schools proved that the diurnal course of photosynthesis does not always follow the intensity of meteorological factors. Thus in the complex of conditions which determine the diurnal dynamics of photosynthesis, certain inherent conditions must play an important part; they entered the literature as the "plasmatic factor". In the course of the past 30 years not only the nature of this "plasmatic" factor has been revealed, but the observations mentioned have also been revised (Refs 9, 12 - 14). Therefore, the authors feel justified to describe their test results which point to a rhythm in photosynthesis, without, however, trying to interpret the nature of the facts observed. Bean plants of the fiberless Saksa kind were selected for the tests, which grow well in artificial light

Card 1/3

and show very distinct day and night rhythms in their leaf movements (Refs 3, 5, 11). CO_2 absorption was always measured by means of Rikhter (Richter) absorbers which were combined into an aggregate following the arrangement of Nichiporovich and Vasil'yeva (Ref 6). From the results obtained, the authors deducted the following conclusions: 1) The day and night round of photosynthesis is irregular under any kind of test conditions. This holds of the entire period of vegetation also under constant conditions in the environment. A certain repetitiveness (povtoryayemost') was observed as to the moments when maxima and minima would occur. The day and night round of photosynthesis is to be studied with consideration to the endogenous rhythms. 2) Plants which were grown under the usual change of light and darkness showed the following periods of photosynthesis after being transferred to conditions of constant factors: the maximum roughly corresponded to the astronomic noon hours, the minimum to the night hours. 3) Plants which were grown in light continuous throughout 24 hours showed a rhythm in the day and night round of photosynthesis. Its increases and depressions

followed each other more often. This caused "feverish" curves of photosynthesis (a term employed by A. S. Okanenko, Ref 7). 4) All this suggests that in the day and night round of photosynthesis rhythms are effective which are determined by heredity. But new rhythms may also be adopted by the plants. There are 2 figures and 14 references, 8 of which are Soviet.

ASSOCIATION: Moskovskaya sel'skokhozyaystvennaya akademiya im. K. A. Timiryazeva (Moscow Academy of Agriculture imeni K. A. Timiryazev)

PRESENTED: June 5, 1958, by A. L. Kursanov, Academician

SUBMITTED: June 4, 1958

BELIKOV, P.S., prof., doktor biologicheskikh nauk; KIRILLOVA, T.V., aspirantka

Dynamics of the secretion of substances as an indication of the heat resistance of plant tissue. Izv.TSKhA no.6:7-18 '59. (MIRA 13:6)

(Plants, Effect of temperature on)

BELIKOV, P.S., doktor biologicheskikh nauk, prof.; MOTORINA, M.V., kand. biologicheskikh nauk; KURKOVA, Ye.B., laborantka.

Using the GIP-5 infrared gas analyser for determining the intensiveness of photosynthesis. Izv. TSKhA no.3:30-39 '60. (MIRA 14:4)

(Photosynthesis) (Infrared rays)

BELIKOV, P.S., doktor biologicheskikh nauk, prof.; KIRILLOVA, T.V., aspirantka

Effect of thermal stimuli on the viscosity of protoplasm [with summary in English]. Izv. TSKhA no.5:35-44 '60. (MIRA 13:11)
(HEAT—PHYSIOLOGICAL EFFECT) (PROTOPLASM)

BELIKOV, P.S., doktor biologicheskikh nauk, prof.; MOTORINA, M.V., kand.biologicheskikh nauk; KURKOVA, Ye.B., laborant

Intensity of photosynthesis in various Triticum species.
Izv. TSKhA no.5:44-54 '61. (MIRA 14:12)
(Wheat)
(Photosynthesis)

BELIKOV, P.S., doktor biolog. nauk, prof.; DMITRIYEVA, M.I., aspirantka

Changes in the carbohydrate and amino acid composition of the barley coleoptile at high temperatures. Izv. TSKHA no.6:49-60 '62. (MIRA 16:6)

(Barley) (Plants, Effect of temperature on)
(Plants—Chemical analysis)

BELIKOV, P.S., doktor biologicheskikh nauk; prof.; MORTORINA, M.V. kand. biologicheskikh nauk.; KURKOVA, Ye.B., laborant.

Brief activation of photosynthesis as the manifestation of irritability in plants [with summary in English]. Izv. TSKHA no.1:47-60 '62. (MIRA 15:6)

(Photosynthesis)

BELIKOV, P.S.

"Plant physiology" by V.A.Novikov. Reviewed by P.S.Belikov.
Fiziol.rast. 9 no.4:511-514 '62. (MIRA 15:9)
(PLANT PHYSIOLOGY)

BELIKOV, P.S., doktor biolog. nauk, prof.; KIRILLOVA, T.V., kand. biolog. nauk

Dynamics of the excretion of some substances from barley coleoptiles under the influence of heat. Izv. TSKHA no.6: 61-68 '62. (MIRA 16:6)

(Barley)
(Plants, Effect of temperature on)
(Exudation(Botany))

BELIKOV, P. S.; DMITRIYEVA, M.I.; KIRILLOV, T. V.

