BELOZEROV, V.P.; SADOVNIKOV, G.N.

Stratigraphy of the Korvunchana series in the lower part of the Lower Tunguska Basin. Trudy VAGT no.8:24-42 '62. (MIRA 15:11)
(Lower Tunguska Valley—Geology, Stratigraphic)

BELOZEROV, YE.YA.

ORLOV, S.F., doktor tekhn. nauk; GOL'DBERG, A.M., kand. tekhn. nauk; BELOZEROV, Ye.Ya., aspirant; YERSHOV, I.S., inzh.; LYCHEV, D.P., inzh.; RAVDIN, P.D.

First attempts at the skidless conveying of timber. Mekh. trud. rab. 11 no.10:6-8 O '57. (MIRA 10:11)

(Lumber--Transportation)

BELOZEROV, Ye.Ya.

New technological process in lumbering based on the use of felling and skidding machines. Trudy LTA no.83:61-64 '59.
(MIRA 13:4)
(Lumbering--Machinery)

BELOZEROV, YU A.

21

Automation of Cold [Metal] Stamping Production SOV/5580

COVERAGE: The collection contains reports delivered at the Kiyev Scientific and Technical Conference by workers of machine and instrument plants, design organizations, and scientific research and educational institutes. The Conference was sponsored by the Kiyevskoye oblastnoye pravleniye Nauchno-tekhnicheskogo obshchestva mashinostroiteľnoy promyshlennosti (Kiyev Oblast Administration of the Scientific and Technical Society of the Machine-Building Industry) and by the Ukrainskoye respublikanskoye pravleniye Nauchno-tekhnicheskogo obshchestva priborostroiteľnoy promyshlennosti (Ukrainian Republican Administration of the Scientific and Technical Society of the Instrument-Making Industry). The purpose of the Conference was to discuss the achievements and practical experience (especially at the Gor'kiy Automobile Plant, the VEF Plant, and Leningrad factories) in the automation of stamping production. The Conference also served to acquaint a wide number of machine and instrument builders with the present state of automation in these fields and with the prospects for its further development. Papers dealing with experience in the design and operation of automatic devices, presses, and automatic production lines used in stamping production were discussed. No personalities are mentioned. References accompany most of the articles.

TABLE OF CONTENTS:

21

PASS I BOOK EXPLOITATION SOV/5580

Gol'ber, T.M., Doctor of Technical Sciences, Professor, and I.P. Tartakovskiy, Candidate of Technical Sciences, Docent, eds.

Avtomatizatsiya kholodnoshtampovochnogo proizvodstva (Automation of Cold [Metal] Stamping Production) Moscow, Mashgiz, 1961. 282 p. 6,000 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov USSR Institut tekhnicheskoy informatsii. Nauchno-tekhnicheskoye obshchestvo mashinostroiteľnoy promyshlennosti. Kiyevskoye oblastnoye pravleniye. Nauchno-tekhnicheskoye obshchestvo priborostroiteľnoy promyshlennosti. Ukrainskoye respublikanskoye pravleniye.

Ed.: M.S. Sorokin; Tech. Ed.: M.S. Gorokstyapol'skaya; Chief Ed.: (Southern Dept. Mashgiz): V.K. Serdyuk, Engineer.

PURPOSE: This collection of articles is intended for workers at machine and instrument plants and scientific research and design institutes.

Contents:

AVAILABLE: Library of Congress

VK/vrc/mas
9-13-61

Card 5/5

ROMANOVSKIY, Viktor Petrovich, prof.; DAGELAYSKAYA, Natal'ya Aleksandrovna; BELOZEROV, Yu.A., inzh., retsenzent; CHFAS, M.A., red.izd-va; BARDINA, A.A., tekhn. red.

[Progressive die stamping of strips]Posledovatel'naia shtampovka v lente. Pod obshchei red. V.P.Romanovskogo. Moskva, Mashgiz, 1962. 87 p. (Bibliotechka shtampovshchika, no.6) (MIRA 16:2)
(Sheet-metal work)

BELOZEROV, Yu.S.

Experimental study of a helical nanosecond pulse transformer. Izv. vys. ucheb. zav.; radiotekh. 5 no.1:58-65 Ja-F '62. (MIRA 15:5)

1. Rekomendovana kafedroy radiotekhniki Gor'kovskogo politekhnicheskogo instituta imeni A.A. Zhdanova.
(Electric transformers)
(Pulse techniques (Electronics))

BELOZEROV, Yu.S.

Propagation of radio frequency pulses in a helical delay line.
Radiotekh. i elektron. 9 no.2:234-240 F '64. (MIRA 17:3)

L 8777-66 EWT(1)/EWA(h)

ACC NR: AP5027628 SOURCE CODE: UR/0109/65/010/011/2064/2067

AUTHOR: Belozerov, Yu. S.

ORG: none

TITLE: Calculation of helical delay lines having a solid shield

SOURCE: Radiotekhnika i elektronika, v. 10, no. 11, 1965, 2064-2067

TOPIC TAGS: delay line, video signal

ABSTRACT: This is a continuation of a previous author's work (Rad. i elektronika, 1964, 9, 2, 234) on helical-wire dielectric-filled solid-shield delay lines intended for nanosecond operation. A dispersion equation, a delay-time formula, and a transient-response formula are cited from previously-published Soviet sources. Additionally, transient-response characteristics were calculated on a digital computer by using the P. K. Akul'shin method (system response to a

Card 1/2 UDC: 621.374.522.001.24

L 8777-66

ACC NR: AP5027628

periodic sequence of square pulses in the form of a unit meander). Curves of the Q-factor vs. delay time and parameter m are shown; m = b/a, where b is the internal radius of the shield and "a" is the radius of the helix. "The author wishes to thank G. V. Glebovich for his valuable comments re this article." Orig. art. has: 3 figures and 10 formulas.

SUB CODE: 09 / SUBM DATE: 22Jun64 / ORIG REF: 006

jw

Card 2/2

ACC NR: AP7004910 (N) SOURCE CODE: UR/0109/66/011/012/2251/2252

AUTHOR: Belozerov, Yu. S.

ORG: none

TITLE: Calculation of the Q-factor of a helical delay line with the return conductor slit along its axis

SOURCE: Radiotekhnika i elektronika, v. 11, no. 12, 1966, 2251-2252

TOPIC TAGS: delay line, helical delay line, Q factor

ABSTRACT: Formulas and curves are supplied for calculating the Q-factor of a helical delay line with the return conductor slit along its axis and with an allowance for losses in conductors; the delay-line construction was described by the author in Rad. i elektronika, 1966, v. 11, no. 6, p. 1134. As the Q-factor is a ratio of the delay time to the transient-response rise time, the latter is estimated from the phase factor and attenuation of the delay line. The phase factor is determined from the dispersion equation of the line. The attenuation can be found from a formula suggested in the above author's article. An approximate formula for the Q-factor shows that this factor increases when the helix radius and $\mathrm{tg}\,\Phi$ decrease and when the delay time increases. Orig. art. has: 2 figures and 5 formulas.

SUB CODE: 09 / SUBM DATE: 17Mar66 / ORIG REF: 004

Card 1/1 UDC: 621.374.5

L 47341-65 EWT(1)/EWA(h) Pi-4/Pn-4/Peb

ACCESSION NR: AR5009719 UR/0058/65/000/002/H037/H037

17

B

AUTHOR: Belozerov, Yu. S.

SOURCE: Ref. zh. Fizika, Abs. 2Zh250

TITLE: Distortion of radio pulses in a helical time-delay cable

15 25

CITED SOURCE: Tr. po radiotekhn., elektrotekhn. i energ. Gor'kovsk. politekhn. in-t, v. 20, no. 2, 1964, 30-39

TOPIC TAGS: helical cable, time delay cable, radio pulse distortion, rectangular pulse, Gaussian pulse

TRANSLATION: The distortions of rectangular and bell-shaped radio pulses in a radio-frequency helical delay cable with closed shield are calculated. The calculation is carried out without account of the active losses, and under the assumption that only waves with axial symmetry propagate in the helix. The expressions obtained show that a

Card 1/2

L 47341-65
ACCESSION NR: AR5009719 0

bell-shaped pulse passing through the line broadens, its amplitude increases, and the pulse becomes frequency modulated. The expression obtained for the shape of the envelope of the rectangular radio pulse is identical with the expression obtained for a pulse passing through the ionosphere. In the general case, the leading and trailing fronts of a rectangular pulse are not distorted to an equal degree. An analysis of the obtained expressions shows that in order to reduce the distortions of the pulse it is necessary to choose a minimum ratio of helix radius to shield radius. V. P.

SUB CODE: EC ENCL: 00

Card 2/2 CC

BELOZEROV-MIKHIN G.

USSR/General Problems. Methodology. History. Scientific Institutions and Conferences. Teaching. Problems of Bibliography and Scientific Documentation. A

Abs Jour : Ref Zhur-Khimiya, No 6, 1958, 16692

Author : Belozerov-Mikhin G.
Inst : Not given
Title : Flour Milling and Groats Industry in the Forty Years of Soviet Rule.

Orig Pub : Mukomol'no-elevat. prom-sta', 1957, No 11, 26-27

Abstract : No abstract

Card 1/1

BELOZEROV, Yu.S.

Calculation of losses in a helical delay line with a return conductor cut parallel to the axis. Radiotekh. i elektron. 11 no. 2:348-351 F '66 (MIRA 19:2)

1. Submitted June 16, 1965.

BELOZEROV-MUKHIN, G

BELOZEROV-MUKHIN, G.

Flour and groat milling during the 40 years of Soviet rule. Muk.-elev. prom. 23 no.11:17-19 N '57. (MIRA 11:1)

1. Planovyy otdel Ministerstva khleboproduktov SSSR.
(Grain milling)

BELOZEROVA, A.S., inzh.; EYDINOV, Yu.S., inzh., red.

[Instructions for making and using pinion joints of glued wooden construction elements and details] Ukazaniia po primeneniiu i izgotovleniiu zubchatykh soedinenii v kleenykh dereviannykh konstruktsiiakh i stroitel'nykh detaliakh. Moskva, Biuro tekhn.informatsii, 1959. 26 p.

(MIRA 13:6)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu.

(Building, Wooden)

BELOZEROVA A.S.

KOVAL'CHUK, L.M., kand.tekhn.nauk; BELOZEROVA, A.S., inzh.; PARINI, Ye.P., inzh.

Longitudinal gluing of assemblies in a field of high-frequency currents. Der.prom. 10 no.2:4-6 F '61. (MIRA 14:3)
(Gluing) (Induction heating)

BELOZEROVA, A.S.; ZUBAREV, G.N.; CHEBANENKO, M.A.; CHERNYY, B.G.

Construction of a warehouse made of glued wooden elements.
Prom.stroi. 40 no.6:11-14 '62. (MIRA 15:6)
(Potassium salts--Storage)
(Warehouses)

KHRULEV, Valentin Mikhaylovich; FREYDIN, Anatoliy Semenovich; BELOZEROVA, Anastasiya Sergeyevna; AKSENOV, Viktor Vasil'yevich; GUBENKO, A.B., doktor tekhn. nauk, red.; AZAROVA, V.G., red. izd-va; PARAKHINA, N.L., tekhn. red.

[Wood gluing in foreign countries] Skleivanie drevesiny za rubezhom. By V.M.Khrulev i dr. Moskva, Goslesbumizdat, 1961. 301 p. (MIRA 14:11)

(Woodwork)

BELOZEROVA, Anastasiya Sergeyevna; VETRYUK, Ivan Martynovich; GODILO, Petr Viktorovich; ZUBAREV, Georgiy Nikolayevich; KOVAL'CHUK, Leonid Mikhaylovich; KSYUNINA, Nina Grigor'yevna; NIKIFOROV, Yuriy Nikolayevich; PARINI, Yevgeniy Pavlovich; PATUROYEV, Vasiliy Vasil'yevich; PETROV, Igor' Stepanovich; CHERNYY, Boris Grigor'yevich; GUBENKO, A.B., doktor tekhn. nauk, red.; SAKHAROV, M.D., red.; MAKSAKOVA, A.M., red.izd-va; GRECHISHCHEVA, V.I., tekhn. red.

[Glued wooden elements and techniques for their manufacture] Kleenye dereviannye konstruktsii i tekhnologiia ikh izgotovleniia. [By] A.S.Belozerova. i dr. Moskva, Goslesbumizdat, 1962. 180 p. (MIRA 16:5)

(Gluing)

KOBAL'CHUK, L.M., kand. tekhn. nauk; BASKAKIN, Ye.N.; BELOZEROVA, A.S.; ZAGOSKINA, G.V., nauchn. red.

[Mechanized dovetail gluing of wood] Mekhanizirovannoe skleivanie drevesiny na zubchatyi ship. Moskva, TSentr. nauchno-issl. in-t informatsii i tekhniko-ekon. issledovanii po lesnoi, tsellulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i lesnomu khoziaistvu, 1963. 43 p.
(MIRA 17:5)

AUTHORS: Goryaga, G.I., and Belozerova, E.P. SOV/55-58-1-17/33

TITLE: Electrical Conductivity of Liquid Gallium and Indium (Elektroprovodnost' zhidkikh galliya i indiya)

PERIODICAL: Vestnik Moskovskogo universiteta, Seriya fiziko-matematicheskikh i yestestvennykh nauk, 1958, Nr 1, pp 133-136 (USSR)

ABSTRACT: The authors state experimentally (relative error 1%):
1) In the interval 156-450° C the conductivity of indium depends linearly on the temperature; here no structural changes take place; 2) the curve of conductivity of the liquid gallium is also a linear function of the temperature, but for 270-300° C it has a slight break; thence it is concluded that the micro structure changes.
There are 2 figures, and 14 references, 12 of which are Soviet, 1 English, and 1 German.

ASSOCIATION: Kafedra molekulyarnoy fiziki (Chair of Molecular Physics)

SUBMITTED: March 27, 1957

Card 1/1

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000204520003-5"

AUTHORS: Rakova, N. K., Goryaga, G. I., Belozerova, E. P. SOV/163-58-2-36/46

TITLE: Investigation of the Electric Conductivity of Some Metals in Solid and Liquid State (Issledovaniye elektroprovodnosti nekotorykh metallov v tverdom i zhidkom sostoyanii)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 2, pp. 200 - 204 (USSR)

ABSTRACT: An investigation of the electric conductivity in bismuth, lead, and tin in solid and liquid state was carried out. From the determinations of the electric conductivity of lead and bismuth in undercooled state may be seen that at the transition from the liquid to the undercooled state the temperature coefficient of the electric conductivity is not changed. The dependence of the electric conductivity of molten lead, tin, and bismuth on the temperature was investigated and graphically represented. The electric conductivity of bismuth and tin is linearly dependent on the temperature. The dependence between the electric properties of the alloys mentioned above and the change in structure of the metallic melt was investigated, too. In

Card 1/2

Investigation of the Electric Conductivity of Some Metals in Solid and Liquid State SOV/163-58-2-36/46

molten bismuth and tin a considerable change in structure occurs within the temperature range from 500-540°C; this change causes the change of the temperature coefficient of the electric conductivity. The change of the electric conductivity of monocrystalline bismuth in dependence on the degree of overheating of the melt at temperatures by 40°C higher than the melting temperature was also investigated and graphically represented. There are 2 figures and 18 references, 14 of which are Soviet.

ASSOCIATION: MGU, fizicheskiy fakultet (Moscow State University, Department of Physics)

SUBMITTED: October 1, 1957

Card 2/2

S/070/62/007/003/023/026
E132/E460

AUTHORS: Shvidkovskiy, Ye.G., Tyapunina, N.A., Belozerova, E.P.

TITLE: The influence of an electric field on the behaviour of charged dislocations

PERIODICAL: Kristallografiya, v.7, no.3, 1962, 471-472

TEXT: Crystals of LiF and NaCl were etched chemically in an electric field of 0.3 kV/mm and also without a field and the etch pits were compared. The faces of the plates lying parallel to the electric field were examined. In the case of LiF the etch pits were drawn out and similar results were obtained for NaCl. In the latter case, a minimum of 2 kV/cm was found to be necessary to produce an effect. The most likely explanation is that the dislocations move under the influence of the field. There are 2 figures.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova (Moscow State University imeni M.V.Lomonosov)

SUBMITTED: September 17, 1961

Card 1/1

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000204520003-5"

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S/070/62/007/003/024/026
E132/E460

34.7500

AUTHORS: Shvidkovskiy, Ye.G., Tyapunina, N.A., Belozerova, E.P.

