"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

S/081/61/000/020/076/089
B106/B147

AUTHORS: Kucher, R. V., Kovbuz, M. A., Yurzhenko, A. I.

TITLE: Decomposition of isopropyl benzene hydroperoxide during hydrocarbon oxidation in a homogeneous liquid phase or in an emulsion

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 321, abstract 20L46 (Sb. nauchn. rabot. In-t Fiz.-organ. khimii AN BSSR, no. 8, 1960, 22-31)

TEXT: The conversion degree of isopropyl benzene (I) into hydroperoxide (HP) at different oxidation degrees of this hydrocarbon was investigated. HP was found to be the only oxidation product in the initial stage of reaction. When the oxidation takes place in an emulsion, the reaction is more intense, and higher concentrations of HP are reached. A study of HP decomposition during the oxidation of I in a homogeneous liquid phase or in an emulsion indicated that rate and mechanism of HP decomposition vary with the degree of oxidation. When the oxidation takes place in an emulsion, the HP decomposition in the oleophase has a similar course as

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Decomposition of isopropyl ...

during the oxidation in a homogeneous liquid phase, and the rate constant of HP decomposition drops with progressing reaction. In the aqueous phase, the decomposition of HP is monomolecular throughout the oxidation of cumene in an emulsion, and the decomposition constant rises with increasing degree of oxidation. If the oxidation in a homogeneous liquid phase is stimulated with cobalt stearate, the decomposition rate of HP rises, and by-products of the reactions are formed in a large quantity. After the precipitation of the catalyst, monomolecular decomposition sets in. The results of the investigation can be explained well by a radical chain mechanism of HP decomposition. [Abstracter's note: Complete translation.]

Card 2/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVBUZ, M.A., KUCHER, R.V., BUGROVA, E.M.

Chromatographic determination of isopropylbenzene during the process of its oxidation. Zav.lab. 26 no.7:816-817 '60. (MIRA 13:7)

1. L'vovskiy gosudarstvennyy universitet im. Franko.
(Benzene) (Chromatographic analysis)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KUCHER, R.V.; KOVBUZ, M.A.; KAZ'MIN, S.D.

Alkaline oxidation of isopropylbenzene. Ukr.khim.zhur. 27 no.5:658-663 '61. (MIRA 14:9)

1. L'vovskiy gosudarstvennyy universitet im. I. Franko.
(Cumene) (Oxidation)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KUCHER, R.V.; KOVBUZ, M.A.; TEODOROVICH, M.Ye.

Chromatographic separation of meta-diisopropylbenzene hydroperoxides.
Zav.lab. 27 no.11:1331-1333 '61. (MIRA 14:10)

1. L'vovskiy gosudarstvennyy universitet imeni I.Franko.
(Benzene) (Hydroperoxide)
(Chromatographic analysis)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

S/080/61/034/003/009/017
A057/A129

AUTHORS: Kucher, R. V., Kovbuz, M. A., Teodorovich, M. Ye.

TITLE: On the purification of isopropylbenzene by adsorption

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 3, 1961, 598 - 603

TEXT: A method for the purification of isopropylbenzene by means of adsorption was developed to improve the oxidizability of the latter in liquid phase autocatalytic oxidation processes. These processes are very sensitive, especially at the beginning of the reaction, to the presence of impurities in the hydrocarbon. Usually an acid-alkali purification is applied, eventually with subsequent boiling over sodium metal, as recommended by D. D. Grant and C. F. Tipper [Ref. 4: J. Chem. Soc., 640 (1955)]. But also several adsorption methods were suggested in order to remove impurities from hydrocarbons, as isopropylbenzene or others by O. A. Kolmakov et al. [Ref. 9: Tr. po khim. i khim. tekhn., Gor'kiy, 1, 36 (1958)] or N. D. Kazakova and V. G. Gutsalyuk [Ref. 10: Izv. AN KazSSR, ser. khim., 1, 99 (1958)] and also in the Canadian patent 509870. Thus in the present work the adsorption was investigated of some substances dissolved in isopropylbenzene on ACK (ASK), ACM (ASM) silica gel, aluminum oxide "for chromatography" and two types of carbon

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

On the purification of isopropylbenzene by adsorption

S/080/61/034/003/009/017
A057/A129

black (from Dasha and Ufa). Also the oxidation rate of isopropylbenzene after purification was estimated. The adsorption of the impurities - thiophene, styrene, phenol, acetophenone and dimethylphenylcarbinol - from isopropylbenzene was studied by the dynamic method. The amount of the non-adsorbed impurity was determined by means of an ИТР-2 (ITR-2) nephelometer. Activation of the silica gel was carried out in the usual way by gradual drying at 40, 60, 80 and 110°C according to E. Kh. Iskhakova et al. [Tr. Inst. nefti AN SSSR, 12, 35 (1958)]. The experiments on adsorption of a non-saturated compound (styrene) showed highest adsorption on carbon black. Because of the easier handling, granulated carbon black was used in the further experiments (see tabulated data). Aluminum oxide showed a low adsorption capacity related to non-saturated compounds (styrene) and also for oxygen-containing compounds (acetophenone, dimethylphenylcarbinol). Therefore aluminum oxide was no more investigated. ASM silical gel had a high adsorption capacity for all investigated impurities, but it adsorbs also isopropylbenzene, while ASK silica gel does not adsorb the latter, but shows low adsorption capacity for styrene. Consequently a mixture (2 : 1 by weight) of ASK silica gel and granulated carbon black was tested with isopropylbenzene containing: 0.01% styrene, 0.01% dimethylphenylcarbinol, 0.01% phenol and 0.01% acetophenone. The obtained results were compared

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with values obtained on pure ASM silica gel, consecutive adsorption of granulated carbon black on ASK and ASM silica gel, and the mixture 2 : 1. It can be seen from Fig. 3 that best results were obtained with ASK-carbon black mixture. Hence the latter is the optimum adsorbent for the purification of technical grade isopropylbenzene. Regeneration of the silica gel is carried out by washing with boiling water or steam and subsequent calcination. Kinetic curves (Fig. 4) on accumulation of hydrogen peroxide in liquid-phase homogeneous oxidation of isopropylbenzene obtained after purification by the acid-alkali method show that a lower reaction capacity is obtained in comparison to the product purified by adsorption methods. 5 kg of ASK silica gel and 2.5 kg of carbon black are necessary for the purification of 100 l of isopropylbenzene. There are 5 figures, 1 table and 12 references: 11 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: D. D. Grant, C. F. Tipper, J. Chem. Soc., 640 (1955).

ASSOCIATION: Kafedra fizicheskoy i kolloidnoy khimii L'vovskogo gosudarstvennogo universiteta imeni I. Franko (Department of Physical and Colloid Chemistry of the L'vov State University imeni I. Franko)

SUBMITTED: May 18, 196

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KUCHER, R.V.; KAZ'MIN, S.D.; KOVBUZ, M.A.

Characteristics of salt catalysis during oxidation of alkyl aromatic hydrocarbons. Izv.vys.ucheb.zav.; khim.i khim.tekh. 4 no.6:971-976 '61. (MIRA 15:3)

1. L'vovskiy gosudarstvennyy universitet imeni Franko, kafedra fizicheskoy i kolloidnoy khimii.
(Salts) (Catalysis) (Oxidation) (Hydrocarbons)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KUCHER, R.V.; KOVBUZ, M.A.; BUGROVA, E.M.; VASIL'KEVICH, I.M.

Liquid phase oxidation of isopropylbenzene at high pressure. Zhur. prikl.khim. 35 no.1:170-176 Ja '62. (MIRA 15:1)

1. L'vovskiy gosudarstvennyy universitet imeni I.Franko.
(Cumene) (Oxidation)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

BOLDYREV, B.G.; KOVBUZ, M.A.; TROFIMOVA, T.A.

Thiosulfonic acids. Part 10: Reduction of thiosulfonic acid esters on a mercury dropping electrode. Zhur. ob. khim. 35 no.1:22-27 Ja '65. (MIRA 18:2)

1. L'vovskiy politekhnicheskiy institut.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHA, V.

Improve the establishment of work norms for foundry work.
Sots.trud 4 no.7:92-93 Jl '59. (MIRA 13:4)
(Founding--Production standards)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHA, V.

Developing norms for the number of employees. Sots. trud 7 no.10:94-96 O '62. (MIRA 15:10)

(Industrial management)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHAVTSEV, P.G., inzh; KOSTRYGIN, V.A., inzh.; STOROZHUK, K.S., inzh.

Reconstruction of RVS-110 valve-type discharger. Elek.sta. 30 no.2:65-66 F '59. (MIRA 12:3)
(Electric power distribution--Equipment and supplies)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

AVLAVIDOV, T.; KOVCHAZOV, G.

Results of the eradication of taeniasis in Varna District, Bulgarian People's Republic. Med. paraz. i paraz. bol. 34 no.5: 572-575 S-O '65 (MIRA 19:1)

1. Okruzhnaya sanitarno-epidemiologicheskaya stantsiya, Varna. Submitted June 9, 1965.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVACHEGARSKI, T.

"Rationalization work in the Ores and Metallurgy Administration.

p. 8 (Ratsionalizatsiia, Vol. 7, no. 11, Oct. 1957, Sofiia, Bulgaria.)

"Results from the competition of young rationalizers."

p. 13 (Ratsionalizatsiia, Vol. 7, no. 11, Oct. 1957, Sofiia, Bulgaria.)

Monthly Index of East European Accession (EEAI) LC, Vol. 7, No. 6, June 1958.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHEGARSKI, T.

"How the proposed rationalizations are tested in the Lead-Zinc Plant."

p. 12 (Ratsionalizatsiia, Vol. 7, no. 11, Oct. 1957, Sofiia, Bulgaria.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 6, June 1958.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHEGARSKI, T.

New method for finishing the mercury valves of electric-current rectifiers.
p. 20 Ratsionalizatsii Vol. 8, No. 4, Apr., 1958. Sofiia, Bulgaria.

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 10,
Oct. 58

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHEGARSKI, T.

TECHNOLOGY

Periodical: RATSIONALIZATSIIA. Vol. 8, no. 6, June 1958.

KOVCHEGARSKI, T. Work in concentration plants and tasks of rationalizers.
p. 15.

Monthly List of East European Accession (EEAI), LC, Vol. 8, no. 2,
February 1959, Unclass.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

FREYMAN, V.B.; ISKLIKOVA, N.S.; RYZHOV, A.F.; KOVCHIK, N.A.