"Physiological and biochemical characteristics of response reactions of the plant cell to the continuous action of high temperature."

UNESCO - International Symposium on the Role of Cell Reactions in Adaptations of Metazoa to Environmental Temperature.

Leningrad, USSR, 31 May - 5 June 1963

BELIKOV, P.S., doktor biologicheskikh nauk, prof.; GEY, B.A., kand. biolog. nauk

Discharge of substances from wheat leaves under increased dehydration as related to time. Izv. TSKHA no.2:29-33 '63. (MIRA 16:10)

BELIKOV, P.S., doktor biolog. nauk, prof.; DMITRIYEVA, M.I., aspirantka

Changes in phosphorus compounds and gas exchange in barley coleoptiles at high temperatures [with summary in English]. Izv. TSKHA no.3: 49-61 '63. (MIRA 16:9)

(Plants— Respiration)
(Plants, Effect of heat on)
(Phosphorus metabolism)

BELIKOV, P.S., prof. doktor biol. nauk; MOTORINA, M.V., starshiy nauchnyy sotrudnik; NEVSKAYA, R.I., kand. biol. nauk

Nature of short time activation of photosynthesis. Izv. TSKHA no.6:28-36 '64 (MIRA 18:1)

1. Kafedra fiziologii rasteniy i Laboratoriya iskusstvennogo klimata Moskovskoy ordena Lenina sel'skokhozyaystvennoy akademii imeni K.A.Timiryazeva.

BELIKOV, P.S., prof. doktor biol. nauk; AVAKIMOVA, L.G., aspirantka

Photosynthesis, water content, and stoma movement in the cut leaves of kidney beans. Izv. TSKHA no. 1:48-58 '65
(MIRA 19:1)

1. Kafedra fiziologii rasteniy i laboratoriya iskusstvennogo klimata Moskovskoy sel'skokhozyaystvennoy ordena Lenina akademii imeni Timiryazeva.

L 44277-66 EWT(1) SCTB DD

ACC NR: AR6011859 SOURCE CODE: UR/0299/65/000/020/G001/G001

AUTHOR: Belikov, P. S.; Motorina, M. V.; Nevskaya, R. I. 35 B

TITLE: Nature of short duration activation of photosynthesis

SOURCE: Ref. zh. Biologiya, Abs. 20G2

REF SOURCE: Izv. Timiryazevsk. s.-kh. akad., no. 6, 1964, 28-36

TOPIC TAGS: photosynthesis, light biologic effect, gas analyzer, IR analysis

ABSTRACT: An infrared gas analyzer was used to study the photosynthesis rate of 17 to 20 day old leaves of Kustovaya beans with an NaCl solution (1 M) acting on the roots as a stimulant for 2 min. The plants were grown under different lighting conditions: fluorescent lamp or a DRL lamp at 9000 lux and a DRL lamp at 18,000 lux. In the first case the photosynthesis rate was studied at 5,000 lux (ascending part of light curve) and at 11,000 lux (zone of light saturation). In the second case, experiments were conducted at 5,000 and 20,000 lux. At the same time the state of the stomatal apparatus of the bean leaf (lower epidermis) was studied. Under light saturation conditions temporary activation of photosynthesis in response to submersion of roots in a plasmolytic solution lasted longer and displayed a higher value. Short duration

Card 1/2 UDC: 581.18/581.132

L 44277-66

ACC NR: AR6011859 O

activation was also observed in the linear section of the light curve. A hypothesis is suggested stating that the photosynthesis activation process starts with the light stage. The photosynthesis rate does not coincide in time with stomate movements as increased photosynthesis prevents widening of stomate openings; the general appearance of the curves is the same. During the activation period of both processes, strands considered as proof of an excited state of the leaf appear in the surrounding stoma of the epidermal cells and then disappear. It is assumed that any stimulus acting on the roots can induce propagation of excitement which is transmitted to the leaf and causes activation of one or the other physiological function. Bibliography of 32 titles.
L. Avakimova. [Translation of abstract].

SUB CODE: 06,20

Card 2/2 mjs

BELIKOV, P.Ye.; PLANKINA, A.V.

Cast and shaped rolls for rolling trolleybus rails. Lit. proizv. no.4:39 Ap '64. (MIRA 18:7)

BELIKOV, P.Ya., inzhener.

Experience in using inoculated and high-grade pig iron for castings at the Frunze Sumy Machine Building Plant. Proizv.-tekh. inform. no.2: 1-50 '52. (MIRA 10:6)

1. Zavod im. Frunze.
(Founding) (Iron-magnesium-silicon alloys)

BELIKOV, P. YA.

123-1-417

Translation from: Referativnyy Zhurnal, Mashinostroyeniye, 1957, Nr 1, p. 71 (USSR)

AUTHORS: Belikov, P.Ya., Bolotov, A.N., Kononenko, A.G.