TITLE: The generation of dislocations during the vibration of crystals of lithium fluoride and sodium chloride

PERIODICAL: Kristallografiya, v.7, no.3, 1962, 473-474

TEXT: Crystals of LiF were oscillated mechanically as a double oscillator (LiF coupled to quartz) for an hour at 100 kc/s. The amplitude was in one case 2×10^{-6} and in a second run 2.7×10^{-4} which correspond to stresses of 0.02 and 2.3 kg/mm^2 respectively; the limit of flow being 0.5 kg/mm^2. The crystals were etched and examined for dislocations before and after treatment. Before oscillation the dislocation density was approximately 10^4 cm^{-2}. In the case of the specimen oscillated below the limit of flow no new dislocations were observed but for the other specimen new dislocations had been generated. Similar results were obtained for crystals of NaCl. These are in agreement with the observations of other authors. There are 2 figures.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im.M.V.Lomonosova (Moscow State University imeni M.V.Lomonosov)

SUBMITTED: September 17, 1961

Card 1/1

SHVIDKOVSKIY, Ye. G.; BELOZEROVA, E. P.; TYAPUNINA, N. A.

"Effect of High Frequency Vebrations on Dislocation Structure and Internal Friction in Lithium Fluoride Crystals"
Paper Was submitted at the International Conference on Crystal Lattice Defects at Kyoto, 7-12 Sep '62

(for Shvidkovskiy, ye. G.) Inst. of Crystallogrpahy, acad. of sci., USSR, Leninsky Prospect 59, Moscow, V-333

SHVIDKOVSKIY, Ye. G.; TYAPUNINA, N. A.; BELOZEROVA, E. P.

Genesis of dislocations in lithium fluoride and sodium chloride crystals caused by vibration. Kristallografiia 7 no.3:473-474 My-Je '62. (MIRA 16:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

(Dislocations in crystals)
(Lithium fluoride) (Salt)

L 18114-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD

ACCESSION NR: AP3003911 S/0181/63/005/007/2025/2027

AUTHOR: Belozerova, E. P.

TITLE: Effect on internal friction of plastic deformation caused by high-frequency vibrations, and Young's modulus for alkali-halide crystals

SOURCE: Fizika tverdogo tela, v. 5, no. 7, 1963, 2025-2027

TOPIC TAGS: plastic deformation, high frequency, vibration, internal friction, Young's modulus, alkali, halide, crystal, Li, F, Na, Cl, double resonance, oscillator, dislocation interaction, relaxation, etching figure

ABSTRACT: The authors have investigated LiF and NaCl. Measurements were made by means of a double resonance oscillator at a frequency of 110 kilocycles. The stress during high-frequency vibrations ranged up to 2200 g/mm^2. The vibration period at any given stress was 1 hour in all experiments. Measurements for LiF are shown in Fig. 1 (see enclosure). Microscopic studies show that internal friction begins to increase immediately with the birth of new dislocation units, continues to grow as the number mounts, and ceases at some maximum, corresponding to the formation of a slip band. Slip bands corresponding to the maximum of

Card 1/2

ACCESSION NR: AP3003911

2

internal friction are single narrow lines with densely distributed etching figures. Further deformation brings about the formation of broad diffuse slip zones and causes a simultaneous decrease in internal friction. The computed change in Young's modulus is not as large as the measured value. This variance is apparently due to the fact that some mechanism of relaxation takes place in addition to dislocation interaction. The actual nature of the relaxation process is not yet clear. Orig. art. has: 1 figure and 2 formulas.

ASSOCIATION: none

SUBMITTED: 11Oct62 DATE ACQ: 15Aug63 ENCL: 01

SUB CODE: PH NO REF SOV: 003 OTHER: 001

Card 2/2

S/070/63/008/002/005/017
E021/E120

AUTHORS: Belozerova E.P., Tyapunina N.A., and Shvidkovskiy Ye.G.

TITLE: Multiplication of dislocations in alkali-halide crystals under the influence of high frequency vibrations

PERIODICAL: Kristallografiya, v.8, no.2, 1963, 232-237

TEXT: Crystals of lithium fluoride and sodium chloride with yield points of 500 and 200 g/mm^2 respectively were used in the investigation. The initial dislocation densities were $6 \times 10^4/cm^{-2}$ and $2 \times 10^4/cm^{-2}$ respectively. The crystals were subjected to vibrations in a double resonance oscillator with a frequency of 110 kcps. The amplitude was variable up to 3.2×10^{-4}. The change in dislocation structure was followed by repeated etching. Lithium fluoride was etched in a 3% aqueous solution of ferric chloride for 1 minute and sodium chloride etched in glacial acetic acid for 30 seconds. In the case of lithium fluoride, the minimum stress of the vibration leading to the formation of new dislocations was 580 g/mm^2. Further increases in amplitude of vibration caused the appearance of slip bands at about 850 g/mm^2.

Multiplication of dislocations in ... S/070/63/008/002/005/017
E021/E120

With vibrations of amplitude 1000 g/mm^2 the dislocation density increased with time, approaching a saturation value. The time to reach saturation depended on the stress level and at 850 and 2700 g/mm^2 was over an hour and five minutes respectively. In the case of sodium chloride, the minimum stress level to cause the formation of new dislocations was 250 g/mm^2 and slip bands appeared with stresses greater than 480 g/mm^2.
There are 7 figures.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova
(Moscow State University imeni M.V. Lomonosov)

SUBMITTED: July 3, 1962

Card 2/2

ACC NR: AP6036988 (A,N) SOURCE CODE: UR/0181/66/008/011/3375/3377

AUTHOR: Belozerova, E. P.; Tyapunina, N. A.; Kazak, F. A.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvenny universitet)

TITLE: Frequency dependence of the internal friction of lithium fluoride single crystals

SOURCE: Fizika tverdogo tela, v. 8, no. 11, 1966, 3375-3377

TOPIC TAGS: lithium fluoride, internal friction, crystal dislocation phenomenon, plastic deformation

ABSTRACT: In view of the contradictory published data on the frequency dependence of internal friction in the kilocycle frequency range, the authors have measured the internal friction in lithium fluoride single crystals using the method of double piezoelectric oscillator (Ye. G. Shvidkovskiy and A. A. Durgaryan, Nauchn. dokl. vysshey shkoly no. 5, 211, and 217, 1958). The frequency range covered was from 40 to 300 kcs and harmonics. The results showed a linear dependence of the internal friction on the frequency, which agrees well with the dislocation theory of dynamic losses for the case when the frequency of the driving force is much lower than the natural frequency of the dislocation loop. The linear dependence of the frequency remains if the samples are plastically deformed before the tests. A study of the dependence of the internal friction on the prior deformation at different frequencies has shown

Card 1/2

ACC NR: AP6036988

that with increasing frequency the maximum of internal friction shifts toward the region of larger deformations. The results were similar for the fundamental and for the third harmonics. This shift can also be explained from the point of view of dislocation theory. The authors thank Ye. G. Shvidkovskiy for continuous interest, valuable advice, and hints. Orig. art. has: 2 figures and 1 formula.

SUB CODE: 20/ SUBM DATE: 07Feb66/ ORIG REF: 004/ OTH REF: 004

Card 2/2

BELOZEROVA, K.A.

PA 246T25

USSR/Medicine - Gas Gangrene Feb 53

"The Chemotherapeutic Properties of Synthomycin With Reference To Experimental Gas Gangrene," G.N. Pershin, K.A. Belozerova, All-Union Sci Res Chem Pharm Inst imeni S. Ordzhonikidze

"Zhur Mikrobiol, Epidemiol, i Immunobiol" No 2, pp 88, 89

Synthomycin has a therapeutic effect on infections of mice caused by Cl. perfringens, Cl. septicum, Cl. histolyticum, and Cl. oedematiens. Although the active ingredient of synthomycin is the

246T25

levorotatory isomer, the activity of the racemic substance is no lower than that of the l-isomer. Clinical investigations on the effect of synthomycin on gas gangrene should be carried out.

246T25

PERSHIN, G.N.; PADEYSKAYA, Ye.N.; YAKOVLEVA, A.I.; BELOZEROVA, K.A.

Model of infectious polyarthritis in white rats. Zhur.mikrobiol. epid. i immun. 30 no.2:119-125 F '59. (MIRA 12:3)

1. Iz Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta imeni Ordzhonikidze.
(ARTHRITIS, RHEUMATOID, exper.
in white rats (Rus))

BELOZEROVA, L. A.

(2)

24 6730

S/120/62/000/004/034/047
E140/E420

AUTHORS: Talyzin, A.N., Gol'din, L.L., Trokhachev, G.V., Radkevich, I.A., Nozalovskiy, I.A., Sokolovskiy, V.V., Kukhyadze, K.M., Belozerova, L.A., Borisov, V.S., Dysheva, G.K., Veselov, M.D., Goryachev, Yu.M.

TITLE: Investigation and correction of the magnetic characteristics of the proton synchrotron C-blocks at small fields

PERIODICAL: Pribory i tekhnika eksperimenta, no.4, 1962, 184-192

TEXT: Comparative measurements are made on the C-blocks in the residual field (~35 Oe) the injection field (87 Oe) and the field at the beginning of the acceleration cycle (117 Oe). The iron for the magnet blocks was not pre-selected. This had no substantial effect on differences in the dynamic characteristics of the C-blocks, but the differences in residual field constituted 4.25% on the average and reached up to 10%. The mean-square deviation of the magnetic induction was 4.25%, and 1.4% in the injection field, thus exceeding by far the allowable tolerances. The variations were compensated by shunt resistances

Card 1/2

Investigation and correction ...

and by changing the order of the blocks. The present article is concerned with the measurement of the magnetic field intensity and its gradient in the residual field, the compensation by resistances connected across compensation windings, compensation of C-blocks at injection, with investigation of the dynamic characteristics. The equilibrium orbit in the synchrotron has not yet been studied in detail but it is found that either as a result of these corrections or the arrangement of the blocks, the loss of particles is fairly small. There are 7 figures and 1 table.

ASSOCIATIONS: Institut teoreticheskoy i eksperimental'noy fiziki GKAE (Institute of Theoretical and Experimental Physics GKAE)
Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury GKAE (Scientific Research Institute for Electrophysical Apparatus GKAE)

SUBMITTED: March 31, 1962

Card 2/2

TALYZIN, A.N.; GOL'DIN, L.L.; TROKHACHEV, G.V.; RADKEVICH, I.A.; MOZALEVSKIY, I.A.; SOKOLOVSKIY, V.V.; KUKABADZE, G.M.; BELOZEROVA, L.A.; BORISOV, V.S.; BYSHEVA, G.K.; VESOLOV, M.D.; GORYACHEV, Yu.M.

Study and corrective measurements of the magnetic characteristics of S-elements of a proton synchrotron with low fields. Prib. i tekh. eksp. 7 no.4:184-192 Jl-Ag '62. (MIRA 16:4)

1. Institut teoreticheskoy i eksperimental'noy fiziki Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy energii SSSR i Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy energii SSSR.

(Magnetic measurements) (Synchrotron)

ANISIMOVA, K.I.; ANTONOVSKIY, S.D.; BELOZEROVA, L.A.; ZAYTSEVA, A.F.; SHTEYNBOK, S.D.

Larch as a source of the production of a series of useful substances. Rast. res. 1 no.1:74-83 '65. (MIRA 18:6)

1. Botanicheskiy institut im. V.L. Komarova AN SSSR; Lesotekhnicheskaya akademiya im. S.M. Kirova i Institut vysokomolekulyarnykh soyedineniy AN SSSR, Leningrad.

BELOZEROVA, L.S.; SOLDATENKOV, S.V.

Transformation of organic acids in illuminated succulents. Fiziol. rast. 10 no.2:212-218 Mr-Ap '63. (MIRA 16:5)

1. A.A. Zhadanov Leningrad State University.
(Acids, Organic) (Succulent plants)
(Plants—Metabolism)

L 44278-66 EWT(1) SCTB DD

ACC NR: AR6011860 SOURCE CODE: UR/0299/65/000/020/G002/G003

37
B

AUTHOR: Belozerova, L. S. 2

TITLE: Effect of sodium fluoride on photosynthesis, respiration and conversion of organic acids in succulents in the presence of light

SOURCE: Ref. zh. Biologiya, Abs. 20G10

REF SOURCE: Vestn. Leningr. un-ta, no. 21, 1964, 116-121

TOPIC TAGS: plant metabolism, photosynthesis, plant respiration, sodium compound, fluoride

ABSTRACT: Experiments were conducted on whole leaves and leaf cuttings of Bryophyllum crenatum and B. daigremontiana. A NaF solution in a concentration of 0.02 M inhibited photosynthesis and assimilation in the presence of light of the apple cultures approximately the same; in B. crenatum photosynthesis was depressed by 35 to 40% and assimilation of the apple culture was depressed by 17 to 32%; in B. daigremontiana the corresponding figures were 65 to 75% and 56 to 68%. These data indicate that photosynthesis in succulents in the absence of CO_2 takes place due to assimilation of the apple culture; apparently according to the di-tricarboxylic acid cycle. NaF stimulated respiration in both types

UDC: 581.10

Card 1/2

L 44278-66

ACC NR: AR6011860

of Bryophyllum. It is concluded that pentosephosphate plays an important role in the respiration of succulents. S. Vladimirtseva. [Translation of abstract].

SUB CODE: 06

Card 2/2 mjs

L 13616-65 EWT(m)/EWP(t)/EWP(b) IJP(c)/ASD(a)-5/ESD(c) JD

ACCESSION NR: AP4046790 S/0115/64/000/008/0039/0042

AUTHOR: Aladinskiy, V. K.; Belozerova, L. V.; Yermoshin, V. D.; Sushchik, A. S.

TITLE: Precision voltage-regulating silicon diodes

SOURCE: Izmeritel'naya tekhnika, no. 8, 1964, 39-42

TOPIC TAGS: silicon diode, voltage regulating diode, precision silicon diode / D818 silicon diode

ABSTRACT: Generalities about silicon voltage-regulating diodes are given, and Soviet makes are described. D818-A, -B, -V, -G, -D, and -Ye types have these characteristics: rated current, 10 ma; stabilized voltage, 9 v ± (5—15)%; differential resistance, 18 ohms or less; deviation of the stabilized voltage, ± (16—320) mv for -60+120C; average temperature coefficient of voltage, ± (0.001—0.02)% per 1C for -60+120C (more detailed table supplied). D818

Card 1/2

L 13616-65
ACCESSION NR: AP4046790

diodes are claimed to be resistant to mechanical and climatic influences. Their aging for 5,000 hours (50 diodes at 10 ma and 50 diodes at 33 ma) resulted in a deviation of 10 mv from the stabilized voltage. Orig. art. has: 7 figures, 15 formulas, and 1 table.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00

SUB CODE: EC NO REF SOV: 000 OTHER: 000

Card 2/2

ZAYTSEVA, A.F.; BOCHARNIKOVA, N.G.; BELOZEROVA, L.A.

Change in the chemical composition and morphological structure of cellulose fibers in the process of larch wood delignification. Zhur.prikl.khim. 38 no.6:1349-1355 Je '65. (MIRA 18:10)

OVRUTSKIY, G.D., dotsent; BELOZEROVA, L.K., vrach

Evaluation of the effect of factors of the prenatal period on the incidence of caries. Vop. obshchej stom. 17:14-15 '64. (MIRA 18:11)

BELOZEROVA, L.S.

Effect of sodium fluoride on photosynthesis, respiration and organic acid metabolism in succulent plants exposed to light. Vest. LGU 19 no.21:116-121 '64 (MIRA 18:1)

ACCESSION NR: AP3000199 S/0115/63/000/005/0054/0057

AUTHOR: Malkova, E. M.; Radovskaya, T. L.; Belozerova, M. P.; Berestneva, Z. T.