Immunization methods and immunological and electrophoretic studies on anti-influenza sera obtained from donkeys. Vak. i syv. no.1:133-139 '63. (MIRA 17:8)

1. Moskovskiy institut vaktsin i syvorotok im. Mechnikova.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIN, S.A.

Analysis of some feedback networks for stabilizing the speed of electric drives. Trudy LPI 240:39-47 '64. (MIRA 17:11)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

GRUZOV, Vladimir Leonidovich; NOVIKOVA, Galina Ivanovna; KOVCHIN, S.A., red.

[Transistorized frequency converters for automated a.c. drives] Poluprovodnikovye preobrazovateli chastoty dlia avtomatizirovannykh elektroprivodov peremennogo toka. Leningrad, 1964. 24 p. (MIRA 18:3)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

S/020/62/146/001/009/016
B108/B102

AUTHORS: Panasyuk, V. V., Kovchik, S. Ye.

TITLE: Effect of a surface active medium on the surface energy of a brittle body

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 146, no. 1, 1962, 82 - 85

TEXT: The effect of water on the development of cracks in silicate glass was studied. The surface energy of a sample plate with thickness h is $\gamma = (1 - \nu^2)P_k^2/2\pi Eh^2 l_k$, where E is Young's modulus, ν is Poisson's ratio, P_k is the critical stress at which a crack of length $2l_k$ starts to expand. Thus γ can be calculated on reading P_k from a strain gage. The authors determined the surface energy in air (γ_o) and in water (γ_w) of glass consisting of 72.7% SiO_2, 0.37% SO_3, 1.45% Al_2O_3, 0.1% Fe_2O_3, 7.6% CaO, 3.73% MgO, 14.5% Na_2O. γ_o was between 1800 and 2700 erg/cm^2 (average 2340 erg/cm^2), γ_w was between 1400 and 2000 erg/cm^2 (average 1790 erg/cm^2). The mean ratio γ_w/γ_o was 76%. There are 4 figures and 2 tables.

Card 1/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

S/020/62/146/001/009/016
B108/B102

Effect of a surface active ...

ASSOCIATION: Institut mashinovedcniya i avtomatiki Akademii nauk USSR (Institute of the Science of Machines and -Automation of the Academy of Sciences UkrSSR)

PRESENTED: April 29, 1962 by P. A. Rebinder, Academician

SUBMITTED: April 13, 1962

Card 2/4

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

ACCESSION NR: AT4023779 S/2723/63/000/002/0116/0127

AUTHOR: Panasyuk, V. V.; Kovchik, S. Ye.

TITLE: The effect of some surface active agents on the intensity of the energy of glass destruction

SOURCE: AN UkrRSR. Insty*tut mashy*noznavstva i avtomaty*ky*, L'viv. Vliyaniye rabochikh sred na svoystva materialov (Effect of active media on the properties of materials), no. 2, 1963, 116-127

TOPIC TAGS: glass, surfactant, surface active agent, crack, brittle failure, glass destruction, glass destruction energy, solid body destruction

ABSTRACT: The intensity of the energy required for destroying solid bodies, i. e. the work expended for the formation of a unit of a new body surface of the given material, is a very important property of the material itself. This intensity is also important for explaining the process of destruction of solid bodies and the influence of surface-active agents on this process. In this paper, a method is proposed for determining this energy, based on some results of the theory of crack propagation in brittle substances, and the method is applied to the study of silicate and organic glass in dry air and in a surface

Card 1/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

ACCESSION NR: AT4023779

active medium. A split glass fragment was subjected to tensile forces perpendicular to the crack, and the intensity of the plate-destruction energy was considered to be equal to gamma. When this intensity was measured in the presence of different surface active materials, it was found that water significantly lowered γ (by 25%); methyl alcohol lowered it by 15%; while vaseline oil did not lower γ and even increased it in comparison with dry air. These results corroborate to some extent the hypothesis of P. A. Rebinder (Yubileyny*y sbornik, posvyashchenny*y 30-letiyu Velikoy Oktyabr'skoy sotsialishicheskoy revolyutsii, ch. I, Izd-vo AN SSSR, 1947, p. 533) that surface-active substances act in two ways on the deformation and failure of hard bodies. For some materials this effect is expressed by a lowering of gamma, while for toehrs it leads to an increase in gamma. Orig. art. has: 6 figures, 3 tables and 3 formulas.

ASSOCIATION: Insty*tut mashy*noznavstva i avtomaty*ky AN UkrRSR, Lvov (Institute of Machine Technology and Automation, AN UkrRSR)

SUBMITTED: 00 DATE ACQ: 10Apr64 ENCL: 00

SUB CODE: MT NO REF SOV: 011 OTHER: 000

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APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

PANASYUK, V.V. (L'vov); KOVCHIK, S.Ye. [Kovchyk, S.IE.] (L'vov)

Determining the intensity of the energy of destruction of solid bodies. Prykl.mekh. 9 no.2:183-189 '63. (MIRA 16:3)

1. Institut mashinovedeniya i avtomatiki AN UkrSSR.
(Strength of materials)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIK, S.Ye.

Experimental investigation of the extension of cracks in glass plates. Vop. mekh. real'. tver. tela no. 2:172-176 '64.
(MIRA 17:9)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIK, S.Ye.

Experimental determination of the density of fracture energy of hardened steel. Vop. mekh. real. tver. tela no.3:26-32 '64.
(MIRA 17:11)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

VASILENKO, I.I.; KOVCHIK, S.Ye.; MIKITISHIN, S.I.

Effect of the external medium on the disintegration energy of U-8 carbon steel. Fiz.-khim. mekh. mat. 1 no.1:16-21 '65.
(MIRA 19:1)

1. Fiziko-mekhanicheskiy institut AN UkrSSR, Lvov. Submitted September 5, 1964.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIN, M.A.; BOBROVSKIY, N.N.; ZHURENKOV, F.V.

Zigzag corrugated joint fasteners for strengthening boards. Sel'khozmashina no.11:30 N '53. (MLRA 6:11)

(Nails and spikes)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIN, S. A.

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KOVCHIN, S.A.

Abram Bensianovich Lur'ye. Mashiny i oborudovaniye dlya zhivotnovodcheskikh ferm (Machines and equipment for live stock farms, by) A. B. Lur'ye, S. V. Mel'nikov (1) S. A. Kovchin. Moskva, Sel'khozgig, 1955. 414 p. illus., diagrs., tables.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIN, S.A., inzhener.

Controlled electrode water heaters for stock farms. Sel'khoz-mashina no.12:7-9 D '55. (MLRA 9:3)

1. Leningradskiy sel'skokhozyaystvennyy institut.
(Water heaters)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIN, Sergey Aleksandrovich; MERKUCHEV, Dmitriy Antonovich; RUDAKOV, Viktor Vasil'yevich; SHUSTOV, V.A., dotsent, red.; FAYNBERG, Ye.F., red.; MOLODTSOVA, N.G., tekhn.red.

[Use of electric power in agriculture; laboratory studies] Primenenie elektricheskoi energii v sel'skom khoziaistve; laboratorno-prakticheskie raboty. Pod red. V.A. Shustova. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1958. 228 p. (MIRA 12:2)
(Electricity in agriculture)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIN, S.A., inzh.

Making calculations for ultraviolet irradiation apparatus. Mekh. i elk. sots. sel'khoz. 15 no.2:40-43 '58. (MIRA 11:5)

1. Leningradskiy sel'skokhozyaystvennyy institut.
(Ultraviolet rays--Therapeutic use)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

SHUSTOV, V.A.; KOVCHIN, S.A.; PISKAREV, A.N.

"Reference book on the use of electric power in agriculture" by N.A. Sazonov and others. Reviewed by V.A. Shustov, S.A. Kovchin, A.N. Piskarev. Mekh. i elek. sots. sel'khoz. 16 no.6:61-62 '58.
(MIRA 12:1)

1.Kafedra "Primeneniye elektricheskoy energii v sel'skom khozyaystve" Leningradskogo sel'skokhozyaystvennogo instituta.
(Electricity in agriculture--Handbooks, manuals, etc.)
(Sazonov, N.A.)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIN, S. A., Cand of Tech Sci -- (diss) "Investigation of Combined Systems of Automatic Regulation of Instruments and their Utilization for Certain Agricultural Machines," Leningrad-Pushkin, 1959, 17 pp (Leningrad Agricultural Institute) (KL, 1-60, 122)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

SOV/144-59-5-5/14

AUTHOR: Kovchin, S.A., Aspirant

TITLE: The Influence of the Character of the Load on the Driving Function of an Electromechanical Amplifier

PERIODICAL: Izvestiya vyssikh uchebnykh zavedeniy, Elektromekhanika, 1959, Nr 5, pp 38 - 43 (USSR)

ABSTRACT: It is well known (Refs 1, 2 etc) that a rotating amplifier, on open circuit, can be represented by Eq (1) while the corresponding expression for purely resistive loading is Eq (1a). In Ref 2 a large number of frequency responses are presented in support of the validity of Eq (1a). If the behaviour with an inductive load is required, the driving function is most conveniently factored as in Appendix I using the frequency-dependent coefficient of Eq (4). The suitability of Eq (4) for design purposes is demonstrated in Figure 1 for an EMU-25 amplifier loaded with 22 ohms and 17 henry. The machine parameters are in Table 1. A better method of determining the

Card 1/3

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

The Influence of the Character of the Load on the Driving Function of an Electromechanical Amplifier

essential parameters is that in Refs 3 and 4. If the amplifier is critically compensated and feeds an unloaded motor the amplifier becomes markedly under-compensated and can be considered as a simple-lag circuit with driving function of Eq (7). This result has been verified on EMU-5, EMU-50 and EMU-25. The results for the last case are in Figure 2. For comparison the ordinates of the frequency response are given in Table 2 both for the experimental case and according to Eqs (1a) and (7). It will be noted that the assumption made by several authors that a loaded amplifier can be represented by a simple-lag circuit is valid only for particular load and compensation conditions. Saturation in the magnetic circuit of the amplifier also has a significant effect on the frequency response. Figure 3 is an open-circuit response taken for different outlet voltages. The cut-off frequency and damping are both affected.

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SOV/144-59-5-5/14

The Influence of the Character of the Load on the Driving Function of an Electromechanical Amplifier

There are 3 figures, 3 tables, 2 appendices and 5 Soviet references.

ASSOCIATION: Kafedra primeneniya elektroenergii v sel'skom khozyaystve, Leningradskiy sel'skokhozyaystvennyy institut (Chair of Applications of Electrical Power in Agriculture, Leningrad Agriculture Institute)

SUBMITTED: March 2nd, 1959.

Card 3/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIN, S.A., inzh.