TITLE: Production of High-strength Cast Iron (Opyt polucheniya vysokoprochnogo chuguna)

PERIODICAL: In sbornik: Opyt proizva otlivok. Khar'kov, Oblizdat, 1955, pp. 72-87.

ABSTRACT: The production of high-strength cast iron by treatment with technically pure Mg or with an alloy having a high Mg content is accompanied by a bright flash and a splashing of molten metal from the ladle. As experimentally established, an alloy composed of 5 to 7% Mg, 40 to 50% Si, the rest Fe has the optimum casting properties and produces a minimum flash. The cast iron produced with this alloy is characterized by its excellent technical pro-

Card 1/3

Production of High-strength Cast Iron (Cont.)

perties, a high fluidity and low shrinkage. It can be cast without refining into intricate castings of close-grained texture in all joints and passages and with wall thicknesses of 5 to 6 mm. Tempering for 1.5 to 2 hours at 750-800° produces pearlite-ferrite iron which has the characteristics of malleable ferrite iron. The initial cast iron smelted in a cupola has the following composition (in %%) - 3.0 -3.6 C; 1.5-2.2 Si; 0.4-0.6 Mn; 0.09-0.12 S; up to 0.2 P. Cast iron with an upper limit of C and Si content is recommended for castings having walls <10 mm thick, and for castings having walls >40mm thick a cast iron with a lower limit C and Si content is advised. The alloy is added in pieces weighing from 4 to 10 kg in quantities equalling from 1.5 to 2% of the molten iron by weight, using a hopper and ordinary

Production of High-strength Cast Iron (Cont.)

pouring ladles installed in a chamber with natural draft. When the molds are prepared the cross section of the gate system is made 1.5 to 2-times larger than when similar castings are made of ordinary cast iron, and the deadheads are made approximately 20% smaller than for carbon steel castings.

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Kh.S.S.

PLANKINA, A.V., inzh.; BELIKOV, P.Ye., inzh.; PSHENICHNOV, P.I.

Use of large cast steel rolls. Stal' 22 no.2:141-145 F '62.
(MIRA 15:2)

(Rolls (Iron mills))

CHESNOKOV, N.D.; ZVEREV, V.A.; Prinimali uchastiye: BOGDANOVA, N.G.; BELIKOV, P.Ye.; FOMINSKIY, M.K.; BAZHENOV, M.M.

Making roll cast iron in an acid open-hearth furnace. Lit. proizv. no.2:4-7 F '63. (MIRA 16:3)

(Cast iron--Metallurgy)

PLANKINA, A.V., inzh.; BELIKOV, P.Ye., inzh.; CHAYKIN, I.K., inzh.

Thin-sheet mill rolls of magnesium-treated cast iron. Stal' 23 no.6:544-546 Je '63. (MIRA 16:10)

1. Kuznetskiy metallurgicheskiy kombinat.

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AUTHOR: Belikov, R. (Engineer; Major); Karabak, I. (Engineer; Major)

75
B

ORG: None

TITLE: Light communications 8

SOURCE: Tekhnika i vooruzheniye, no. 3, 1966, 22-27

TOPIC TAGS: light communication, uv communication, ir communication system, coherent light, laser emission, laser modulation

ABSTRACT: After developing the necessary background, the progress in the application of coherent monochromatic rays to communication transmissions is generally reviewed by using information and data published in foreign papers. A laser device with a helium-neon gas mixture continuously emitting rays of a high coherency is considered to be one of the best for various communication purposes. The properties of laser highly directive optical antenna system and the advantages of its sharp directivity and sensitivity are discussed. A possibility of obtaining a great number of high-quality channels is stressed and an unlimited range of transmission in outer space is mentioned. A block diagram is presented, illustrating the transmitting and receiving stations of a laser communication system including generation, amplification, modulation, emission and reception. The use of ultrasonic, electro-optical and magneto-optical methods for modulation is discussed. The modes of operation of these three modulation systems are explained with the help of

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L 46216-66
ACC NR: AP6011738

three diagrams. The ultrasonic modulation is based on supersonic vibrations created by a piezo-electric oscillator. A polaroid crystal placed in electric field is used for electro-optical modulation while in the magneto-optical method, the action of magnetic field is applied to the crystal. The demodulation processes are also briefly considered. It is concluded that the laser-type communications have the best prospects for the future in outer space. Orig. art. has: 3 diagrams.

SUB CODE: 17, 20/ SUBM DATE: None

Card 2/2 blg

BUYANOV, V.M., kand.med. nauk.; BELIKOV, S.I.

Results of the alloplasty of postoperative hernias. Khirurgiia no.3:52-59 '63. (MIRA 16:5)

1. Iz kafedry fakul'tetskoy khirurgii imeni S.I.Spasokukotskogo (zav.akad. A.N.Bakulev) lechebnogo fakul'teta Vtorogo Moskovskogo gosudarstvennogo meditsinskogo instituta imeni N.I.Prigova.
(VENTRAL HERNIA) (SURGERY, PLASTIC)