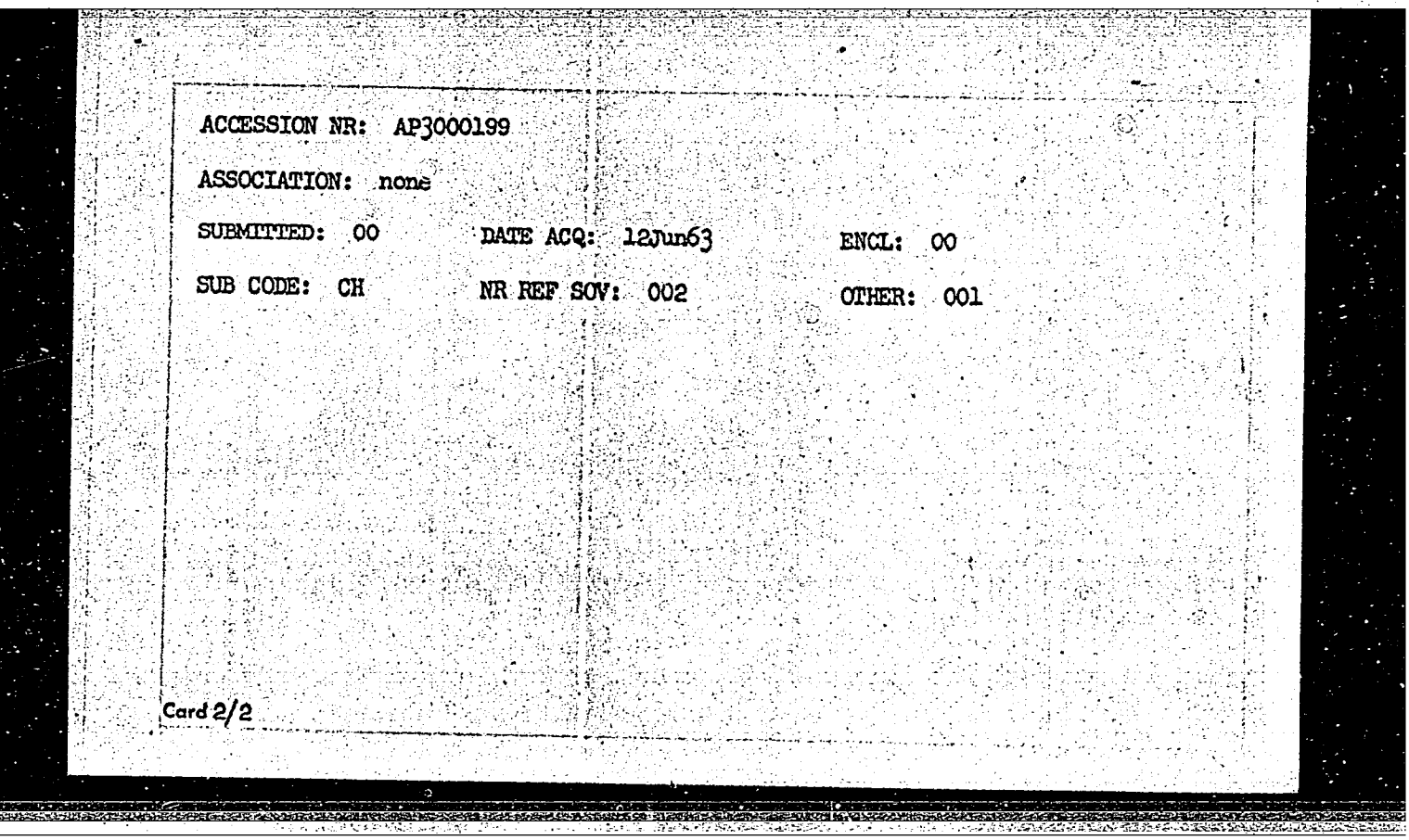
TITLE: Methods for testing the checking gas mixtures

SOURCE: Izmeritel'naya Tekhnika, no. 5, 1963, 54-57

TOPIC TAGS: low oxygen analysis, colorimetric analysis

ABSTRACT: A well-known colorimetric method for determing very low concentrations (0.001 - 1% by volume) of oxygen involves oxidation of a monovalent-copper ion into a bivalent-copper ion by the oxygen contained in the gas being tested. A pipetting device with a sampling cell was made by the authors. The device and the working procedure are described in detail. Another method for the same purpose was investigated by Brooks (Analytical Chemistry, No 3, 1952) and involved diethyl-dithiocarbamic acid whose colored solution had a colloidal nature. Hence, the color-intensity measurements required a photometer or a turbidimeter whose readings were less accurate and less convenient to take than those of a photocolorimeter. To avoid this difficulty, the use of thiosemicarbazide is suggested. Orig. art. has: 2 figures.

Card 1/2



ACCESSION NR: AP3000199

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 12Jun63 ENCL: 00

SUB CODE: CH NR REF SOV: 002 OTHER: 001

Card 2/2

BELOZEROVA, N. A.

USSR/Agriculture - Wheat, Winter Grain May/Jun 49

"Experimental Work With Winter Wheat in Omsk Oblast," N. A. Belozerova, Siberian Sci Res Inst of Grain Culture, Omsk, 18 pp

"Agrobiol" No. 3

Obtained good results by sowing in stubble, even with mildly frost-resistant wheats such as Ukranika. Tabulates results of experiments during several years. Stresses conditions for sowing and ground preparation. Planting vernalized wheat in autumn by "Stern" method improves yield of seed.

2/50T11

Belozerova, N.A.

AFANAS'YEVA, A.L., kand.biol.nauk; BAYERTUYEV, A.A., kand.sel'skokhozyaystvennykh nauk; BAL'CHUGOV, A.V., kand.sel'skokhozyaystvennykh nauk; BELOZEROVA, N.A., agronom; BELOZOROV, A.T., kand.sel'skokhozyaystvennykh nauk; MAKSIMENKO, V.P., agronom; BERNIKOV, V.V., doktor sel'skokhozyaystvennykh nauk; BOGOMYAGKOV, S.T., kand.sel'skokhozyaystvennykh nauk; VOLYNETS, O.S., agronom; BODROV, M.S., kand.sel'skokhozyaystvennykh nauk; BOGOSLAVSKIY, V.P., kand.tekhn.nauk; KHRUPPA, I.F., kand.tekhn.nauk; VERNER, A.R., doktor biol.nauk; VOZBUTSKAYA, A.Ye., kand.sel'skokhozyaystvennykh nauk; VOINOV, P.A., kand.sel'skokhozyaystvennykh nauk; VYSOKOS, G.P., kand.biol.nauk; GALDIN, M.V., inzhener-mekhanik; GERASIMOV, S.A., kand.tekhn.nauk; GORSHENIN, K.P., doktor sel'skokhozyaystvennykh nauk; YELENEV, A.V., inzhener-mekhanik; GERASKEVICH, S.V., mekhanik [deceased]; ZHARIKOVA, L.D., kand.sel'skokhozyaystvennykh nauk; ZHEGALOV, I.S., kand.tekhn.nauk; ZIMINA, Ye.A., agronom; BARANOV, V.V., kand.tekhn.nauk; PAVLOV, V.D.; IVANOV, V.K., kand.sel'skokhozyaystvennykh nauk; KAPLAN, S.M., kand.sel'skokhozyaystvennykh nauk; KATIN-YARTSEV, L.V., kand.sel'skokhozyaystvennykh nauk; KOPYRIN, V.I., doktor sel'skokhozyaystvennykh nauk; KOCHERGIN, A.Ye., kand.sel'skokhozyaystvennykh nauk; KOZHEVNIKOV, A.R., kand. sel'skokhozyaystvennykh nauk; KUZNETSOV, I.N., kand.sel'skokhozyaystvennykh nauk; LAMBIN, A.Z., doktor biol.nauk; LEONT'YEV, S.I., kand.sel'skokhozyaystvennykh nauk; MAYBORODA, N.M., kand.sel'skokhozyaystvennykh nauk; MAKAROVA, G.I., kand.sel'skokhozyaystvennykh nauk; MEL'NIKOV, G.A., inzhener; ZHDANOV, B.A., kand.sel'skokhozyaystvennykh nauk; MIKHAYLENKO, M.A., kand.sel'skokhozyaystvennykh nauk; MAGILEVTSEVA, N.A., kand.sel'skokhozyaystvennykh nauk;

(Continued on next card)

AFANAS'YEVA, A.L.... (continued) Card 2.
NIKIFOROV, P.Ye., kand.sel'skokhozyaystvennykh nauk; NENASHEV, N.I., lesovod; PERVUSHINA, A.N., agronom; PLOTNIKOV, N.A., kand.biol.nauk; L.G.; kand.sel'skokhozyaystvennykh nauk; PAVLOV, V.D., kand.tekhn. nauk; PRUTSKOVA, M.G., kand.sel'skokhozyaystvennykh nauk; GURCHENKO, V.S., agronom; POPOVA, G.I., kand. sel'skokhozyaystvennykn nauk; PORTYANKO, A.F., agronom; RUCHKIN, V.N., prof.; RUSHKOVSKIY, T.V., agronom; SAVITSKIY, M.S., kand.sel'skokhozyaystvennykh nauk; BOLDIN, D.T., agronom; NESTEROVA, A.V., agronom; SERAFIMOVICH, L.B., kand. tekhn.nauk; SMIRNOV, I.N., kand.sel'skokhozyaystvennykh nauk; SEREBRYANSKAYA, P.I., kand.tekhn.nauk; TOKHTUYEV, A.V., kand. sel'skokhozyaystvennykh nauk; FAL'KO, O.S., iznh.; FEDYUSHIN, A.V., doktor biol.nauk; SHEVLYAGIN, A.I., kand.sel'skokhozyaystvennykh nauk; YUFEROV, V.A., kand.sel'skokhozyaystvennykh nauk; YAKHTENFEL'D, P.A., kand.sel'skokhozyaystvennykh nauk; SEMENOVSKIY, A.A., red.; GOR'KOVA, Z.D., tekhn.red.

[Handbook for Siberian agriculturists] Spravochnaia kniga agronoma Sibiri. Moskva, Gos. izd-vo sel'khoz. lit-ry. Vol.1. 1957. 964 p. (Siberia--Agriculture) (MIRA 11:2)

BELOZEROVA, N.A.

Crops to precede spring wheat in steppe regions of Siberia.
Zemledelie 8 no.2:56-59 F '60. (MIRA 13:5)

1. Sibirskiy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skogo institut sel'skogo khozyaystva.
(Siberia--Wheat) (Rotation of crops)

BELOZEROVA, N. A., Cand Agr Sci -- "On the cultivation of winter ~~crops~~ grain in the ~~forest-end~~ wooded-steppe and steppe regions of Western Siberia." Omsk, 1961. (Omsk Agr Inst im S. M. Kirov) (KL, 8-61, 252)

BELOZEROVA, N.A., kand.sel'skokh. nauk

Frost resistance of winter wheat developed from spring wheat. (MIRA 16:7)
Agrobiologiia no.2:247-252 Mr-Ap '63.

1. Sibirskiy nauchno-issledovatel'skiy institut sel'skogo khozyaystva, Omsk.
(Siberia—Wheat—Varieties)
(Plants—Frost resistance)

VYSOKOS, G.P., kand.biolog. nauk; BELOZEROVA, N.A., kand. sel'skokhoz. nauk

Winter crops for virgin lands of Siberia. Agrobiologiia no.3: 447-450 My-Je '63. (MIRA 16:7)

1. Sibirskiy nauchno-issledovatel'skiy institut sel'skogo khozyaystva, Omsk.

(Siberia--Grain)

BELOZEROVA, O.P.; YEPIKHINA, V.I.

Methodology for the quantitative determination of N,N'-dibenzylethylenediamine in dibiomycin. Antibiotiki 9 no.2:172-176 F '64. (MIRA 17:12)

1. Laboratoriya lekarstvennykh form (zav. Ye.N. Lazareva) Vsesoyuznogo nauchno-issledovatel'skogo instituta antibiotikov, Moskva.

ZASYPKINA, P.S.; BELOZEROVA, O.P.; GORNETS, L.V.; MINDLIN, Ya. i.; ANDRIANOV, K.A.

Examination of several hydrophilic polysiloxanes for use as foaming inhibitors in the fermentation of antibiotics. Med. prom. 13 no.2:27-32 F '59. (MIRA 12:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(SILOXANES) (PENICILLIN) (FERMENTATION)

LAZAREVA, Ye.N.; BELOZEROVA, O.P.; AVER'YANOVA, L.L.; RYKALEVA, A.M.

Dibiomycin -- a chlortetracycline for prolonged activity. Antibiotiki 6 no.10:863-867 O '61. (MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(AUREOMYCIN)

POPOVA, L.A.; LEVITOV, M.M.; BELOZEROVA, O.P.

Effect of fats on the biosynthesis of chlortetracycline. Antibiotiki 6 no.11:989-994 N '61. (MIRA 15:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(AUREOMYCIN) (OILS AND FATS)

BELOZEROVA, O.P.; POTRAVNOVA, R.S.; RUBTSOVA, L.K.; EYDEL'STEYN, S.I.; LAZAREVA, Ye.N.

Ditetracycline, a prolonged-action tetracycline derivative. Antibiotiki 8 no.10:926-931 O '63. (MIRA 17:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.

[illegible], Ye. N.; BELOZEROVA, O. P.; KUTSKAYA, I. P.; POTRAVNOVA, R. S.; BEREZINA, Ye. K.; EYDEL'SHTEYN, S. I.; SAVEL'YEVA, A. M.; RUBTSOVA, L. K.

"New derivatives of antibiotics of the tetracycline series."

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

All-Union Res Inst of Antibiotics, Moscow.

RUBTSOVA, L.K.; BELOZEROVA, O.P.; EYDEL'SHTEYN, S.I.; SEMICH, A.I.; PROKHOROVA, I.I.

Some data on experimental clinical studies on oletetrine. Antibiotiki 10 no.1:79-83 Ja '65. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov, Moskva.

BELOZEROVA T.V.

S/138/62/000/005/006/010
A051/A126

AUTHORS: Blokh, G.A.; Kogan, M.S.; Bogdanovich, N.A.; Glavina, V.S.; Krokhina, M.V.; Belozerova, T.V.

TITLE: On the interaction of organic accelerators with the ingredients of rubber mixes

PERIODICAL: Kauchuk i rezina, no. 5, 1962, 22 - 25

TEXT: The authors investigated the amount of accelerator consumed during the process of vulcanization and the role of the adsorption-bound accelerator in its reaction. The content of the organic accelerators was determined quantitatively by the colorimetric method using the ФЭК - М (FEK-M) colorimeter and according to the NIIRP method. Experimental data showed that in simple mixing of the accelerator with various other powdery ingredients at room temperature, intense binding of the accelerators follows. The experiment to determine the strength of the bond between the accelerator and the ingredients showed that in additional extraction the bound captax was hardly extracted, especially from the carbon black mixtures. In cold extraction the captax obtained was less than

Card 1/3

2

S/138/62/000/005/006/010
On the interaction of organic accelerators with A051/A126

that extracted by the hot method. Experimental data further revealed that over 50% of the captax and diphenylguanidine are already bound with the ingredients in the mixing stage and cannot be detected in the free state. The authors conclude that sulfur, zinc oxide and various types of carbon black (gaseous, channel, thermal, jet and lamp) retain on their surface considerable quantities of accelerators, if mixed without heating. Upon heating of the powdery mixture of accelerators and sulfur, zinc oxide or carbon blacks, not only adsorption, but also chemical interaction of the accelerators with the ingredients of the rubber mix is noted. Thus, the accelerators are already used up during the mixing stage. The accelerator bound to the carbon black can also participate in reactions leading to the formation of free radicals and to the occurrence of sulfur fragments as a result of exchange reactions of the sulfur atoms. It determines the structurizing of the rubber within a shorter period of time.

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskiy institut im. F.E. Dzerzhinskogo i Yaroslavskiy zavod rezinovykh tekhnicheskikh izdeliy (Dnepropetrovsk Institute of Chemical Technology im. F.E. Dzerzhinskiy and Yaroslavl' Plant of Rubber Commercial Articles)

Card 2/3

EWT(1)

ACC NR: AR6000100 SOURCE CODE: UR/0058/65/000/008/A014/A014

SOURCE: Ref. zh. Fizika, Abs. 8A136 44,155 44,155 44,155 39 B

AUTHORS: Batrakov, R. I.; Belozerova, V. P.; Tataurov, V. S.

ORG: none

TITLE: High resolution monochromator 10

CITED SOURCE: Tr. Komis. po spektroskopii AN SSSR, t. 2, vyp. 1, 1964, 656-664 44,155

TOPIC TAGS: monochromator, diffraction grating, optic resolution, light dispersion/ 21,40,53

TRANSLATION: A high resolution monochromator, based on the Igel extraplanar installation, was designed and constructed for the 500--600 Å region. An aluminized diffraction grating with three meter of curvature and 1200 lines/mm was used, with a ruled surface 120 x 60 mm and a resolving power 144,000. The average dispersion of the instrument is 5 Å/mm. The spectrum is scanned by both translating and rotating the grating. The angle of incidence was varied thereby from 0° to 20°. Spectral symmetrical slits of the type NO-2443-57 were used. The source, monochromator, and receiver chambers each have their own autonomous vacuum systems. The radiation sources are low-voltage pulsed discharge and a hydrogen lamp, while the radiation receiver is a photomultiplier with fluorescent screen of sodium salicylate.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 000/ OTH REF: 000

1/1 1/1 rdb

BELOZEROVA, Z.F.

Togetherness in a brigade. Tekst.prom. 20 no.3:8-10 Mr '60.
(MIRA 14:5)

1. Direktor Kiyevskoy trikotazhnoy fabriki imeni R.Lyuksemburg.
(Kiev--Textile workers)

RABOTNOVA, I.L.; BALITSKAYA, R.M.; BELOZERSKAYA, N.A.; DISLER, Ye.N.; ZLOCHEVSKAYA, I.V.

Intravital isolation reducing substances in cultures. Mikrobiologiia 30 no.1:3-8 Ja-F '61. (MIRA 14:5)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova.
(MICRO-ORGANISMS) (OXIDATION, PHYSIOLOGICAL)

ALEKSEYEVA, M.V.; BELOZERSKAYA, V.I.