Using experimental frequency characteristics for determining the values of constant coefficients of some transfer functions. Izv.vys.ucheb.zav.; energ. 3 no.1:54-58 Ja '60. (MIRA 13:1)

1. Leningradskiy sel'skokhozyaystvennyy institut. Predstavlena kafedroy primeneniya elektroenergii v sel'skom khozyaystve.
(Functions)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIN, S., inzh.

Requirements concerning automation and machinery in livestock raising. Tekh. v sel'khoz. 20 no.6:31-33 Je '60. (MIRA 13:10)

1. Leningradskiy sel'skokhozyaystvennyy institut.
(Agricultural machinery) (Stock and stockbreeding)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

RUDAKOV, Viktor Vasil'yevich; KOVCHIN, S.A., kand. tekhn. nauk, red.; SOBOLEVA, Ye.M., tekhn. red.

[Amplidynes in automatic control systems] Elektromashinnye usiliteli v sistemakh avtomatiki. Moskva, Gos. energ.izd-vo, 1961. 375 p. (MIRA 14:12)

(Rotating amplifiers) (Automatic control)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

29636 S/144/61/000/010/003/004
D053/D112

16,8000

AUTHORS: Kovchin, S.A., Candidate of Technical Sciences, and Mel'nikova, O.S., Engineer (see associations)

TITLE: Determination of transfer functions of elements from their frequency characteristics

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Elektromekhanika, no. 10, 1961, 72-81

TEXT: The authors describe a new method of determining transfer functions of elements in the automatic control systems. The method consists in simultaneously taking the frequency characteristics of all elements, including the unknown element, in an open-loop control system set to operating conditions sufficiently close to the future real operating conditions. Subsequently, the transfer function for the unknown element is written in the generalized form:

$$W_{el}(p) = \frac{b_o p^m + b_1 p^{m-1} + \ldots + b_{m-1} p + b_m}{p^q (a_o p^n + a_1 p^{n-1} + \ldots + a_{n-1} p + a_n)}, \quad (2)$$

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KOVCHIN, S.A., kand.tekhn.nauk; SERGEYEV, A., kand.tekhn.nauk

Remarks concerning A.S.Sergeev's article "Conversion of the structural networks of multistage systems with transverse parallel excitation." Izv.vys.ucheb.zav.; elektromekh. 5 no.1:113 '62. (MIRA 15:2)
(Automatic control) (Electric networks) (Sergeev, A.S.)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIN, S.A., kand. tekhn.nauk, dots.; LUR'YE, A.B., kand. tekhn. nauk, dots.; PROZOROV, V.A., kand. tekhn. nauk; RUDAKOV, V.V., kand. tekhn. nauk, dots.; SHUSTOV, V.A., kand. tekhn. nauk, retsenzent; DARTAU, A.A., kand. tekhn. nauk, red.; ONISHCHENKO, R.N., red.izd-va; SPERANSKAYA, O.V., tekhn. red.

[Automation of agricultural machines and units] Avtomatizatsiia sel'skokhoziaistvennykh mashin.i ustanovok. Moskva, Mashgiz, 1963. 358 p. (MIRA 16:8)
(Agricultural machinery) (Automatic control)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

ANDREYEV, Vladimir Petrovich [deceased]; SABININ, Yuriy Alekseyevich; KOVCHIN, S.A., kand. tekhn. nauk, red.; ZHITNIKOVA, O.S., tekhn. red.

[Principles of electric drives] Osnovy elektroprivoda. Izd.2. perer. Moskva, Gosenergoizdat, 1963. 771 p. (MIRA 17:1)
(Electric driving) (Electric motors)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIN, Sergey Aleksandrovich, kand.tekhn.nauk; ANDRUSHCHUK, Viktor Vasil'yevich, inzh.

Transfer functions of a loaded amplidyne with feedback. Izv.vys. ucheb.zav.; elektromekh. 7 no.12:1445-1454 '64. (MIRA 18:2)

1. Leningradskiy politekhnicheskiy institut.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHIN, S.A.; TARASOV, A.N.

Tranafer functions and schomatic diagram of a loaded amplidyne amplifier. Trudy LPI 240:48-58 '64. (MIRA 17:11)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

ACCESSION NR: AP4035109 S/0191/64/000/005/0066/0067

AUTHOR: Kovchina, L. D.; Fishman, B. N.

TITLE: Hermetic sealing of articles with epoxide compound under vacuum

SOURCE: Plasticheskiye massy*, no. 5, 1964, 66-67

TOPIC TAGS: hermetic sealing, equipment, apparatus, epoxide sealing, epoxide coating, vacuum casting apparatus

ABSTRACT: Equipment was designed for the hermetic sealing of articles with epoxy compounds under vacuum (fig. 1). In this apparatus a number of articles to be coated are arranged on the turn table (fig. 2), the system is put under 740-750 mm Hg vacuum, the epoxy is poured onto the article in the vicinity of the pour spout, epoxy flow is shut off, the table is rotated and epoxy coating repeated until each successive article has been treated. Orig. art. has: 3 figures.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 02

Card 1/4

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ACCESSION NR: AP4035109

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

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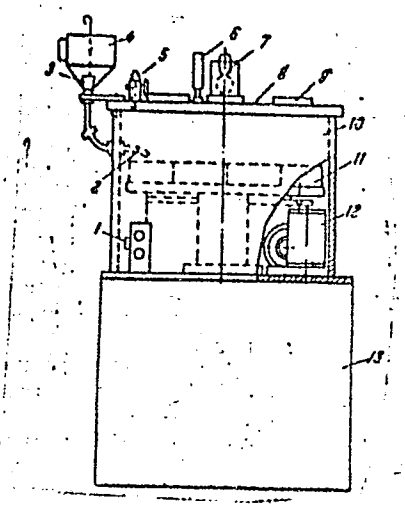
ACCESSION NR: AP4035109 ENCLOSURE: 01

Fig. 1. Vacuum casting arrangement



1--push button control
2--pouring spout
3--conical stopper
4--hopper (for epoxide)
5--stopcock for vacuum release
6--vacuum gage
7--lamp
8--cover
9--window
10--housing
11--turn table
12--reducing gear
13--vacuum pump

Card 3/4

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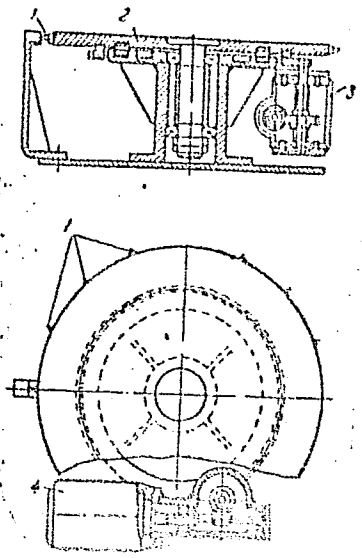
ACCESSION NR: AP4035109

ENCLOSURE: 02

Fig. 2. General view and drive mechanism for turn table.

1--supports for turn table
2--turntable
3--reducing gear
4--electric motor



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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

BELOTSERKOVSKIY, Grigoriy Bentsionovich; REYFMAN, L.L., retsenzent; CHEFRANOV, A.S., retsenzent; RAKOV, V.I., doktor tekhn. nauk, nauchn. red.; KOVCHKINA, G.P., red.

[Principles of pulse techniques and radar] Osnovy impul'snoi tekhniki i radiolokatsii. Leningrad, Sudostroenie, 1965. 458 p. (MIRA 18:7)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVCHUR, S.G.

Crystal glasses with a low content of PbO. Stek. i ker. 20 no.5:31-34 My '63. (MIRA 16:7)

1. Novo-Borisovskiy stekol'nyy zavod imeni Dzerzhinskogo. (Glass)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

LYUBIMOV, V.A.; YELISEYEV, G.P.; KOSMACHEVSKIY, V.K.; KOVDA, A.V.

Pulse dependence of the probability of ionization induced by μ-mesons. Izv. AN SSSR.Ser.fiz.19 no.6:753-757 N-D '55. (MLRA 9:4)

1.Akademiya nauk SSSR.

(Cosmic rays) (Nuclear physics)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

MALAKHOV, S.G.; KOVDA, A.V.

Ratio between the concentration of radon and its decay products in the air. Izv.AN SSSR.Ser.geofiz. no.5:789-792 My '61. (MIRA 14:4)

1. Akademiya nauk SSSR, Institut prikladnoy geofiziki.
(Radio meterology)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVDA, A.V

USSR/ Physics

Card 1/1 Pub. 22 - 11/49

Authors : Lyubinov, V. A., Eliseev, G. P., Kosmachovskiy, V. K. and Kovda, A. V.

Title : Probable ionization of μ^--mesons in gas in the impulse range between 4.10^8 and $1.2.10^9$ ev/c

Periodical : Dok. AN SSSR 100/5, 883-886, Feb 11, 1955

Abstract : Experiments with relativistic μ - mesons are described. The experiments were conducted for the purpose of ascertaining the effect of the velocites of μ -mesons (of the energy range between 4.10^8-$1.2.10^9$ ev/c) on their ionizing characteristics. The experiments were conducted with the help of a 4-fayer proportional counter and of a modern mass-spectrograph. Twelve references: 2 USA, 2 German, 3 British and 5 USSR (1932-1953). Graphs.

Institution : .....

Presented by: Academician A. A. Alikhanov, July 27, 1954

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

G.A. KOVDA, (N.L. Skrinichenko)

"SOME PROBLEMS OF RADIOMETRIC METHOD OF URANIUM ORE CONCENTRATION"

by G. A. Kovda, N. L. Skrinichenko

Report presented at 2nd UN Atoms-for-Peace Conference, Geneva, 6-13 Sept 1958

KOVDA, G.A.

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KOVDA, G.A.

82(4) MAIN I BOOK EXPLOITATION SOV/2718

International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958

Mirnyy novetishikh otkrytiy; rudnogeye gorizonty i rudnogeye setaliy. (Reports of Soviet Scientists; Nuclear Fuel and Raw Materials Series) Moscow, Atomizdat, 1959. 670 p. (Series: Its: Trudy, vol. 3. 6,000 copies printed.

Ed. (Title page): A.A. Bochvar, Academician, A.P. Vinogradov, Academician, V.S. Yemel'yanov, Corresponding Member, USSR Academy of Sciences, and A.P. Zefirov, Doctor of Technical Sciences; Ed. (Inside book): V.V. Ovsyannikov and O.M. Fabilistova; Tech. Ed.: Z.I. Mamil'.

PURPOSE: This volume is intended for scientists, engineers, physicians, and industrial workers in the production and peaceful application of atomic energy; for professors and students of schools of higher and secondary education where the subject is taught; and for people interested in atomic science and technology.

COVERAGE: This is volume 3 of a 5-volume set of reports on atomic energy, presented by Soviet scientists at the Second International Conference on the Peaceful Uses of Atomic Energy, held in Geneva from September 1 to 13, 1958. Volume 3 consists of two parts. The first part, edited by A.P. Zefirov, is devoted to geology, prospecting, concentration and processing of nuclear raw material. The second part, edited by G.A. Kovda, includes 27 reports on metallogeny, metallography, processing technology of nuclear fuels and rarer metals, and neutron irradiation effects on metals. The title of the individual papers in most cases correspond word for word with those in the official English language edition of the Conference proceedings. See SOV/2681 for the titles of the other volumes of the set.

Zefirov, A.P., G.A. Tsaregorodtsev, G.D. Glushkov, I.K. Kikoin, V.A. Polikarpov, and M.K. Pavlichenko. Paragenetic Associations of Hydrothermal Uranium Minerals in Uranium Deposits of the Soviet Union (Report No. 2221) 110

Ovsyannikov, A.I., N.G. Patalin, G.A. Tolstov, A.K. Lisitsin, and V.S. Savchenkov. Some Characteristics of Uranium Distribution in Underground Waters (Report No. 2699) 134

Raw Data on Uranium Minerals in the USSR (Report No. 2066) 160

Gruzenskiy, A.G., K.V. Frolkovskaya, A.I. Khokov, M.M. Kotelov, K.K. Kochurov, S.A.A. Sinno, and S.F. Talipov. Some Theoretical and Methodical Problems of Radiometric Prospecting and Survey (Report No. 2395) 199

Belenkaya, Ye. Z. The Gamma-ray Emanation Method for Classifying Ascarites in Radioactivity (Report No. 2243) 218

Kovda, G.A., and M.K. Shvidchenko. Some Problems of Radiometric Uranium Ore Concentration (Report No. 2061) 227

Card 4/11

Card 1/4

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Lithium, its Chemistry, and Technology (Cont.) SOV/4769

lurgy of lithium. It is based on Soviet and other technical literature published from 1918 through 1958. No personalities are mentioned. References accompany each chapter.

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Ch. I. The Geochemistry and Mineralogy of Lithium
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Occurrence of lithium in nature 7
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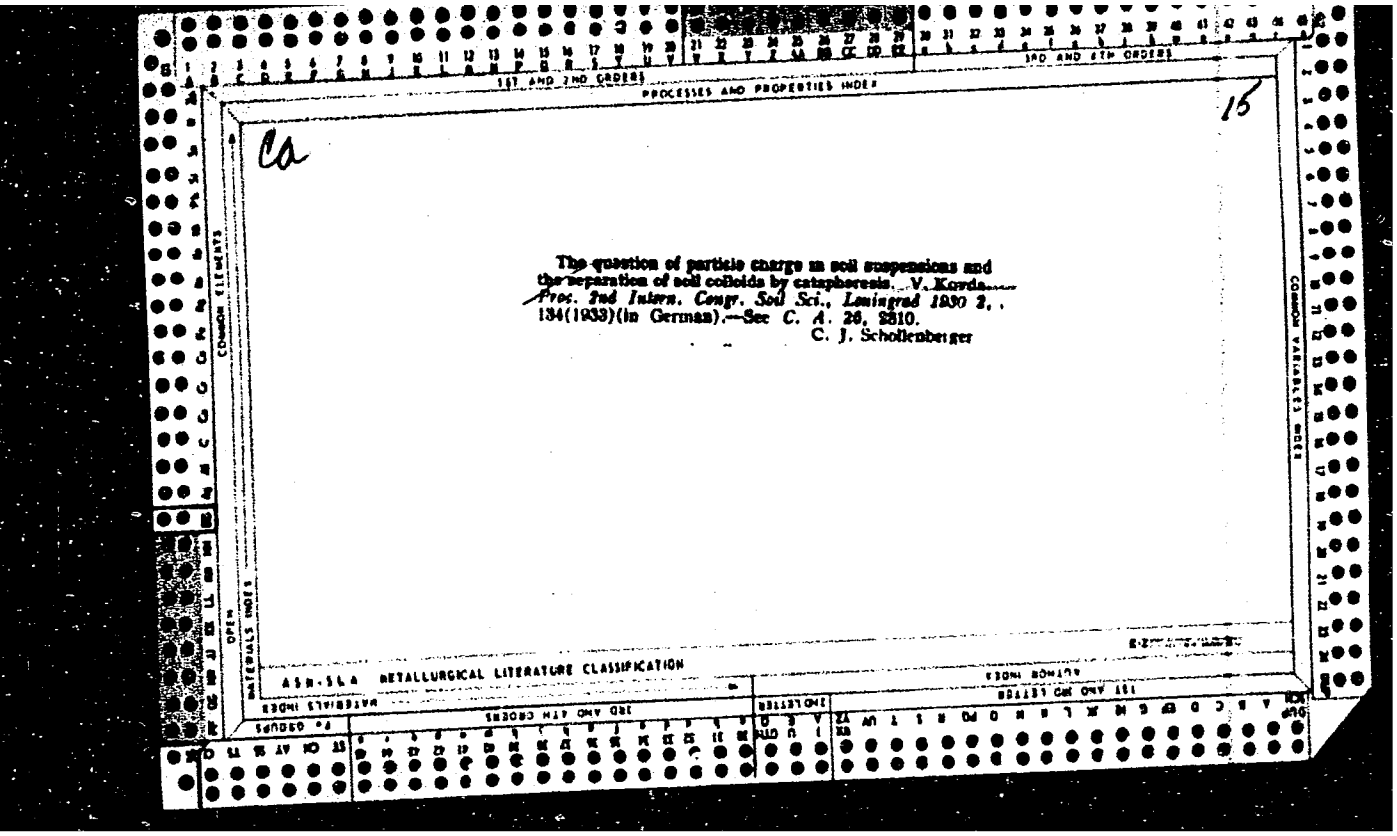

Ca

15

The question of particle charge in soil suspensions and the separation of soil colloids by cataphoresis. V. Kovda. *Proc. 2nd Intern. Congr. Soil Sci., Leningrad 1930* 2, 134(1933)(In German).—See *C. A.* 26, 2810.
C. J. Schollenberger

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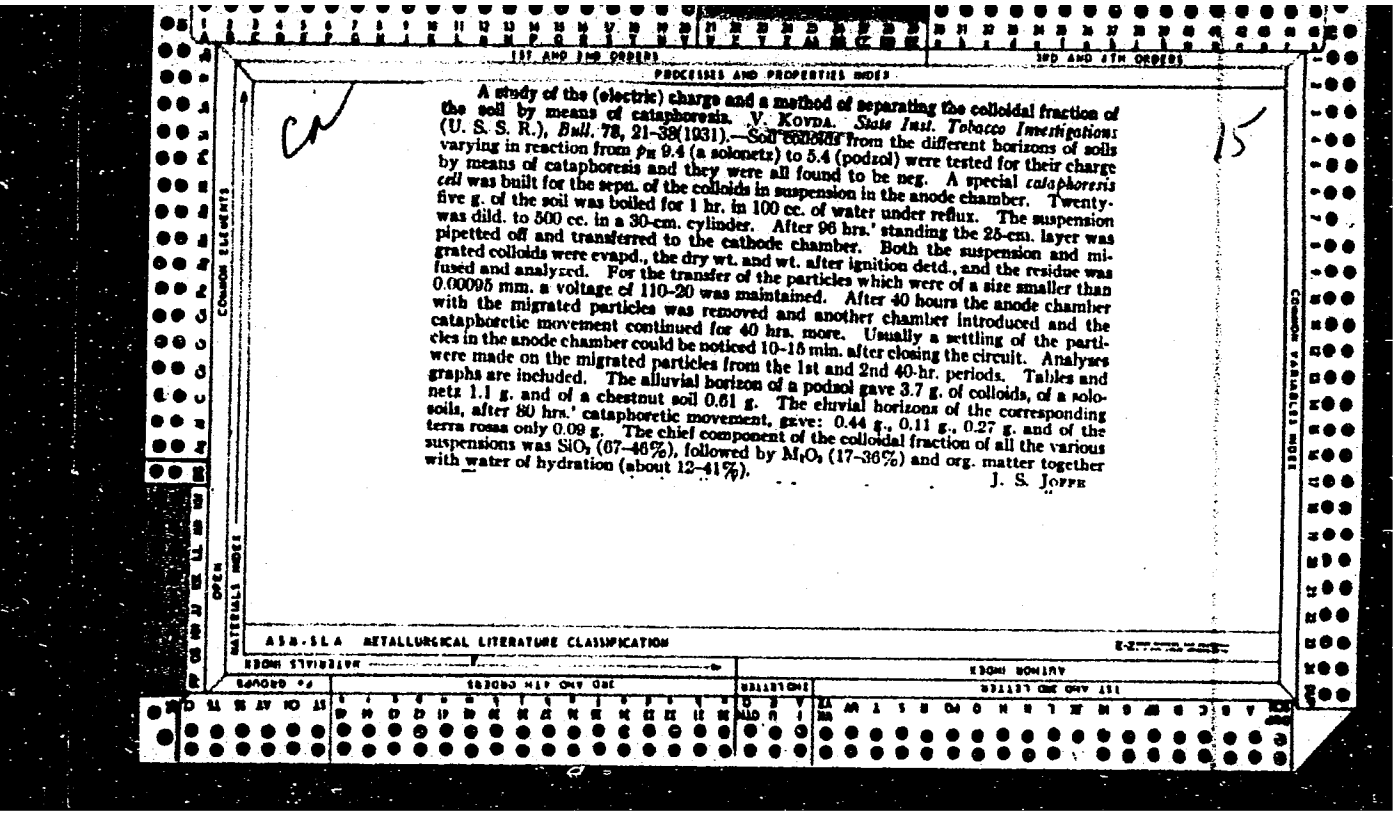

A study of the (electric) charge and a method of separating the colloidal fraction of the soil by means of cataphoresis. V. Kovda. *State Inst. Tobacco Investigations* (U. S. S. R.), *Bull.* 78, 21–38(1931).—Soil colloids from the different horizons of soils varying in reaction from p_H 9.4 (a solonetz) to 5.4 (podzol) were tested for their charge by means of cataphoresis and they were all found to be neg. A special *cataphoresis cell* was built for the sepn. of the colloids in suspension in the anode chamber. Twenty-five g. of the soil was boiled for 1 hr. in 100 cc. of water under reflux. The suspension was dild. to 500 cc. in a 30-cm. cylinder. After 96 hrs.' standing the 25-cm. layer was pipetted off and transferred to the cathode chamber. Both the suspension and migrated colloids were evapd., the dry wt. and wt. after ignition detd., and the residue was fused and analyzed. For the transfer of the particles which were of a size smaller than 0.00095 mm. a voltage of 110–20 was maintained. After 40 hours the anode chamber with the migrated particles was removed and another chamber introduced and the cataphoretic movement continued for 40 hrs. more. Usually a settling of the particles in the anode chamber could be noticed 10–15 min. after closing the circuit. Analyses were made on the migrated particles from the 1st and 2nd 40-hr. periods. Tables and graphs are included. The alluvial horizon of a podzol gave 3.7 g. of colloids, of a solonetz 1.1 g. and of a chestnut soil 0.61 g. The eluvial horizons of the corresponding soils, after 80 hrs.' cataphoretic movement, gave: 0.44 g., 0.11 g., 0.27 g. and of the terra rossa only 0.09 g. The chief component of the colloidal fraction of all the various suspensions was SiO_2 (67–46%), followed by M_2O_3 (17–36%) and org. matter together with water of hydration (about 12–41%).