Spectral determination of chromium in the organs of rabbits. Gig.i san. no.5:53-55 My '53. (MLRA 6:5)

1. Nauchno-issledovatel'skiy sanitarnyy institut imeni Erismana.
(Chromium) (Spectrum analysis)

ALEKSEYEVA, M.V.; BELOZERSKAYA, V.I.

Spectral determination of copper and lead in dust. Gig. sanit., Moskva no.6:48-49 June 1953. (CIML 25:1)

1. Of the Scientific-Research Sanitary Institute imeni Erisman.

BELOZERSKAYA, V.I.; ZORE, V.A.

Spectral determination of zinc in atmospheric dust. Gig.i san. no.3:43 Mr '55. (MLRA 8:5)

1. Iz Nauchno-issledovatel'skogo sanitarnogo instituta im. Erismana.
(ZINC)
(SPCTRUM ANALYSIS)
(DUST--ANALYSIS)

BELOZERSKAYA, V.I.

ALEKSEYEVA, M.B.; BELOZERSKAYA, V.I.

Spectral determination of silicon and manganese in the blood.
Gig. i san. 22 no.12:73-75 D '57 (MIRA 11:3)

1. Iz Nauchno-issledovatel'skogo instituta sanitarii i gigiyeny imeni F.F.Erismana Ministerstva zdravookhraneniya RSFSR.
(SILICON, in blood
spectrographic determ. (Rus)
(MANGANESE, in blood
same)

TOROPOVA, V.F.; BELOZERSKAYA, V.V.; CHERNITSYN, A.I.

Use of thiourea for the precipitation of thallium and lead sulfides. Izv.vys.ucheb.zav.; khim.i khim.tekh. 7 no.6:898-903 '64. (MIRA 18:5)

1. Kazanskiy gosudarstvennyy universitet imeni V.I.Ul'yanova-Lenina, kafedra analiticheskoy khimii.

SIMONOV, A.L., dots; BELOZERSKIY, A.L.

Shortcomings in the repair of mining equipment. Ugol' 33 no.10:16-17 O '58. (MIRA 11:11)

1. Donetskiy industrial'nyy institut (for Simonov). 2. Glavnyy inzhener Gorlovskogo rudoremontnogo zavoda (for Belozerskiy).
(Mining machinery--Maintenance and repair)

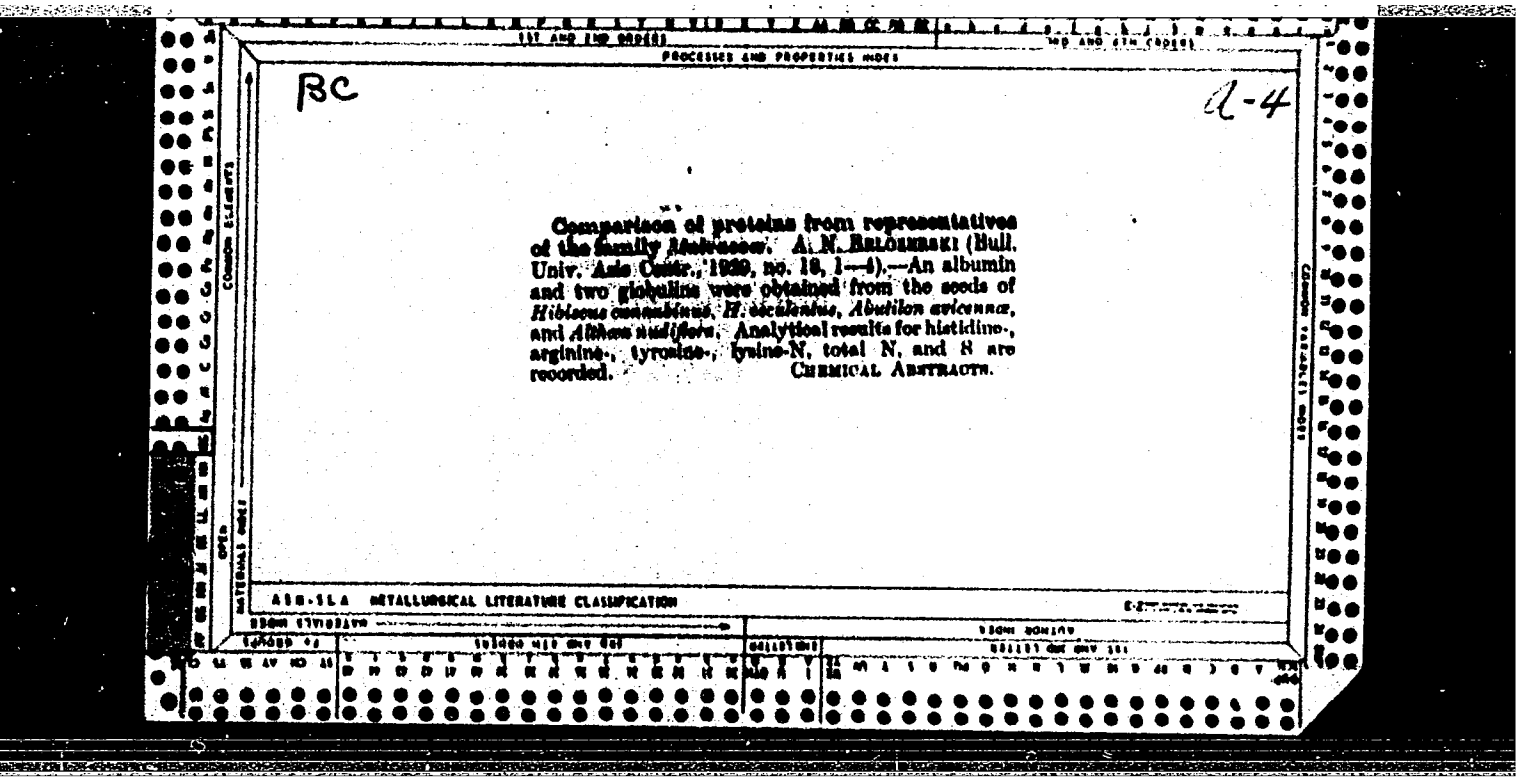
ZAYTSEVA, G.N.; NGO KE SYONG; BELOZERSKIY, A.N.

Metabolism of nucleic acids and mononucleotides in the course of synchronous development of Azotobacter vinelandii. Biokhimiia 28 no.1:172-185 Ja-F '63. (MIRA 16:4)

1. The Faculty of Biology and Soil Science, State University, Moscow.

(NUCLEIC ACID METABOLISM) (AZOTOBACTER)

EARLIER PUBLICATIONS FOR THIS AUTHOR ARE AVAILABLE IN THE INACTIVE FILE -- WE WILL PULL THEM UPON REQUEST.

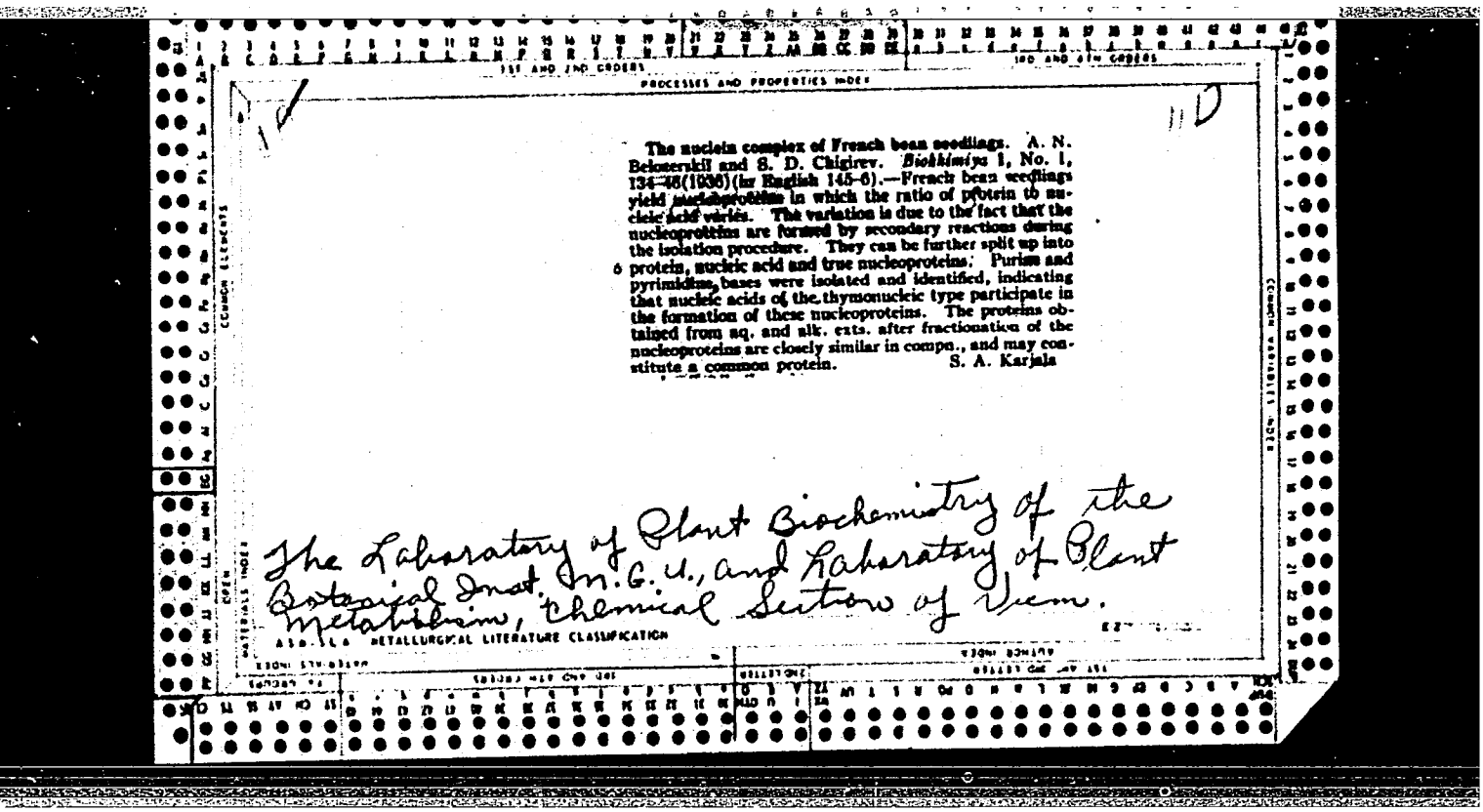


BC

d-4

Comparison of proteins from representatives of the family Malvaceæ. A. N. Belozerskii (Bull. Univ. Asie Centr., 1939, no. 18, 1—4).—An albumin and two globulins were obtained from the seeds of *Hibiscus cannabinus*, *H. esculentus*, *Abutilon avicennæ*, and *Althæa rosifera*. Analytical results for histidine-, arginine-, tyrosine-, lysine-N, total N, and S are recorded.

CHEMICAL ABSTRACTS.



PROCESSES AND PROPERTIES INDEX

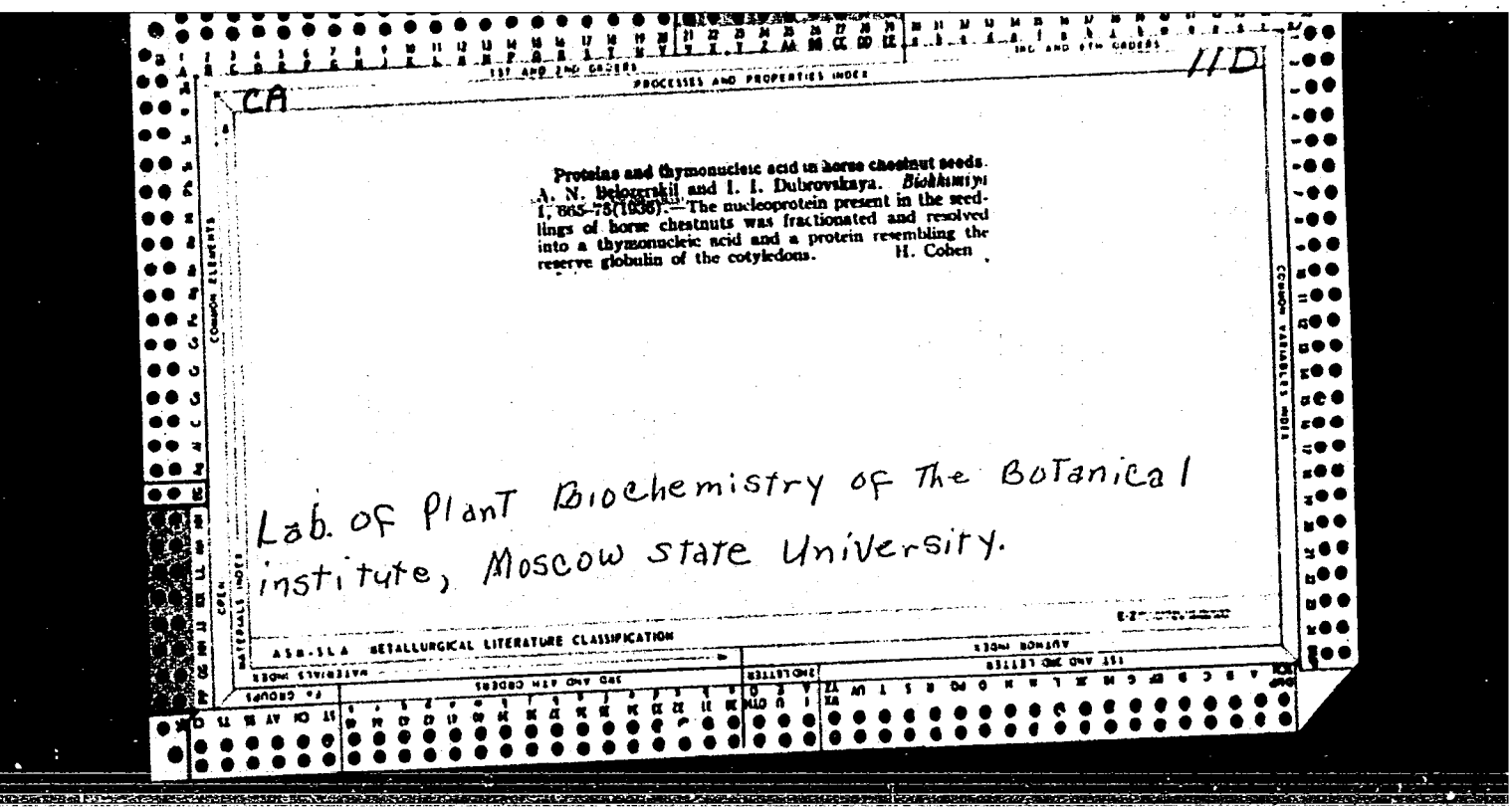
The nuclein complex of French bean seedlings. A. N. Belozerskii and S. D. Chigirev. *Biokhimiya* 1, No. 1, 134–46(1936)(in English 145–6).—French bean seedlings yield nucleoproteins in which the ratio of protein to nucleic acid varies. The variation is due to the fact that the nucleoproteins are formed by secondary reactions during the isolation procedure. They can be further split up into protein, nucleic acid and true nucleoproteins. Purine and pyrimidine bases were isolated and identified, indicating that nucleic acids of the thymonucleic type participate in the formation of these nucleoproteins. The proteins obtained from aq. and alk. exts. after fractionation of the nucleoproteins are closely similar in compn., and may constitute a common protein. S. A. Karjala

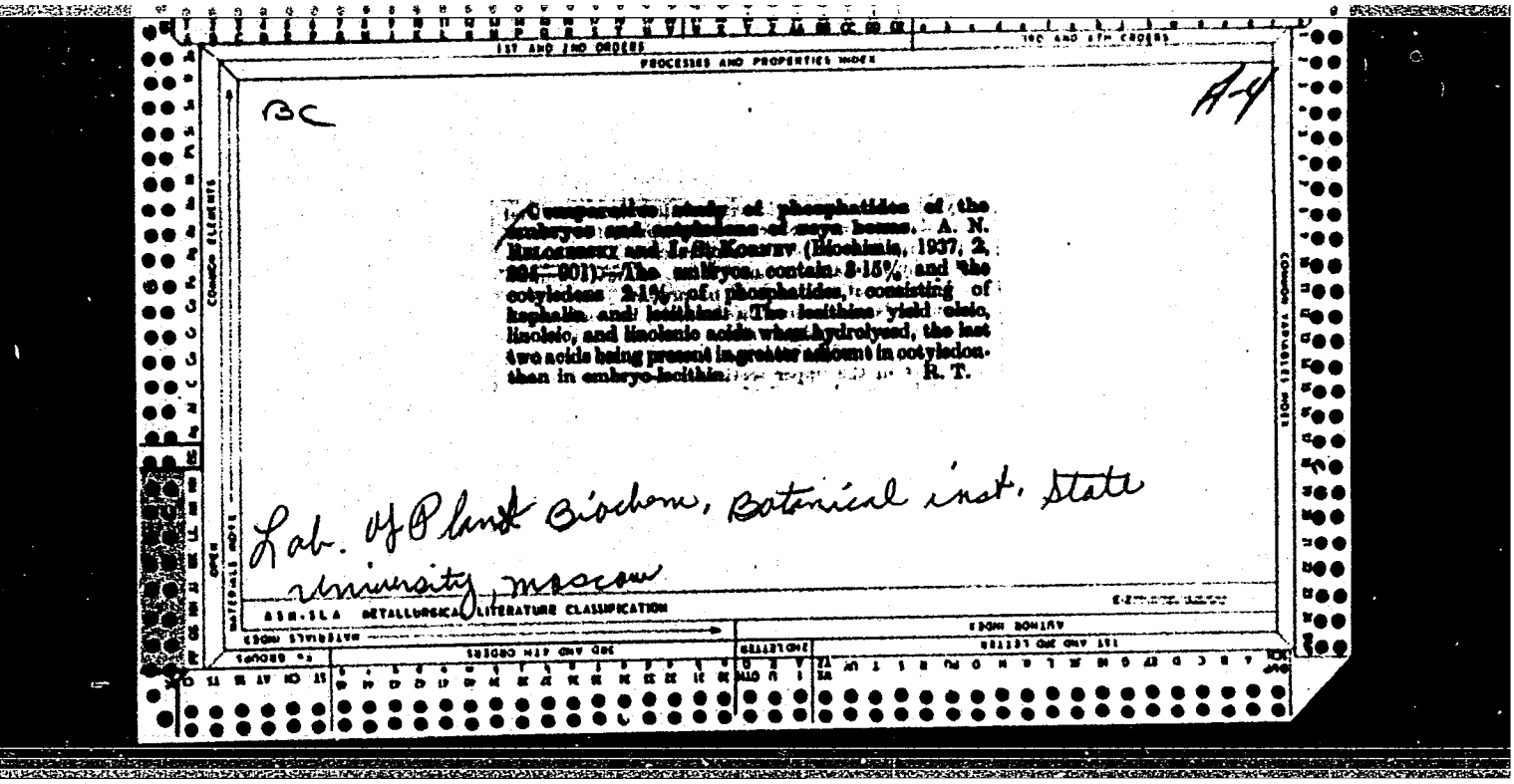
The Laboratory of Plant Biochemistry of the Botanical Inst. Im. G. U., and Laboratory of Plant Metabolism, Chemical Section of Vsem.