J. S. Joffe

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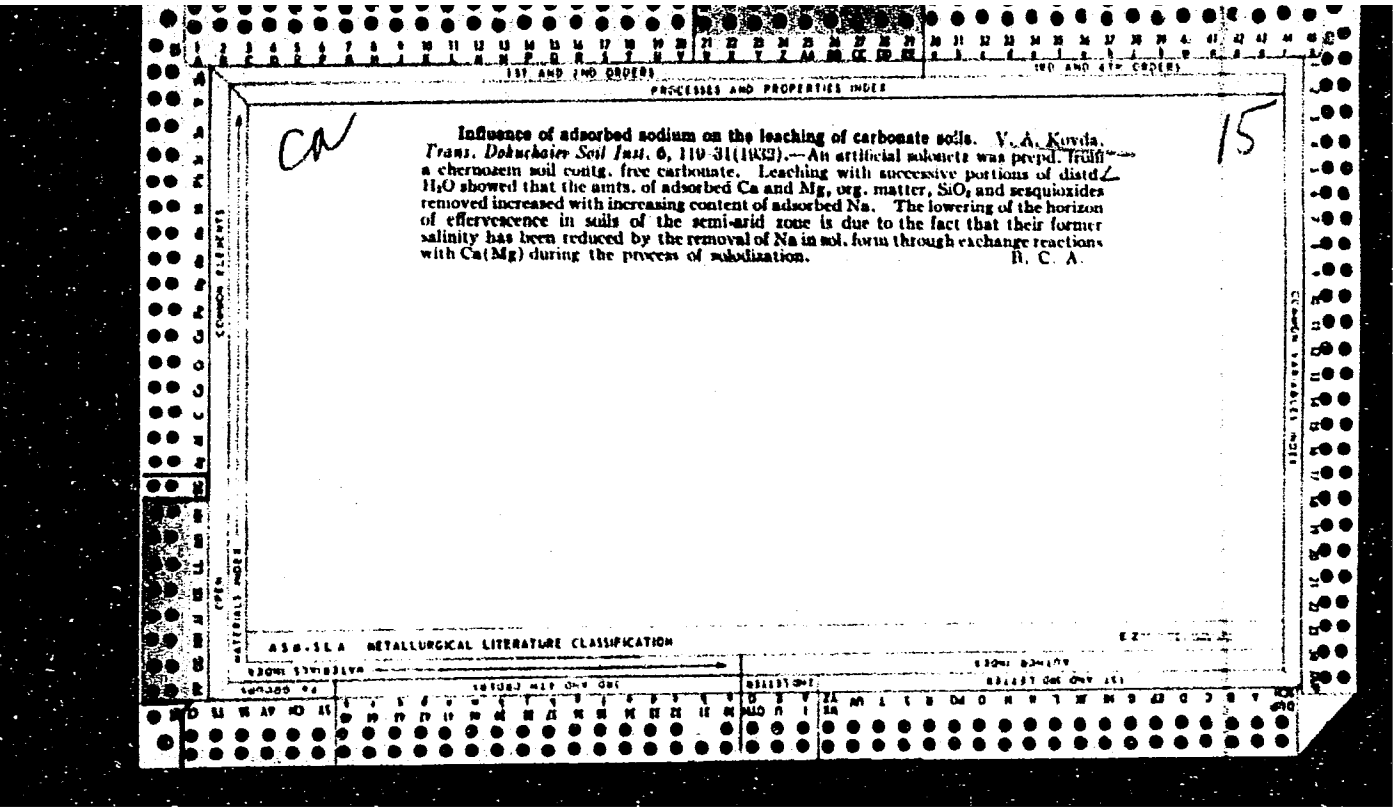

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

CN

15

Influence of adsorbed sodium on the leaching of carbonate soils. V. A. Kovda. *Trans. Dokuchaiev Soil Inst.* 6, 119-31(1932).—An artificial subsoil was prepd. from a chernozem soil contg. free carbonate. Leaching with successive portions of distd. H_2O showed that the amts. of adsorbed Ca and Mg, org. matter, SiO_2, and sesquioxides removed increased with increasing content of adsorbed Na. The lowering of the horizon of effervescence in soils of the semi-arid zone is due to the fact that their former salinity has been reduced by the removal of Na in sol. form through exchange reactions with Ca(Mg) during the process of solodization. B. C. A.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

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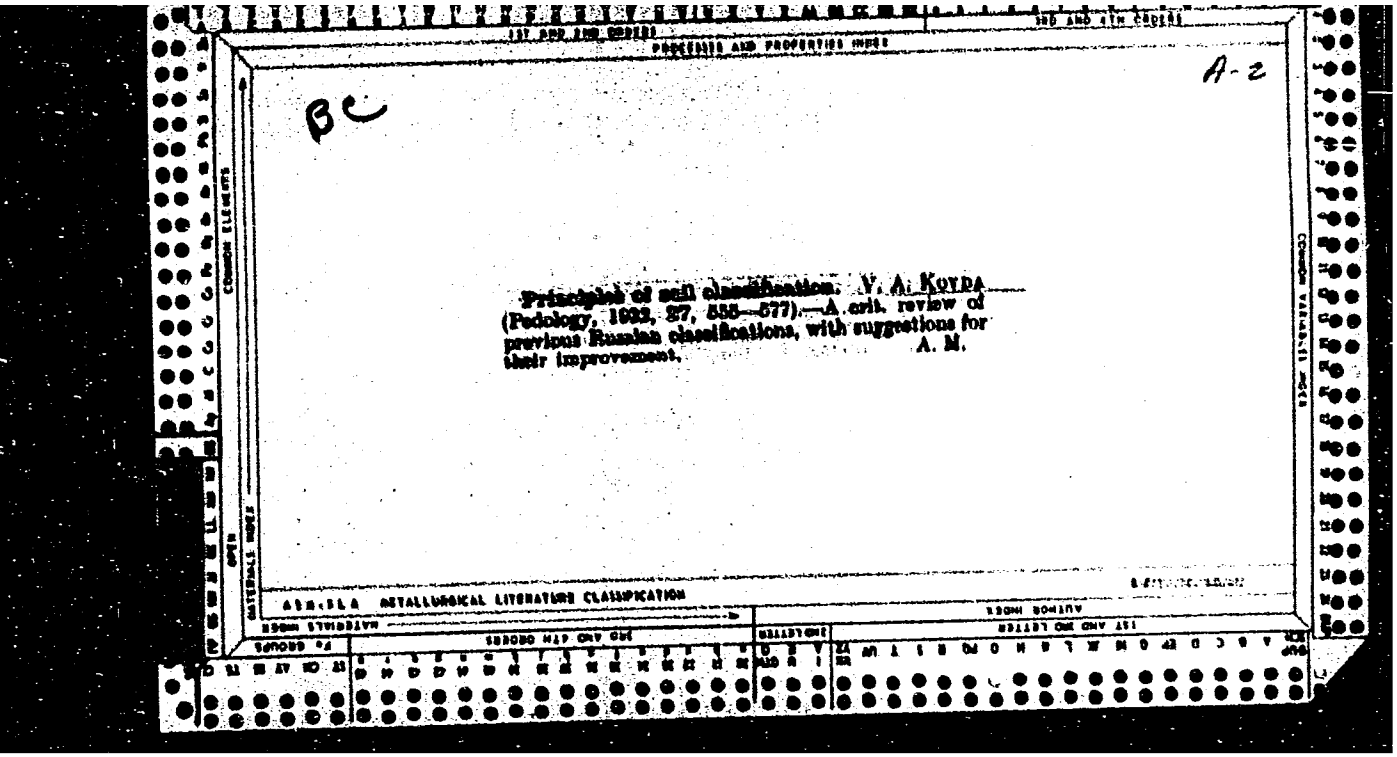

BC

A-2

Principles of soil classification. V. A. Kovda (Pedology, 1932, 27, 555—577).—A crit. review of previous Russian classifications, with suggestions for their improvement. A. M.

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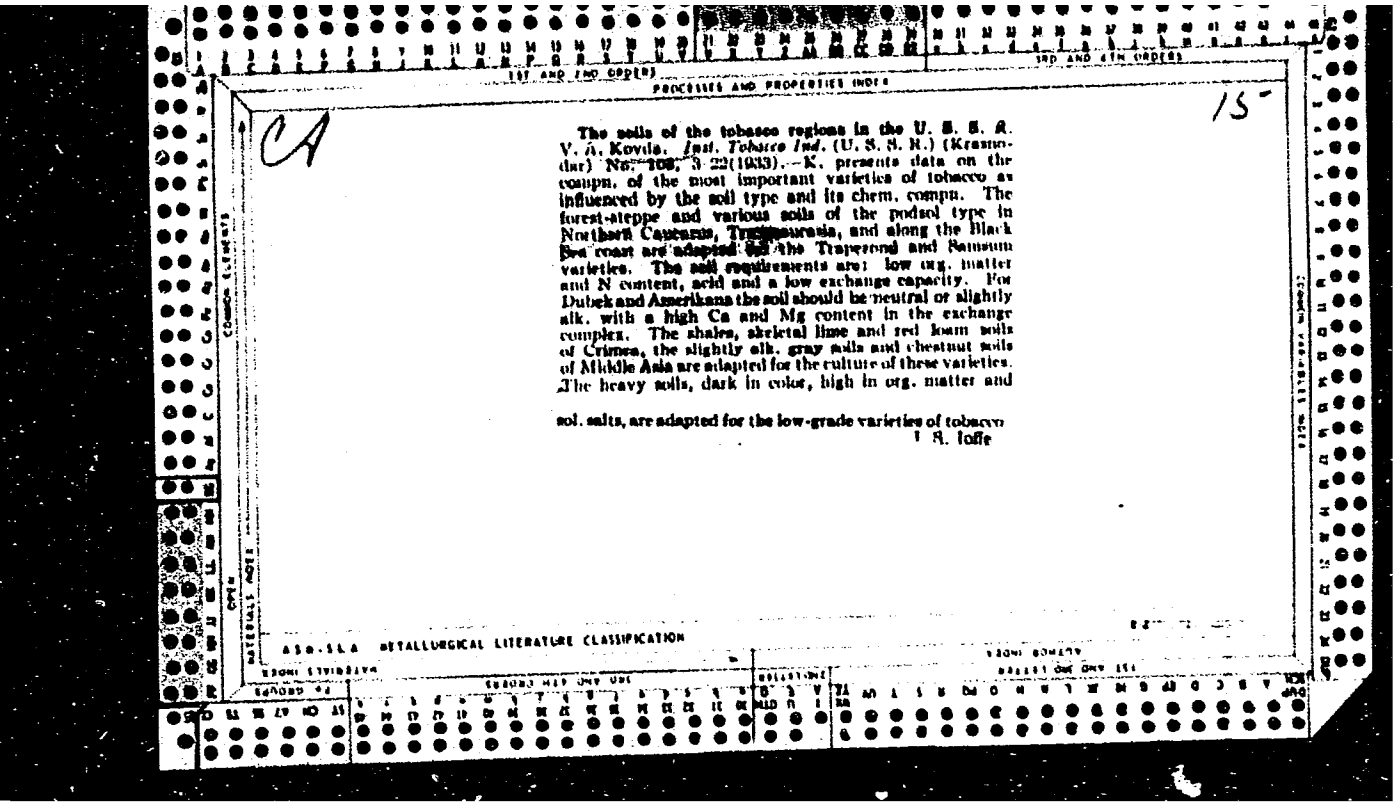

CA

15

The soils of the tobacco regions in the U. S. S. R. V. A. Kovda. *Inst. Tobacco Ind.* (U. S. S. R.) (Krasnodar) No. 108, 3-22(1933).—K. presents data on the compn. of the most important varieties of tobacco as influenced by the soil type and its chem. compn. The forest-steppe and various soils of the podsol type in Northern Caucasia, Transcaucasia, and along the Black Sea coast are adapted for the Trapezond and Samsun varieties. The soil requirements are: low org. matter and N content, acid and a low exchange capacity. For Dubek and Amerikana the soil should be neutral or slightly alk. with a high Ca and Mg content in the exchange complex. The shales, skeletal lime and red loam soils of Crimea, the slightly alk. gray soils and chestnut soils of Middle Asia are adapted for the culture of these varieties. The heavy soils, dark in color, high in org. matter and sol. salts, are adapted for the low-grade varieties of tobacco.

I. S. Ioffe

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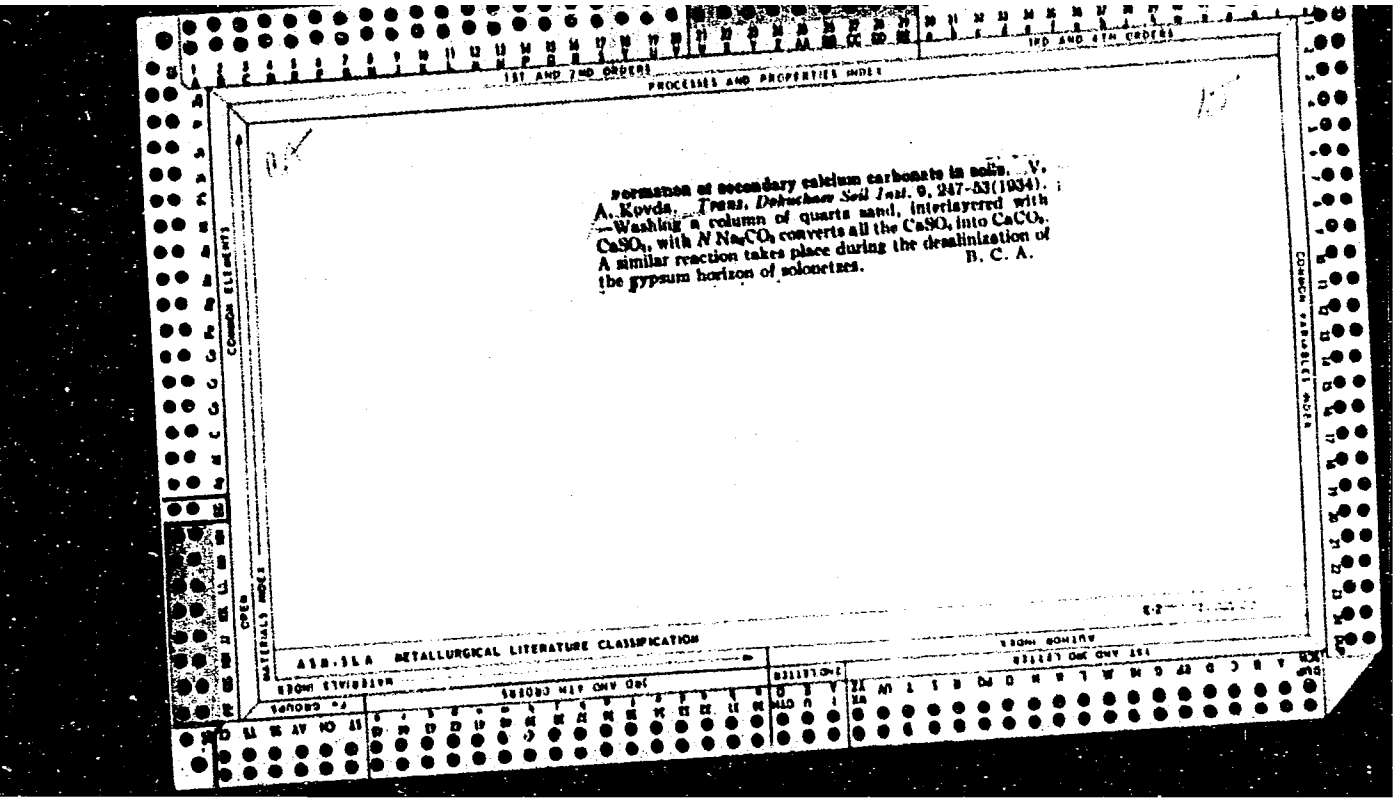

Formation of secondary calcium carbonate in soils. V. A. Kovda. *Trans. Dokuchaev Soil Inst.* 9, 247-53(1934). —Washing a column of quartz sand, interlayered with $CaSO_4$, with *N* Na_2CO_3 converts all the $CaSO_4$ into $CaCO_3$. A similar reaction takes place during the desalinization of the gypsum horizon of solonetzes. B. C. A.

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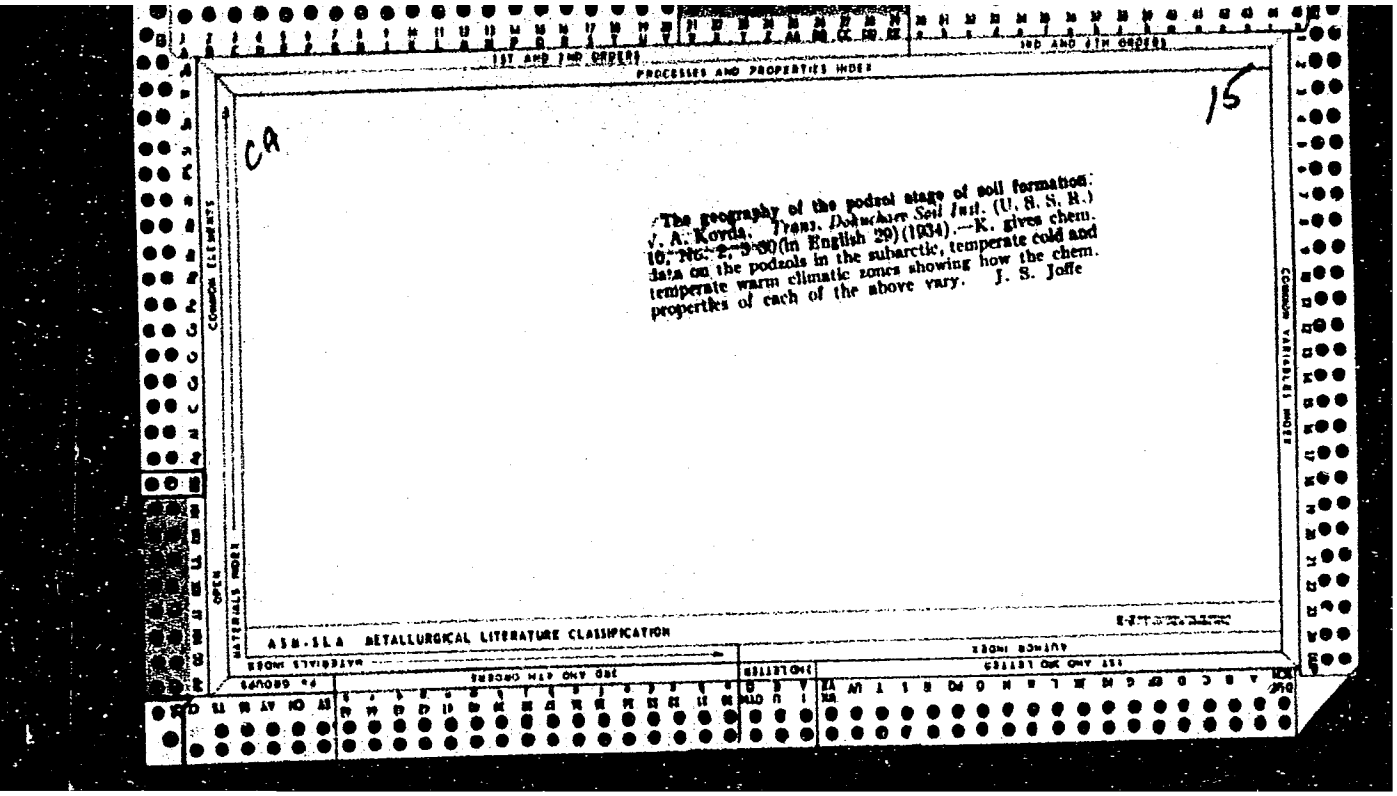