A.S.M.-I.L.A. METALLURGICAL LITERATURE CLASSIFICATION

BELOZERSKIY, A.N.

On the nucleaproteins and nucleoc acids of the soy bean seedling A.. N.BELOZERSKIY, (LAB. OF PLANT BIOCHEMISTRY OF THE BOTANICAL INST. MOSCOW STATE UNIVERSITY) vol.1 no.2 p. 255 1936



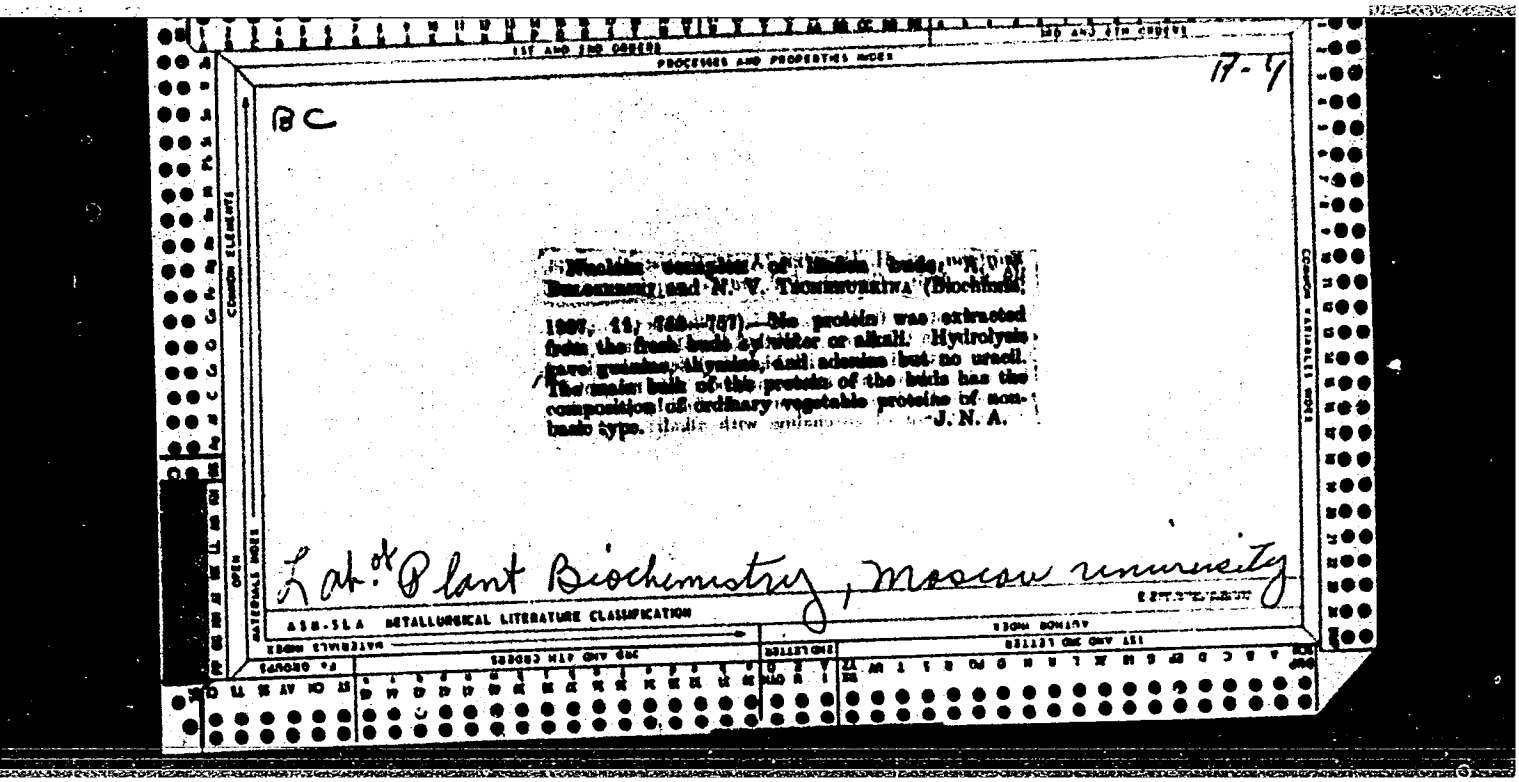


BC

A-4

Comparative study of phosphatides of the embryos and cotyledons of soya beans. A. N. Rumyantsev and Is. Sh. Kosterv (Biochimia, 1937, 2, 894–901). The embryos contain 8-15% and the cotyledons 2-1% of phosphatides, consisting of kephalin and lecithins. The lecithins yield oleic, linoleic, and linolenic acids when hydrolysed, the last two acids being present in greater amount in cotyledon than in embryo-lecithin. R. T.

Lab. of Plant Biochem, Botanical inst. State University, Moscow

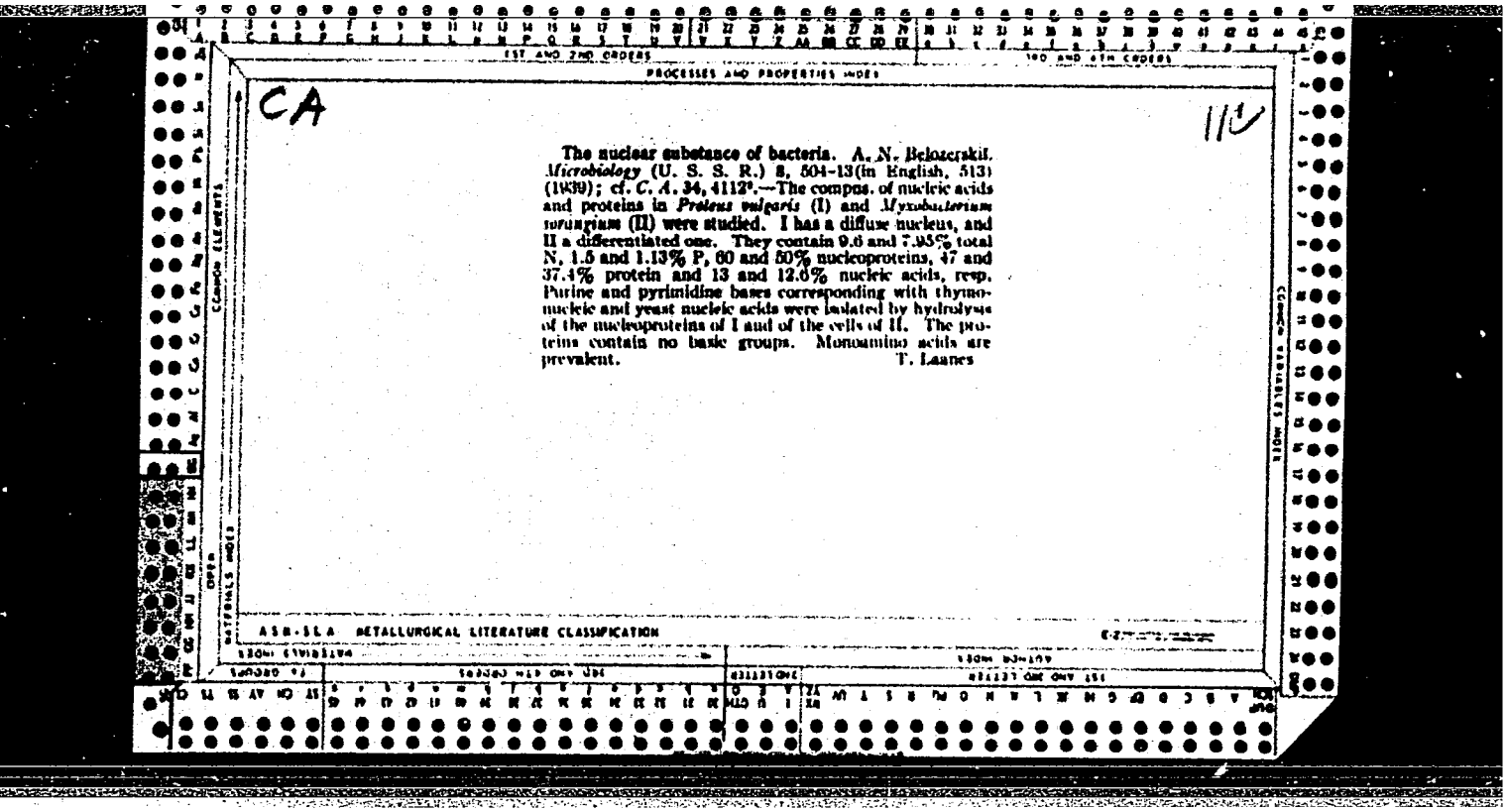


BC

17-4

Lab. of Plant Biochemistry, Moscow university

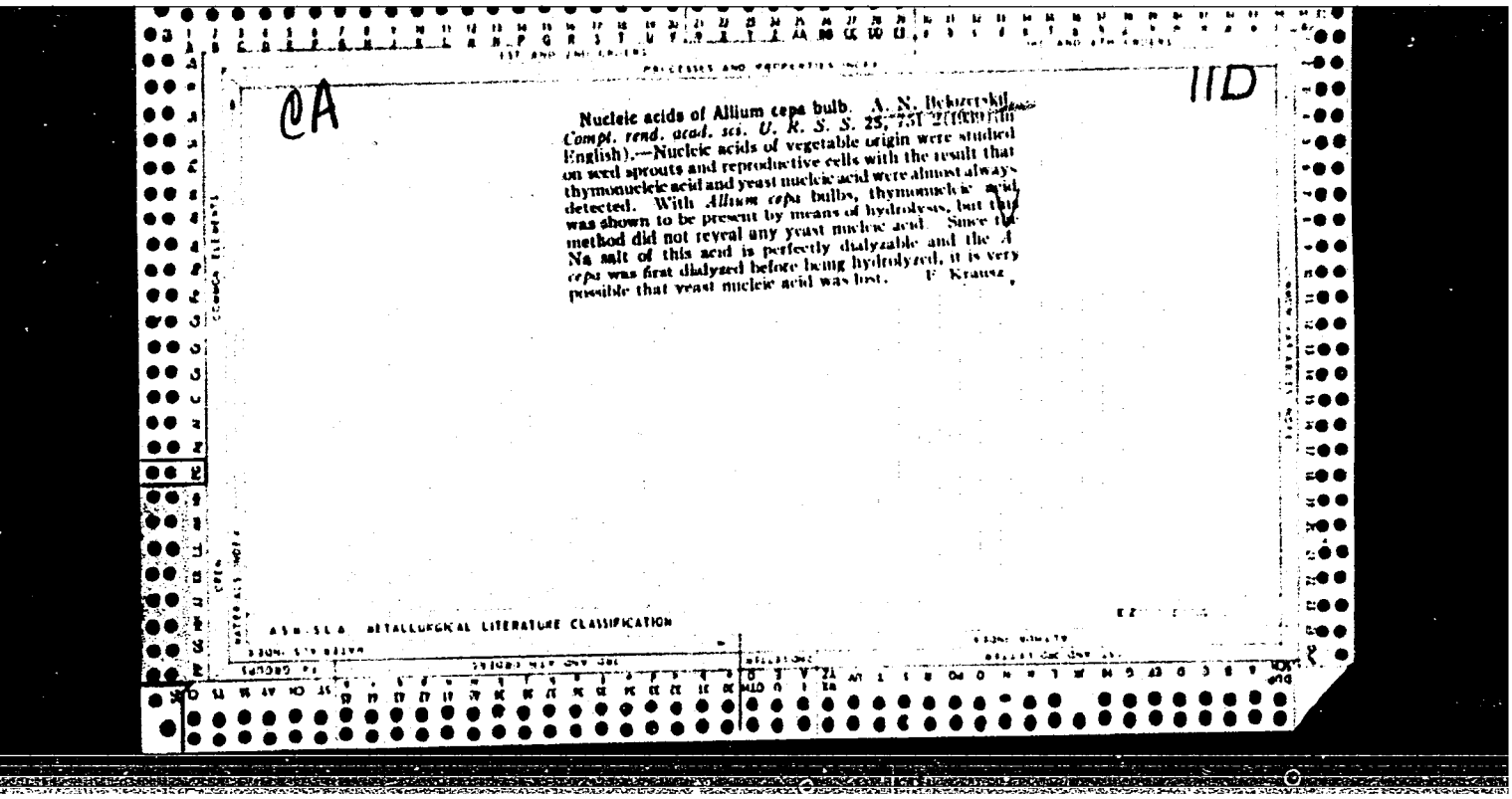
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

11C

The nuclear substance of bacteria. A. N. Belozerskii. *Microbiology* (U. S. S. R.) 8, 504-13(in English, 513) (1939); cf. *C. A.* 34, 4112⁹.—The compns. of nucleic acids and proteins in *Proteus vulgaris* (I) and *Myxobacterium serangium* (II) were studied. I has a diffuse nucleus, and II a differentiated one. They contain 9.6 and 7.95% total N, 1.5 and 1.13% P, 60 and 50% nucleoproteins, 47 and 37.4% protein and 13 and 12.6% nucleic acids, resp. Purine and pyrimidine bases corresponding with thymonucleic and yeast nucleic acids were isolated by hydrolysis of the nucleoproteins of I and of the cells of II. The proteins contain no basic groups. Monoamino acids are prevalent. T. Laanes