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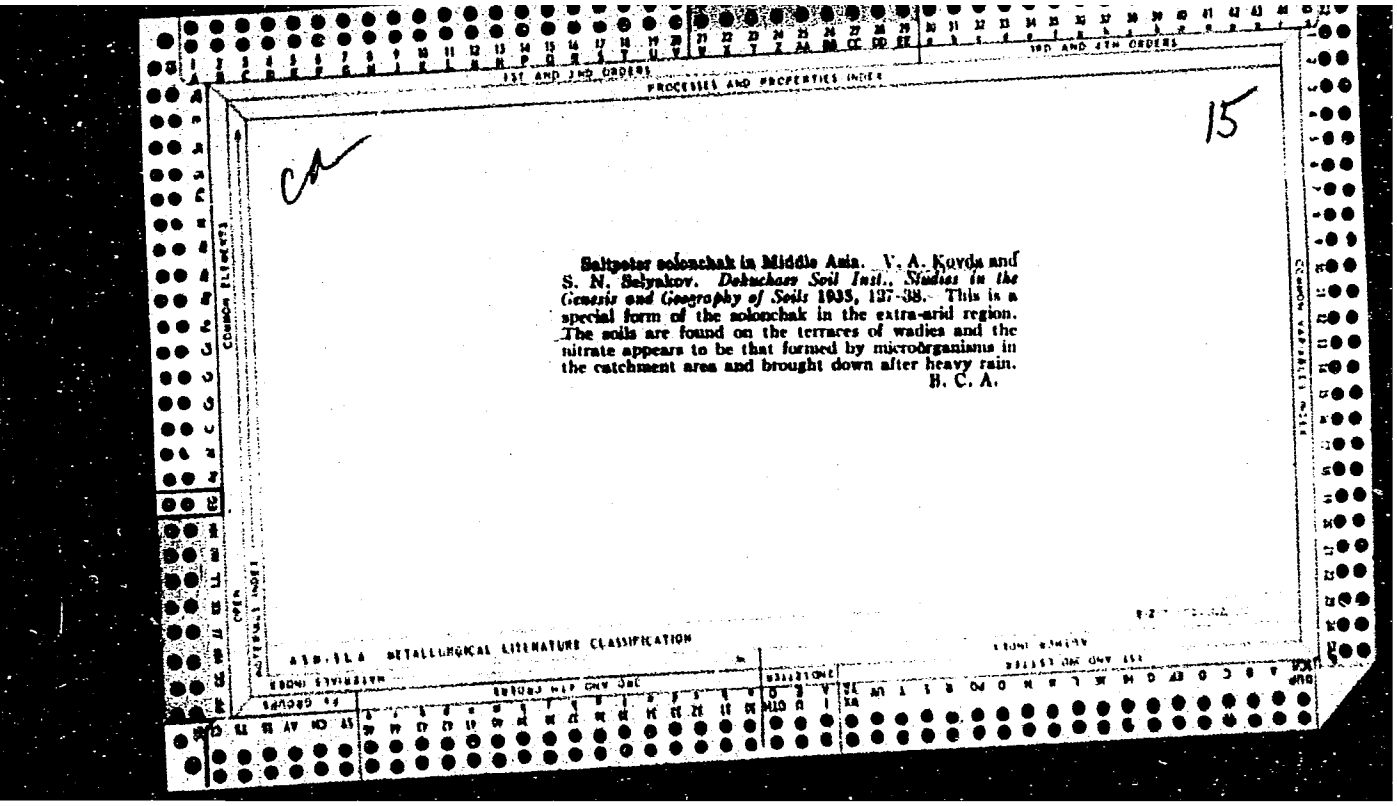

15

Saltpeter solonchak in Middle Asia. V. A. Kovda and S. N. Selyakov. *Dokuchaev Soil Inst., Studies in the Genesis and Geography of Soils* 1935, 137-58. This is a special form of the solonchak in the extra-arid region. The soils are found on the terraces of wadies and the nitrate appears to be that formed by microorganisms in the catchment area and brought down after heavy rain.
B. C. A.

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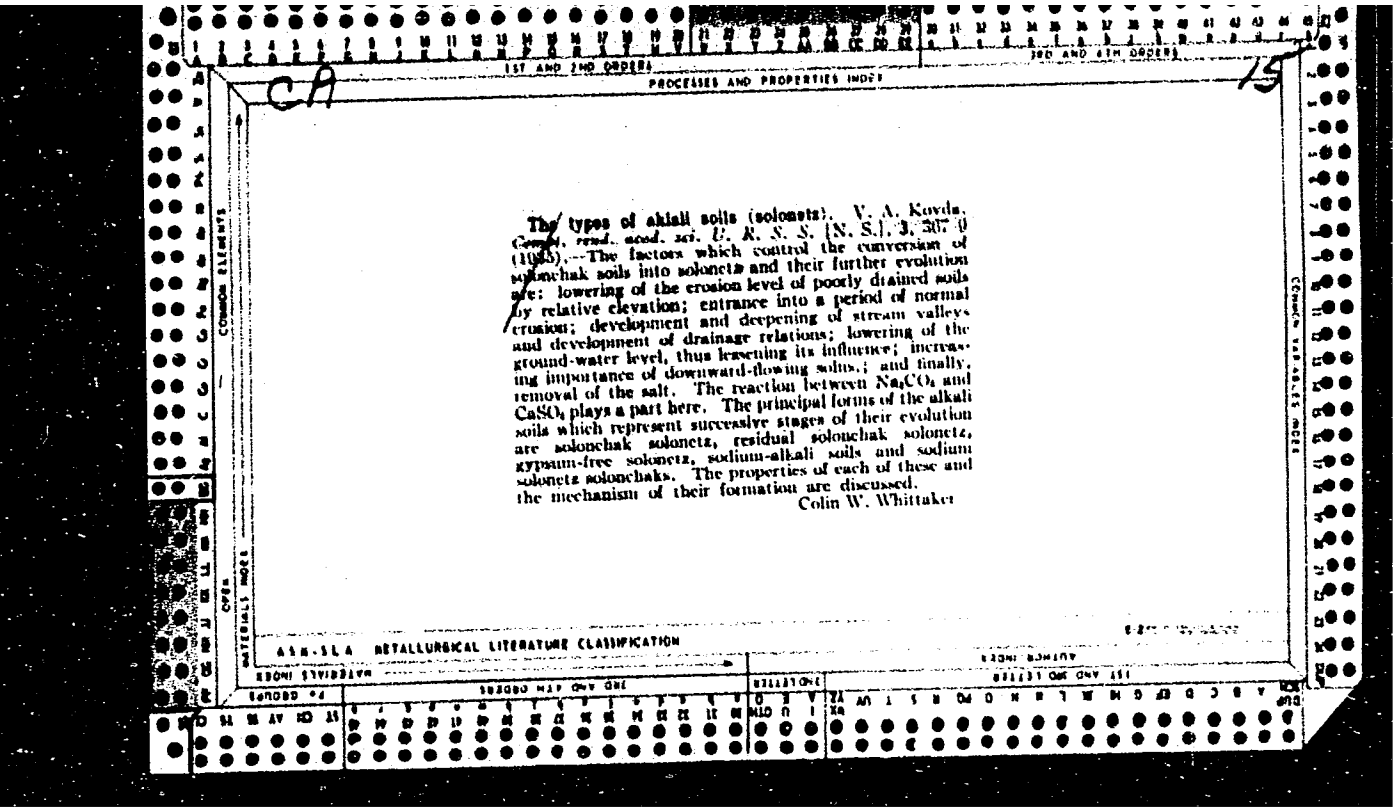

PROCESSES AND PROPERTIES INDEX

CA

15

The types of alkali soils (solonets). V. A. Kovda. *Compt. rend. acad. sci. U. R. S. S.* [N. S.] 3, 307–9 (1935).—The factors which control the conversion of solonchak soils into solonets and their further evolution are: lowering of the erosion level of poorly drained soils by relative elevation; entrance into a period of normal erosion; development and deepening of stream valleys and development of drainage relations; lowering of the ground-water level, thus lessening its influence; increasing importance of downward-flowing solns.; and finally, removal of the salt. The reaction between Na_2CO_3 and $CaSO_4$ plays a part here. The principal forms of the alkali soils which represent successive stages of their evolution are solonchak solonetz, residual solonchak solonetz, gypsum-free solonetz, sodium-alkali soils and sodium solonetz solonchaks. The properties of each of these and the mechanism of their formation are discussed.

Colin W. Whittaker

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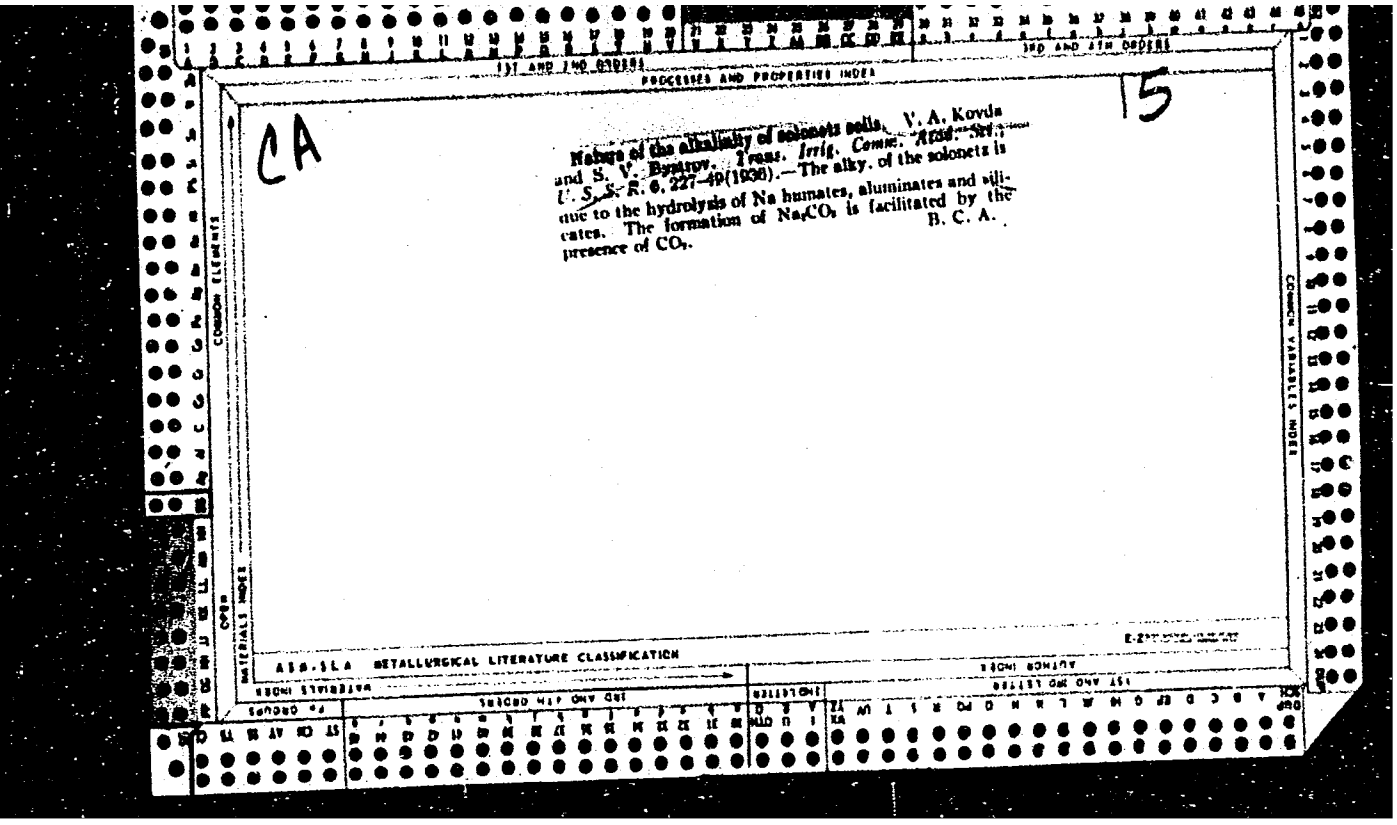