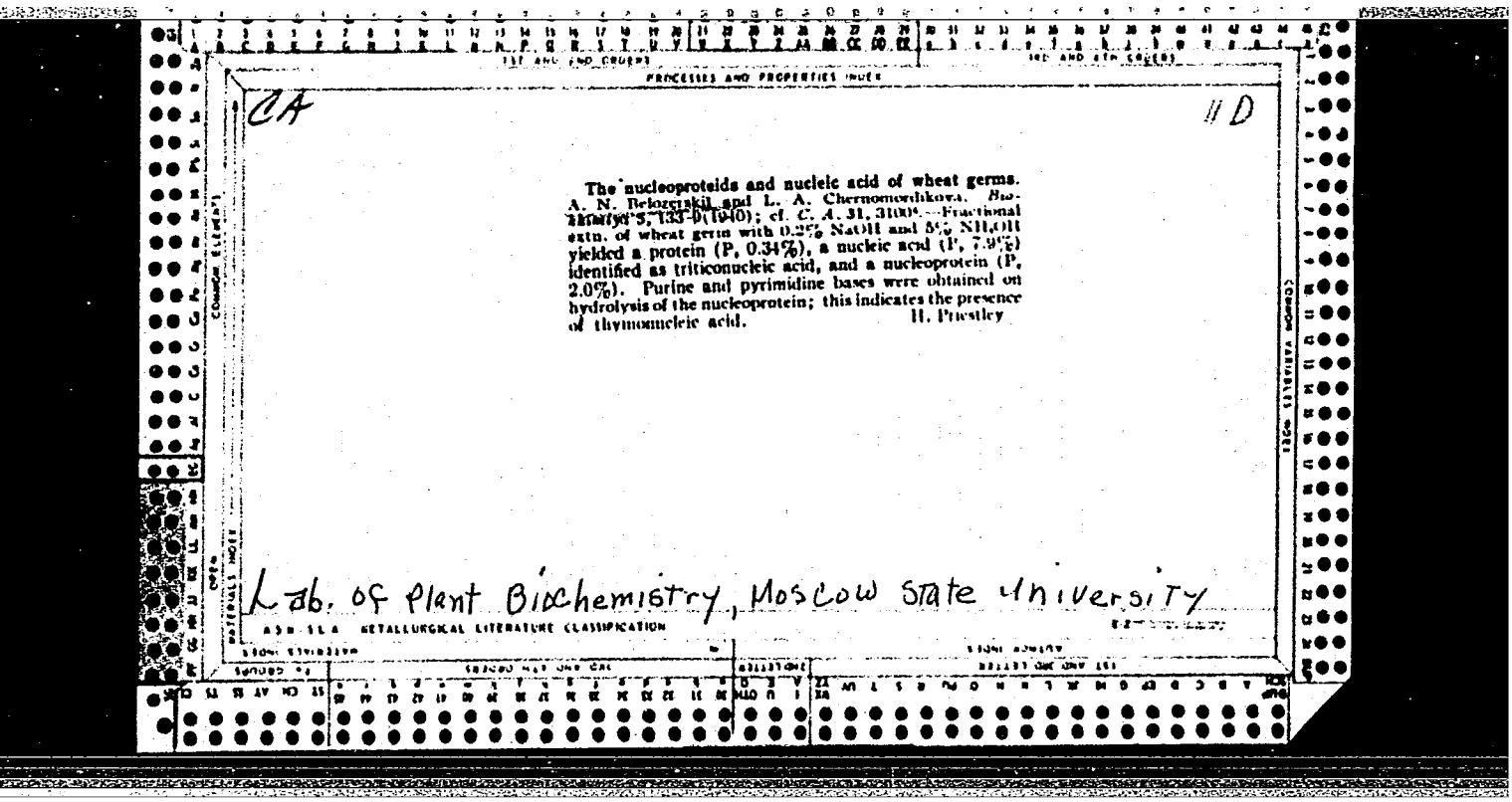


CA

IID

Nucleic acids of Allium cepa bulb. A. N. Belozerskii. *Compt. rend. acad. sci. U. R. S. S.* 25, 751 (1939) (in English).—Nucleic acids of vegetable origin were studied on seed sprouts and reproductive cells with the result that thymonucleic acid and yeast nucleic acid were almost always detected. With *Allium cepa* bulbs, thymonucleic acid was shown to be present by means of hydrolysis, but this method did not reveal any yeast nucleic acid. Since the Na salt of this acid is perfectly dialyzable and the *A. cepa* was first dialyzed before being hydrolyzed, it is very possible that yeast nucleic acid was lost. F. Krausz

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

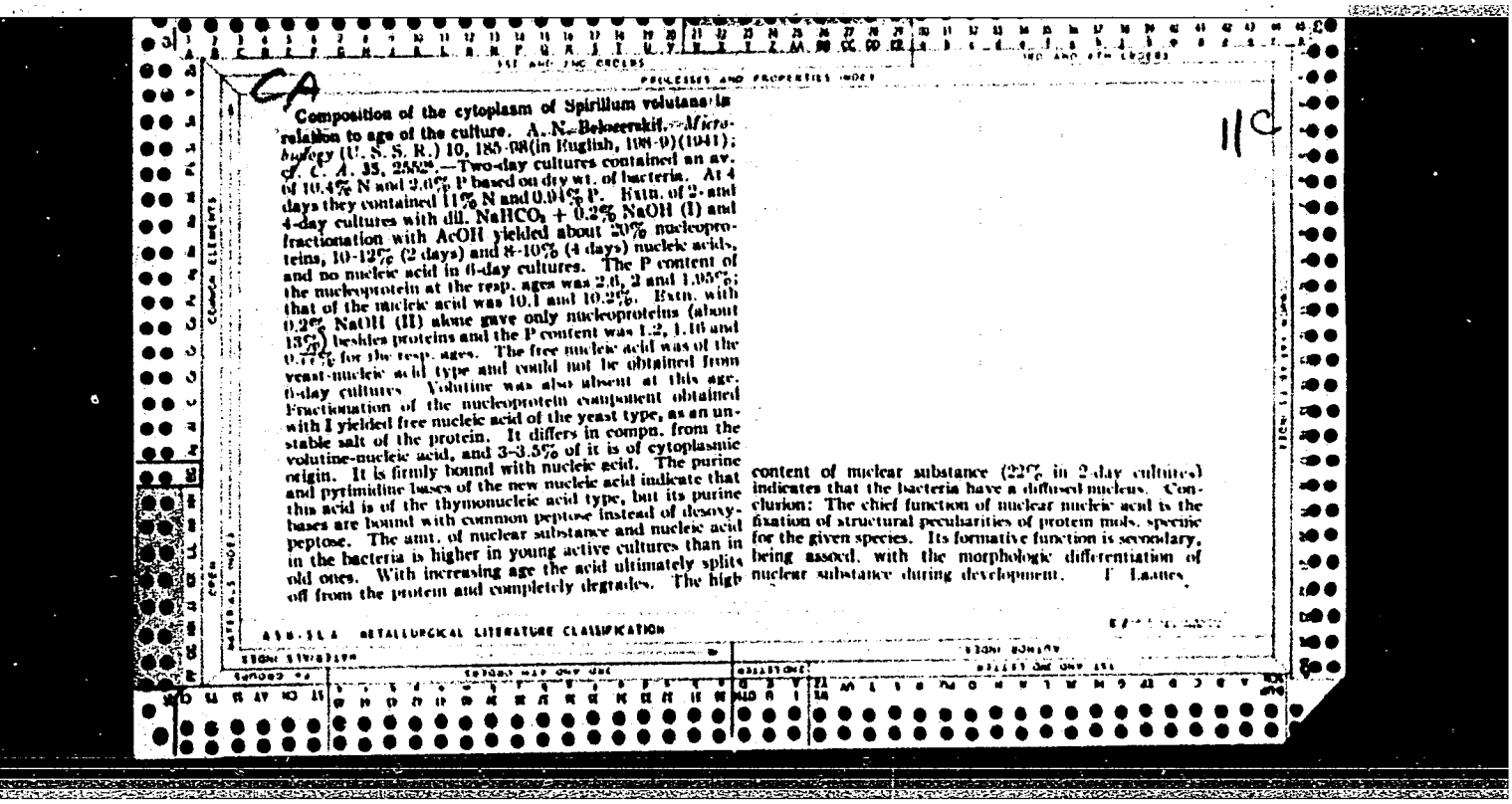


CA

II D

The nucleoproteids and nucleic acid of wheat germs. A. N. Belozerskii and L. A. Chernomordikova. *Biokhimiya* 5, 133-9(1940); cf. *C. A.* 31, 3100⁹.—Fractional extn. of wheat germ with 0.2% NaOH and 5% NH_4OH yielded a protein (P, 0.34%), a nucleic acid (P, 7.9%) identified as triticonucleic acid, and a nucleoprotein (P, 2.0%). Purine and pyrimidine bases were obtained on hydrolysis of the nucleoprotein; this indicates the presence of thymonucleic acid. H. Priestley

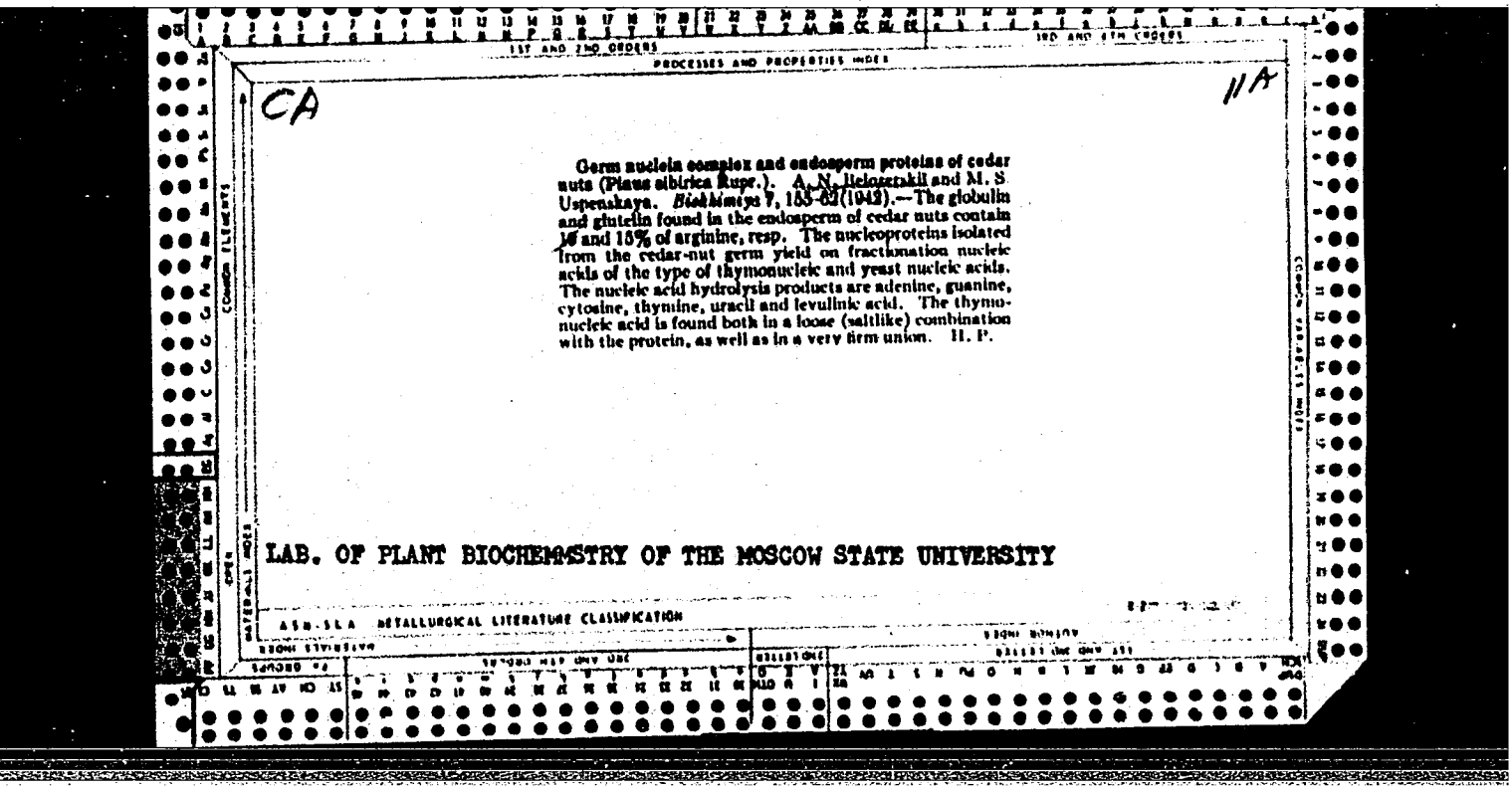
Lab. of Plant Biochemistry, Moscow State University



CA

Composition of the cytoplasm of Spirillum volutans in relation to age of the culture. A. N. Belozerskii. *Microbiology* (U. S. S. R.) 10, 185-98(in English, 198-9)(1941); *C. C. A.* 35, 2852⁸.—Two-day cultures contained an av. of 10.4% N and 2.0% P based on dry wt. of bacteria. At 4 days they contained 11% N and 0.9% P. Extn. of 2- and 4-day cultures with dil. $NaHCO_3$ + 0.2% NaOH (I) and fractionation with AcOH yielded about 20% nucleoproteins, 10-12% (2 days) and 8-10% (4 days) nucleic acids, and no nucleic acid in 6-day cultures. The P content of the nucleoprotein at the resp. ages was 2.6, 2 and 1.95%; that of the nucleic acid was 10.1 and 10.2%. Extn. with 0.2% NaOH (II) alone gave only nucleoproteins (about 13%) besides proteins and the P content was 1.2, 1.16 and 0.77% for the resp. ages. The free nucleic acid was of the yeast-nucleic acid type and could not be obtained from 6-day cultures. Volutine was also absent at this age. Fractionation of the nucleoprotein component obtained with I yielded free nucleic acid of the yeast type, as an unstable salt of the protein. It differs in compn. from the volutine-nucleic acid, and 3–3.5% of it is of cytoplasmic origin. It is firmly bound with nucleic acid. The purine and pyrimidine bases of the new nucleic acid indicate that this acid is of the thymonucleic acid type, but its purine bases are bound with common peptose instead of desoxypeptose. The amt. of nuclear substance and nucleic acid in the bacteria is higher in young active cultures than in old ones. With increasing age the acid ultimately splits off from the protein and completely degrades. The high content of nuclear substance (22% in 2-day cultures) indicates that the bacteria have a diffused nucleus. Conclusion: The chief function of nuclear nucleic acid is the fixation of structural peculiarities of protein mols. specific for the given species. Its formative function is secondary, being assocd. with the morphologic differentiation of nuclear substance during development. I. Lantes.

11C



CA

11A

Germ nuclein complex and endosperm proteins of cedar nuts (Pinus sibirica Rupr.). A. N. Belozerskii and M. S. Uspenskaya. *Biokhimiya* 7, 185-92(1942).—The globulin and glutelin found in the endosperm of cedar nuts contain 16 and 18% of arginine, resp. The nucleoproteins isolated from the cedar-nut germ yield on fractionation nucleic acids of the type of thymonucleic and yeast nucleic acids. The nucleic acid hydrolysis products are adenine, guanine, cytosine, thymine, uracil and levulinic acid. The thymonucleic acid is found both in a loose (saltlike) combination with the protein, as well as in a very firm union. H. P.

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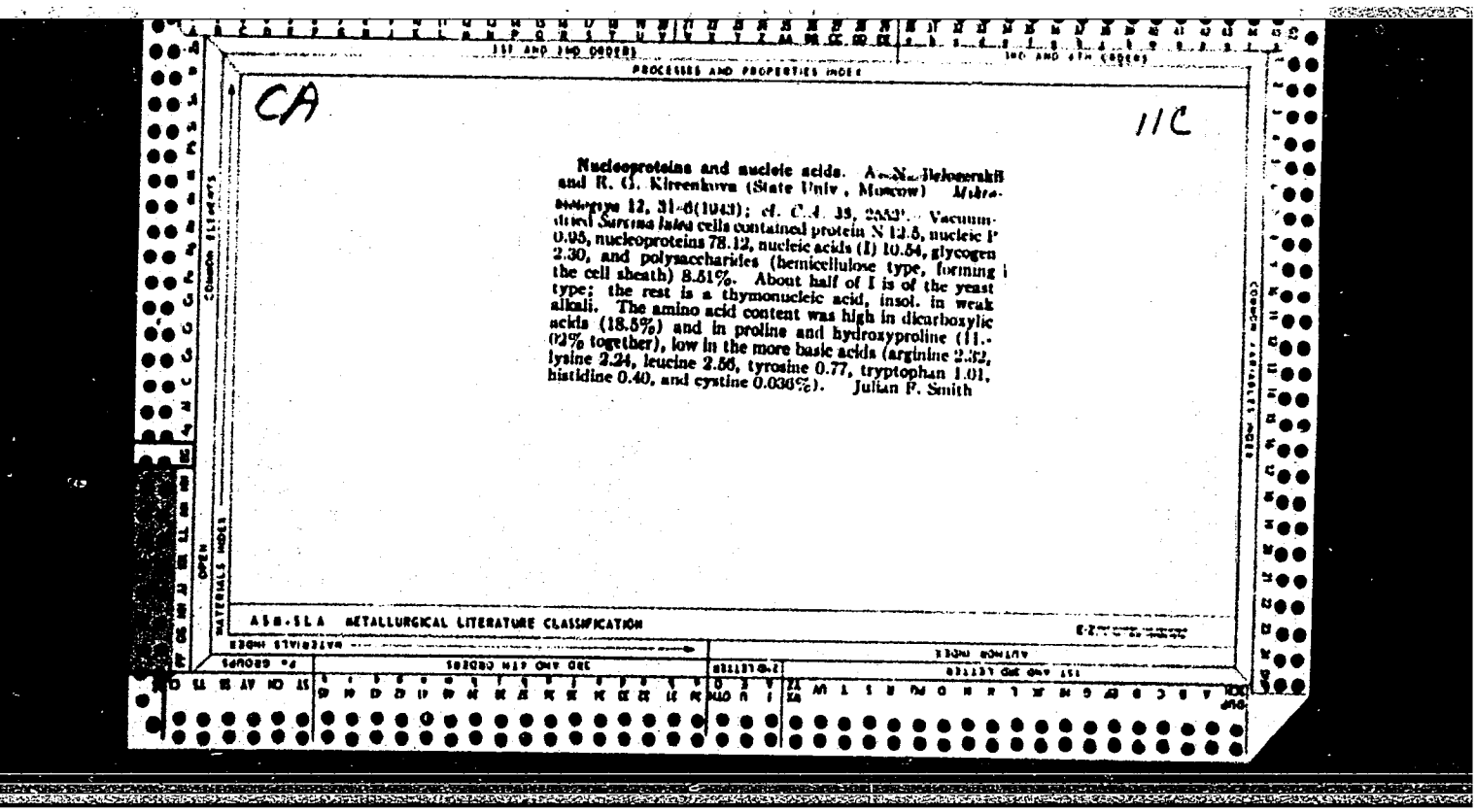

CA

11C

Nucleoproteins and nucleic acids. A. N. Belozerskii and R. G. Kirsenkova (State Univ., Moscow). *Mikrobiologiya* 12, 31-6(1943); cf. C.A. 38, 2443⁹. Vacuum-dried *Sarcina lutea* cells contained protein N 12.8, nucleic P 0.95, nucleoproteins 78.12, nucleic acids (I) 10.54, glycogen 2.30, and polysaccharides (hemicellulose type, forming the cell sheath) 8.51%. About half of I is of the yeast type; the rest is a thymonucleic acid, insol. in weak alkali. The amino acid content was high in dicarboxylic acids (18.5%) and in proline and hydroxyproline (11.-02% together), low in the more basic acids (arginine 2.32, lysine 2.24, leucine 2.56, tyrosine 0.77, tryptophan 1.01, histidine 0.40, and cystine 0.036%). Julian P. Smith

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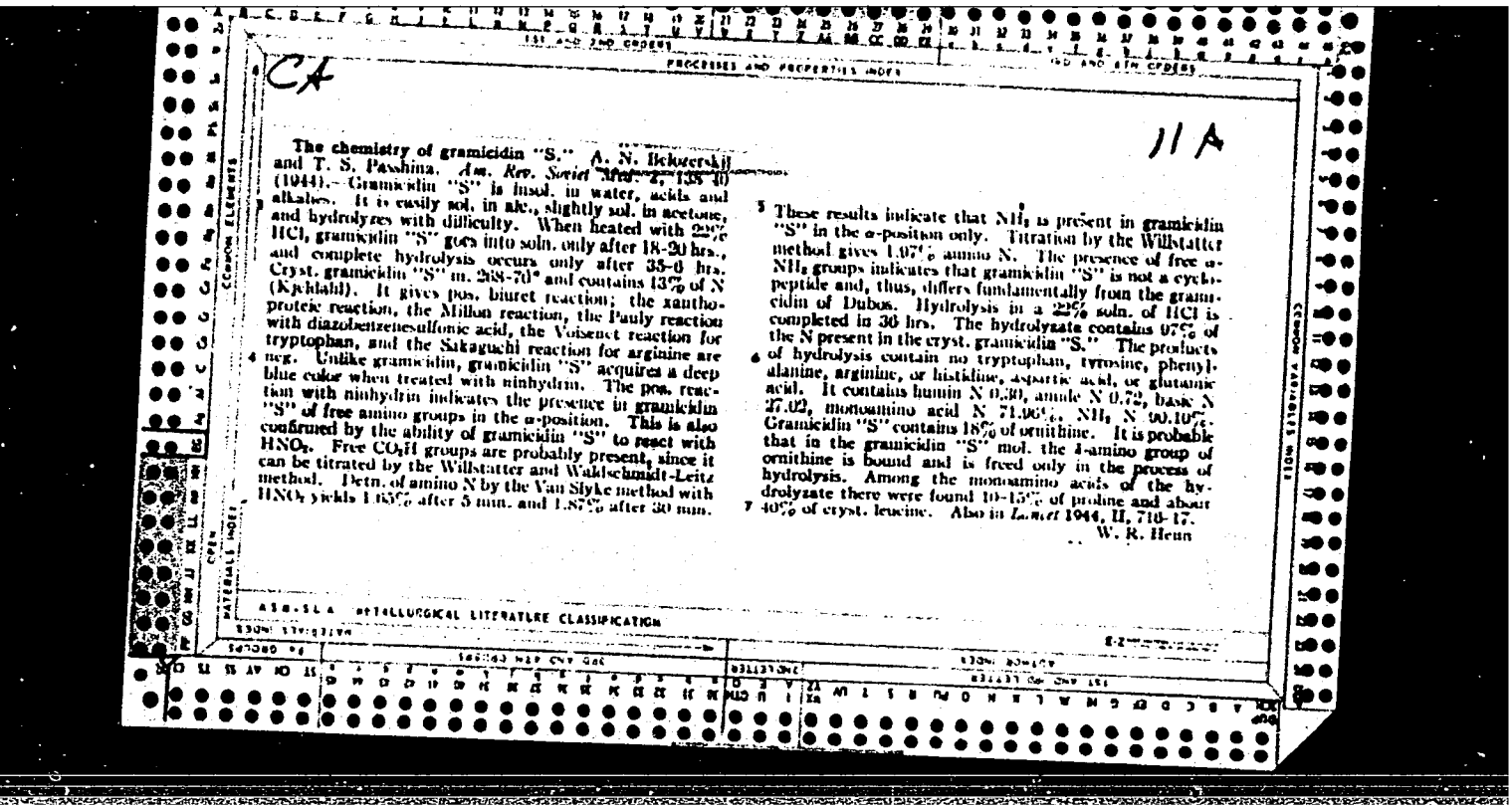
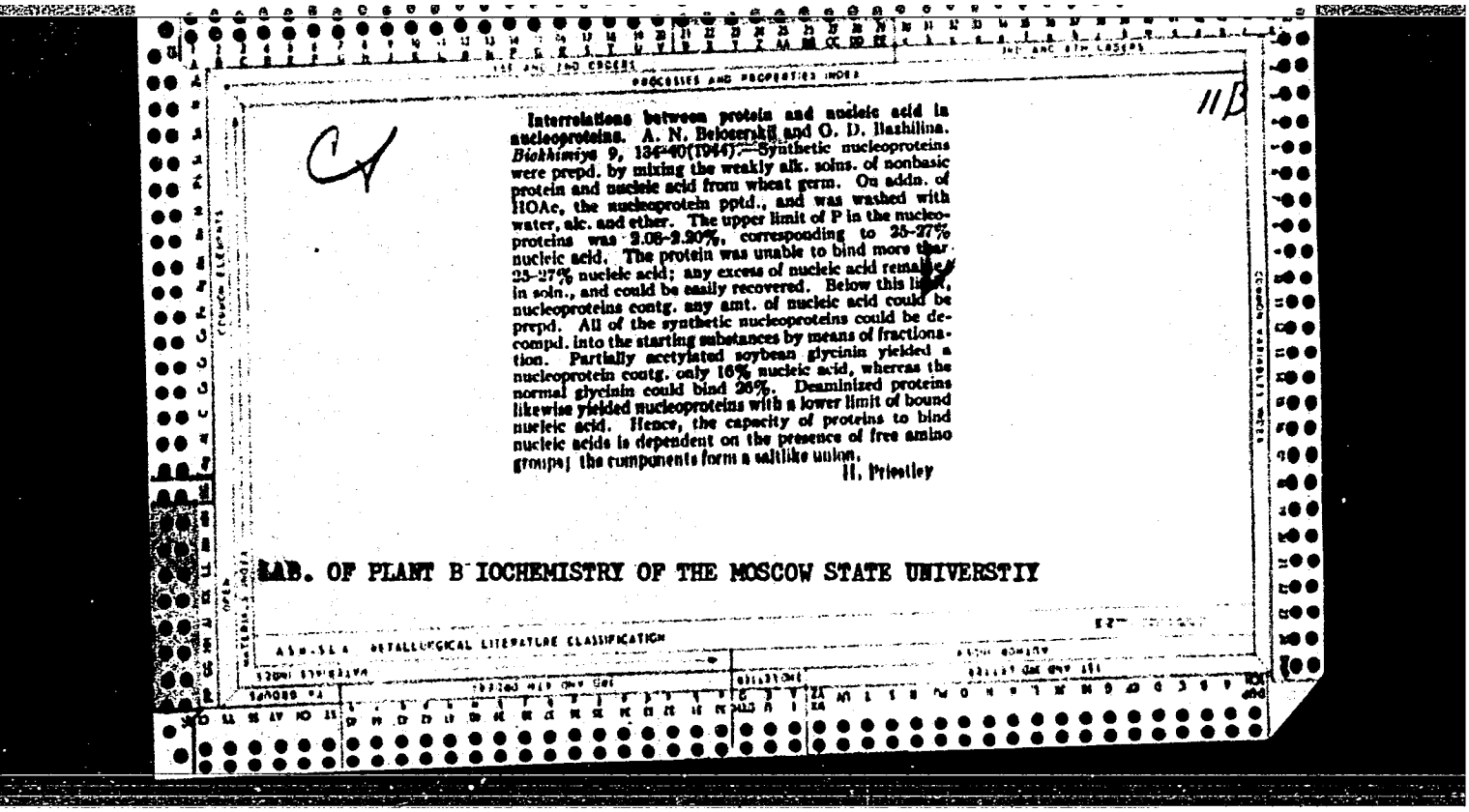


CA

11A

The chemistry of gramicidin "S." A. N. Belozerskii and T. S. Paushina. *Am. Rev. Soviet Med.* 2, 135-40 (1944).—Gramicidin "S" is insol. in water, acids and alkalies. It is easily sol. in alc., slightly sol. in acetone, and hydrolyzes with difficulty. When heated with 20% HCl, gramicidin "S" goes into soln. only after 18-20 hrs., and complete hydrolysis occurs only after 35-0 hrs. Cryst. gramicidin "S" m. 268-70° and contains 13% of N (Kjeldahl). It gives pos. biuret reaction; the xantho-proteic reaction, the Millon reaction, the Pauly reaction with diazobenzenesulfonic acid, the Voisenet reaction for tryptophan, and the Sakaguchi reaction for arginine are neg. Unlike gramicidin, gramicidin "S" acquires a deep blue color when treated with ninhydrin. The pos. reaction with ninhydrin indicates the presence in gramicidin "S" of free amino groups in the α-position. This is also confirmed by the ability of gramicidin "S" to react with HNO_2. Free CO_2H groups are probably present, since it can be titrated by the Willstatter and Waldschmidt-Leitz method. Detn. of amino N by the Van Slyke method with HNO_2 yields 1.65% after 5 min. and 1.87% after 30 min. These results indicate that NH_2 is present in gramicidin "S" in the α-position only. Titration by the Willstatter method gives 1.07% amino N. The presence of free α-NH_2 groups indicates that gramicidin "S" is not a cyclopeptide and, thus, differs fundamentally from the gramicidin of Dubos. Hydrolysis in a 22% soln. of HCl is completed in 30 hrs. The hydrolyzate contains 07% of the N present in the cryst. gramicidin "S." The products of hydrolysis contain no tryptophan, tyrosine, phenylalanine, arginine, or histidine, aspartic acid, or glutamic acid. It contains humin N 0.30, amide N 0.72, basic N 27.02, monoamino acid N 71.06%, NH_2 N 00.10%. Gramicidin "S" contains 18% of ornithine. It is probable that in the gramicidin "S" mol. the δ-amino group of ornithine is bound and is freed only in the process of hydrolysis. Among the monoamino acids of the hydrolyzate there were found 10-15% of proline and about 40% of cryst. leucine. Also in *Lancet* 1944, II, 710-17.

W. R. Heun



PROCESSES AND PROPERTIES INDEX

11B

C4

Interrelations between protein and nucleic acid in nucleoproteins. A. N. Belozerskii and O. D. Bashilina. *Biokhimiya* 9, 134-40(1944).—Synthetic nucleoproteins were prepd. by mixing the weakly alk. solns. of nonbasic protein and nucleic acid from wheat germ. On addn. of HOAc, the nucleoprotein pptd., and was washed with water, alc. and ether. The upper limit of P in the nucleoproteins was 2.08-2.30%, corresponding to 25-27% nucleic acid. The protein was unable to bind more than 25-27% nucleic acid; any excess of nucleic acid remained in soln., and could be easily recovered. Below this limit, nucleoproteins contg. any amt. of nucleic acid could be prepd. All of the synthetic nucleoproteins could be decompd. into the starting substances by means of fractionation. Partially acetylated soybean glycinin yielded a nucleoprotein contg. only 16% nucleic acid, whereas the normal glycinin could bind 26%. Deaminized proteins likewise yielded nucleoproteins with a lower limit of bound nucleic acid. Hence, the capacity of proteins to bind nucleic acids is dependent on the presence of free amino groups; the components form a saltlike union.

H. Priestley

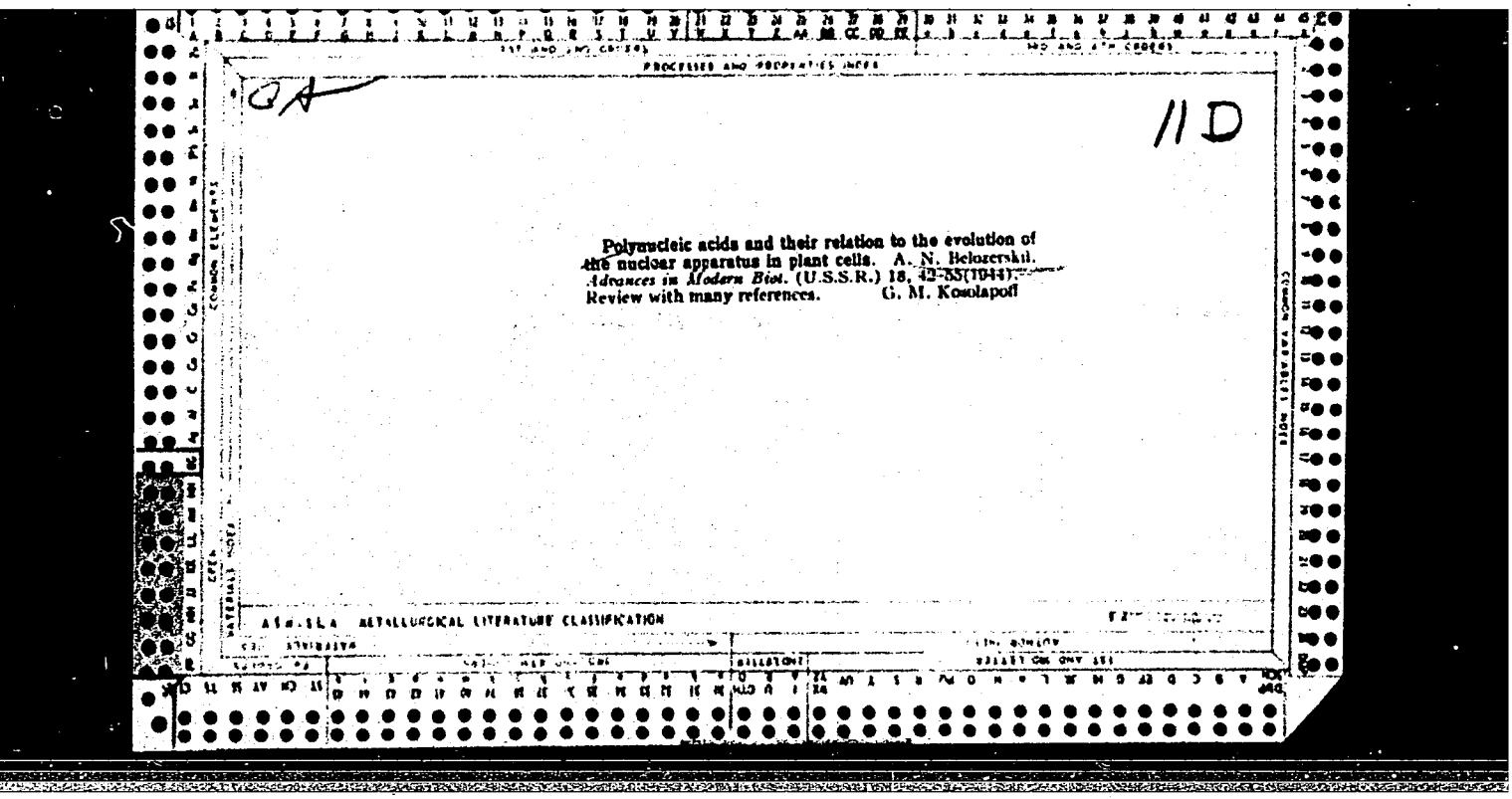
LAB. OF PLANT B IOCHEMISTRY OF THE MOSCOW STATE UNIVERSTIY

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

BELOZERSKIY, A. N.

"On the Nucleus of Bacteria," Mikrobiol., 12, No.1, 1944

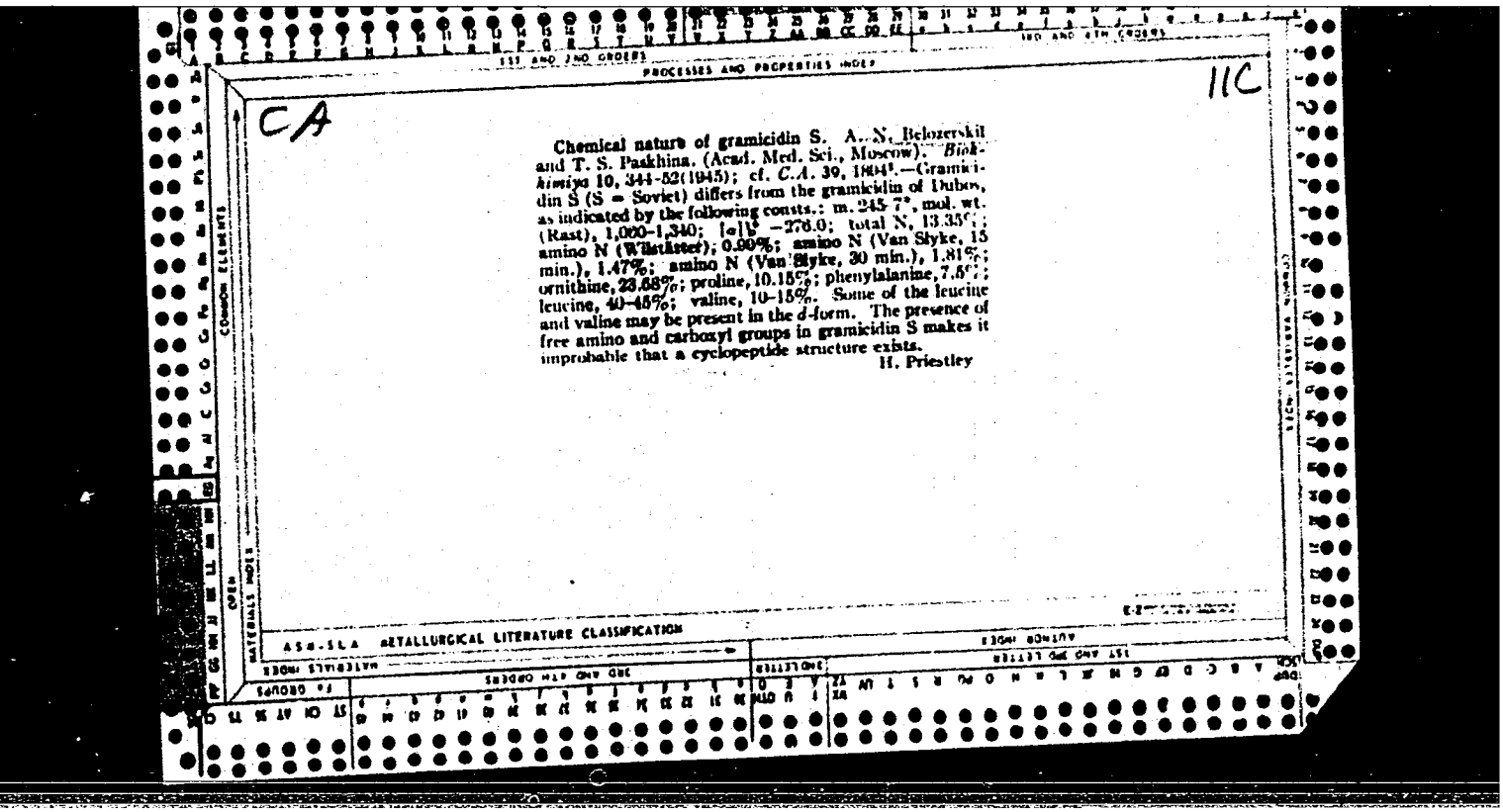
Lab. of Plant Biochemistry, Moscow State U.



QA

11D

Polynucleic acids and their relation to the evolution of the nuclear apparatus in plant cells. A. N. Belozerskii. *Advances in Modern Biol.* (U.S.S.R.) 18, 42-55(1944). Review with many references. G. M. Kosolapoff



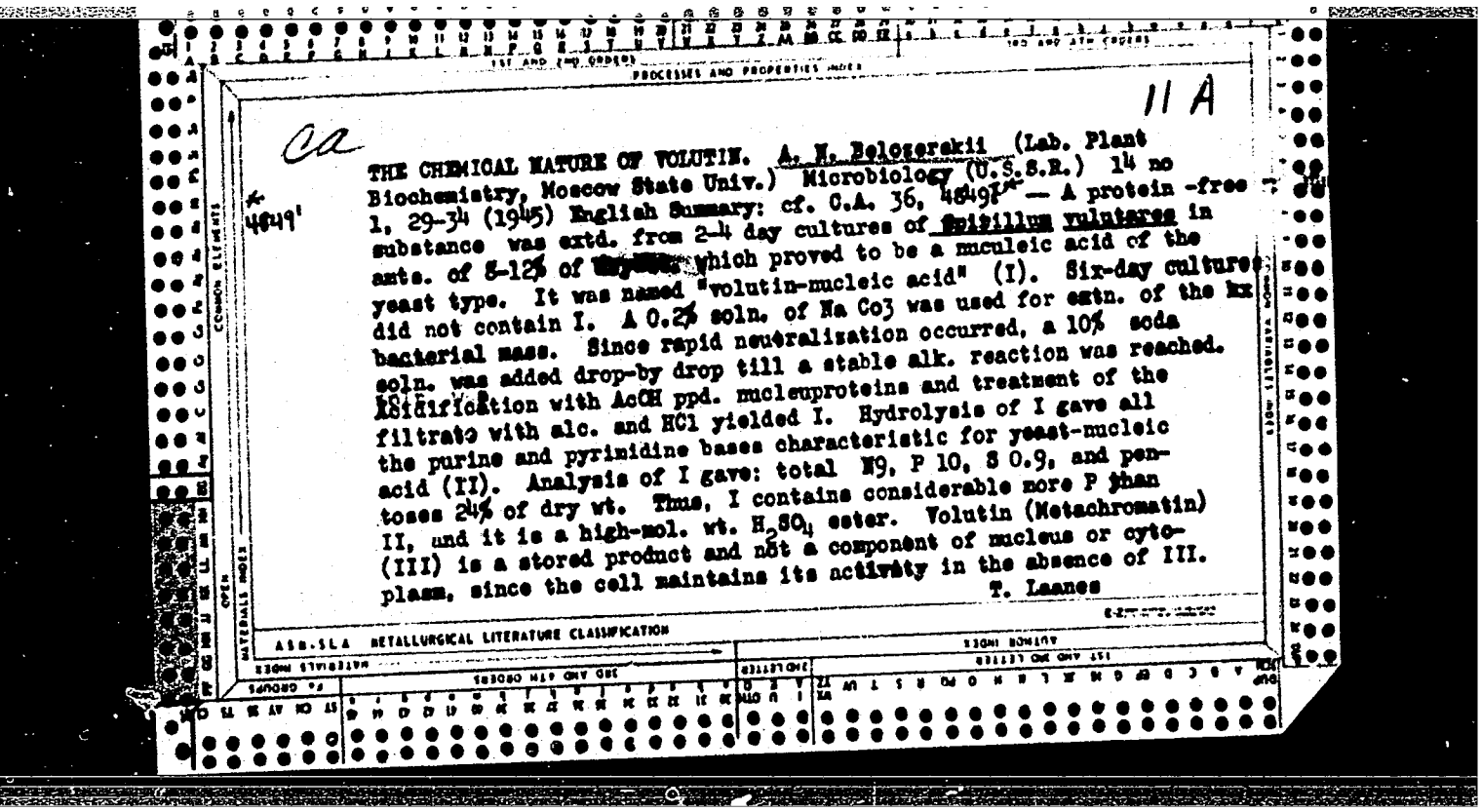
CA

11C

Chemical nature of gramicidin S. A. N. Belozerskii and T. S. Paskhina. (Acad. Med. Sci., Moscow). *Biokhimiya* 10, 344-52(1945); cf. *C.A.* 39, 1804⁸.—Gramicidin S (S = Soviet) differs from the gramicidin of Dubos, as indicated by the following consts.: m. 245-7°, mol. wt. (Rast), 1,000–1,340; $[\alpha]_D^{25}$ −276.0; total N, 13.35%; amino N (Wilstätter), 0.90%; amino N (Van Slyke, 15 min.), 1.47%; amino N (Van Slyke, 30 min.), 1.81%; ornithine, 23.68%; proline, 10.15%; phenylalanine, 7.6%; leucine, 40–45%; valine, 10–15%. Some of the leucine and valine may be present in the *d*-form. The presence of free amino and carboxyl groups in gramicidin S makes it improbable that a cyclopeptide structure exists.

H. Priestley

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



11 A

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4849

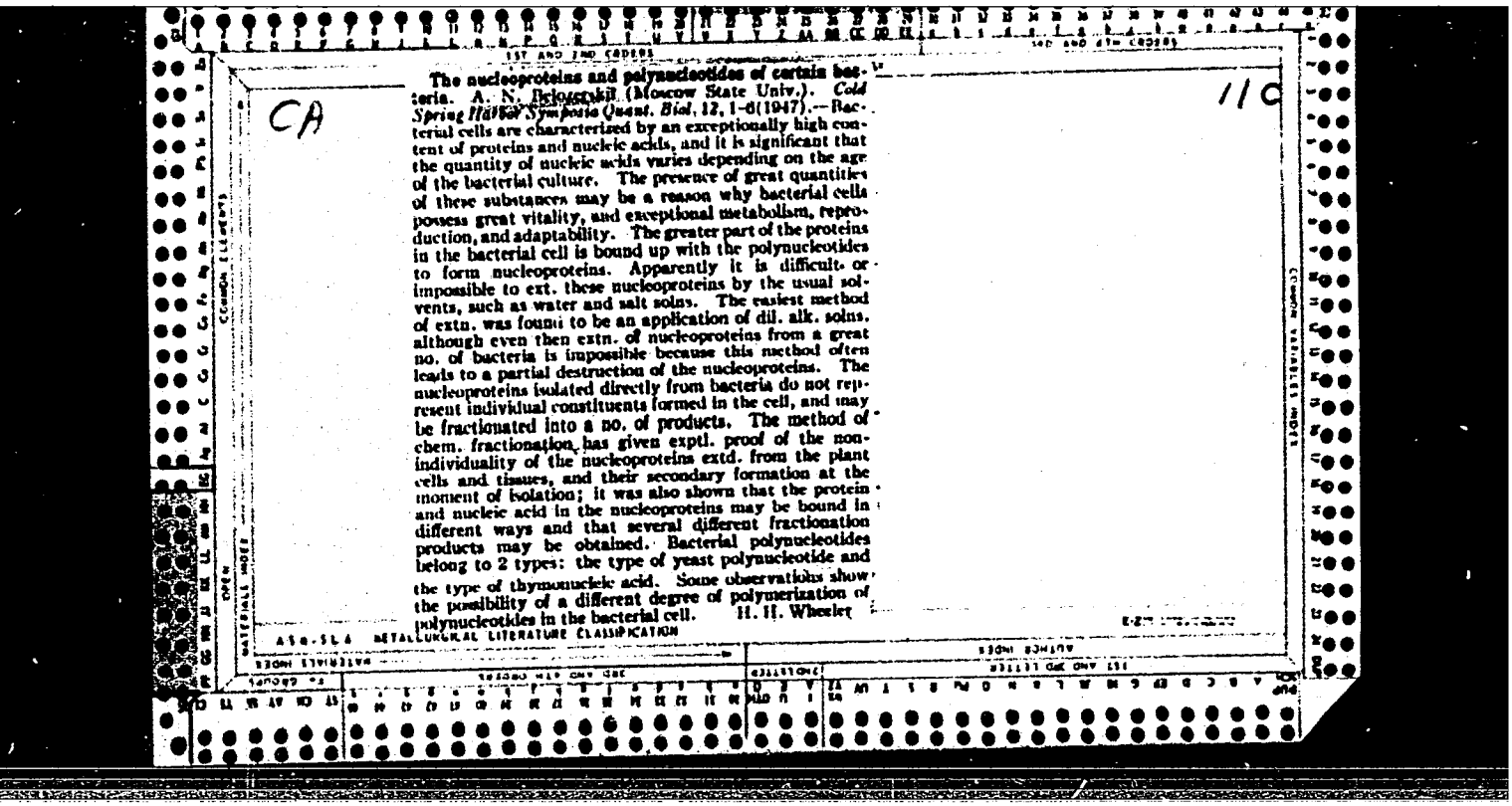
THE CHEMICAL NATURE OF VOLUTIN. A. N. Belozerskii (Lab. Plant Biochemistry, Moscow State Univ.) Microbiology (U.S.S.R.) 14 no 1, 29-34 (1945) English Summary: cf. C.A. 36, 4849[illegible] — A protein-free substance was extd. from 2-4 day cultures of Spirillum volutans in amts. of 8-12% of [illegible] which proved to be a nucleic acid of the yeast type. It was named "volutin-nucleic acid" (I). Six-day cultures did not contain I. A 0.2% soln. of Na CO3 was used for extn. of the bacterial mass. Since rapid neutralization occurred, a 10% soda soln. was added drop-by drop till a stable alk. reaction was reached. Acidification with AcOH ppd. nucleoproteins and treatment of the filtrate with alc. and HCl yielded I. Hydrolysis of I gave all the purine and pyrimidine bases characteristic for yeast-nucleic acid (II). Analysis of I gave: total N9, P 10, S 0.9, and pentoses 24% of dry wt. Thus, I contains considerable more P than II, and it is a high-mol. wt. H_2SO_4 ester. Volutin (Metachromatin) (III) is a stored product and not a component of nucleus or cytoplasm, since the cell maintains its activity in the absence of III.

T. Leanes

BELOZERSKIY, A. N.

"Polynucleic Acids in R- and S-Forms of Sarcina Flava," Mikrobiol., 15, No.2, 1946.

Chair of Plant Biochemistry, Moscow State U.



CA

11 C

The nucleoproteins and polynucleotides of certain bacteria. A. N. Belozerskiĭ (Moscow State Univ.). *Cold Spring Harbor Symposia Quant. Biol.*, 12, 1–6(1947).—Bacterial cells are characterized by an exceptionally high content of proteins and nucleic acids, and it is significant that the quantity of nucleic acids varies depending on the age of the bacterial culture. The presence of great quantities of these substances may be a reason why bacterial cells possess great vitality, and exceptional metabolism, reproduction, and adaptability. The greater part of the proteins in the bacterial cell is bound up with the polynucleotides to form nucleoproteins. Apparently it is difficult or impossible to ext. these nucleoproteins by the usual solvents, such as water and salt solns. The easiest method of extn. was found to be an application of dil. alk. solns. although even then extn. of nucleoproteins from a great no. of bacteria is impossible because this method often leads to a partial destruction of the nucleoproteins. The nucleoproteins isolated directly from bacteria do not represent individual constituents formed in the cell, and may be fractionated into a no. of products. The method of chem. fractionation has given exptl. proof of the non-individuality of the nucleoproteins extd. from the plant cells and tissues, and their secondary formation at the moment of isolation; it was also shown that the protein and nucleic acid in the nucleoproteins may be bound in different ways and that several different fractionation products may be obtained. Bacterial polynucleotides belong to 2 types: the type of yeast polynucleotide and the type of thymonucleic acid. Some observations show the possibility of a different degree of polymerization of polynucleotides in the bacterial cell. H. H. Wheeler

BELOZERSKIY, A. N.

"The Biologically Active Group in Gramacidin S," Dokl. AN SSSR, 59, No.1, 1948

Inst. Biochem. im. Bakh., AS USSR

42T7

BELOZERSKIY, A. N. FR 43157

USSR/Medicine - Immunity Feb 1948
Medicine - Dysentery Bacilli

"Antigenic and Immunogenic Properties of Nucleoproteins of Dysentery Bacteria," A. N. Belozerskiy, V. D. Gekker, Cent Inst Epidemiology and Microbiol, Ministry Public Health USSR, Bot Inst, Moscow State U imeni M. V. Lomonosov, 3½ pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LIX, No 4

Describes research on nucleoproteins obtained from B. Shigella paradysenteriae Flexner. Tabulates their antigenic and immunogenic properties. Submitted by Academician A. I. Oparin, 1 Dec 1947.

43157