CA

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Nature of the alkalinity of solonets soils. V. A. Kovda and S. V. Bystrov. Trans. Irrig. Comm. Acad. Sci. U. S. S. R. 6, 227–49(1936).—The alky. of the solonets is due to the hydrolysis of Na humates, aluminates and silicates. The formation of Na_2CO_3 is facilitated by the presence of CO_2. B. C. A.

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KOVDA, V. A.

"Transactions of the Commission on Irrigation," Academy of Sciences, USSR, 1937.

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KOVDA, VIKTOR ABRAMOVICH

KOVDA, VIKTOR ABRAMOVICH. Solonchaki i solontsy. Moskva, AN SSSR, 1937.
243 p. DLC: Unclass.

SO: LC, Soviet Geography, Part I, 1951, Uncl.

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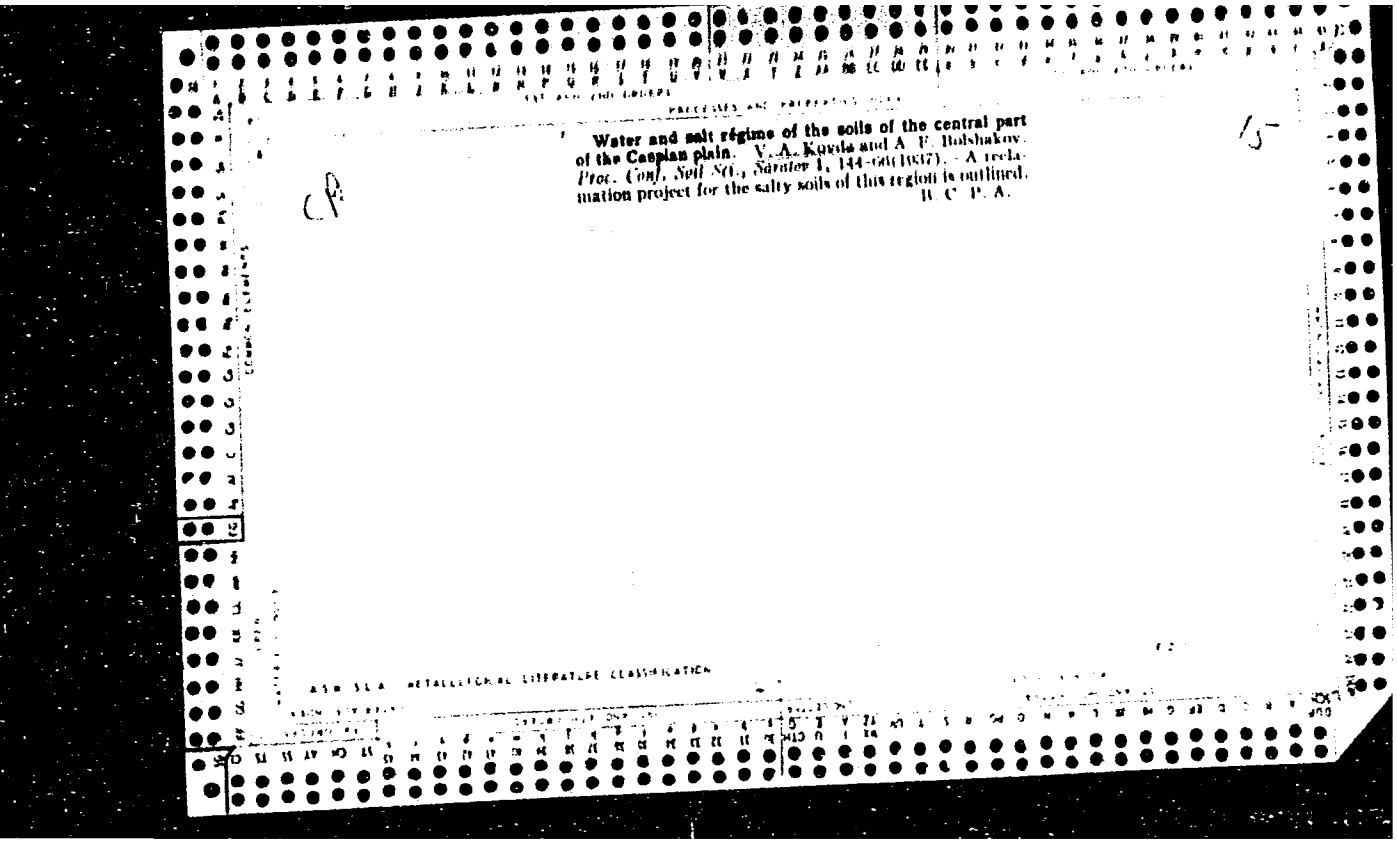

Water and salt régime of the soils of the central part of the Caspian plain. V. A. Kovda and A. F. Bolshakov. *Proc. Conf. Soil Sci., Saratov* 1, 144–60 (1957). – A reclamation project for the salty soils of this region is outlined. R. C. P. A.

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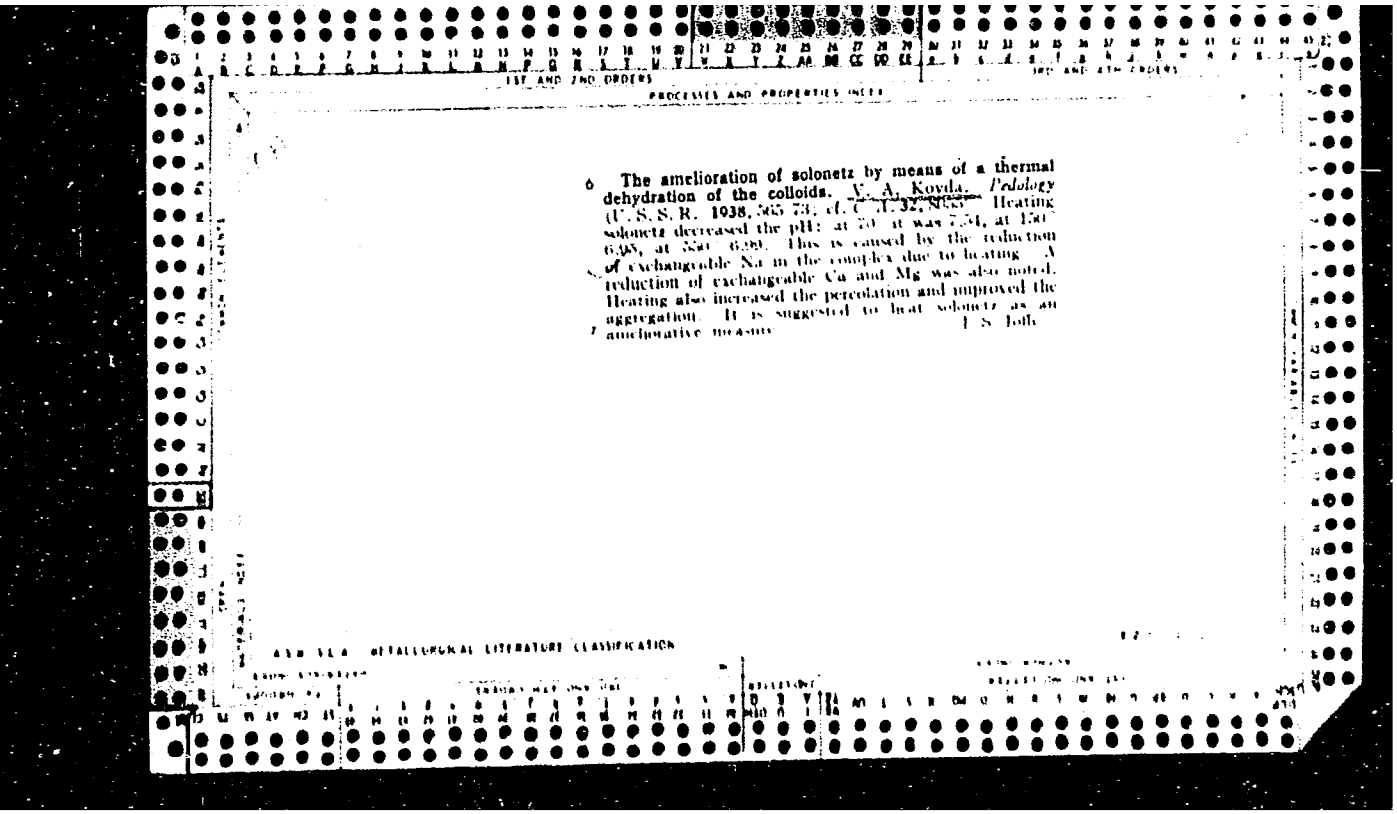

6 The amelioration of solonetz by means of a thermal dehydration of the colloids. V. A. Kovda. *Pedology* (U. S. S. R. 1938, 565-73; cf. C. A. 32, 8865). Heating solonetz decreased the pH: at 70° it was 7.54, at 150° 6.98, at 350° 6.90. This is caused by the reduction of exchangeable Na in the complex due to heating. A reduction of exchangeable Ca and Mg was also noted. Heating also increased the percolation and improved the aggregation. It is suggested to heat solonetz as an ameliorative measure. I. S. Joffe

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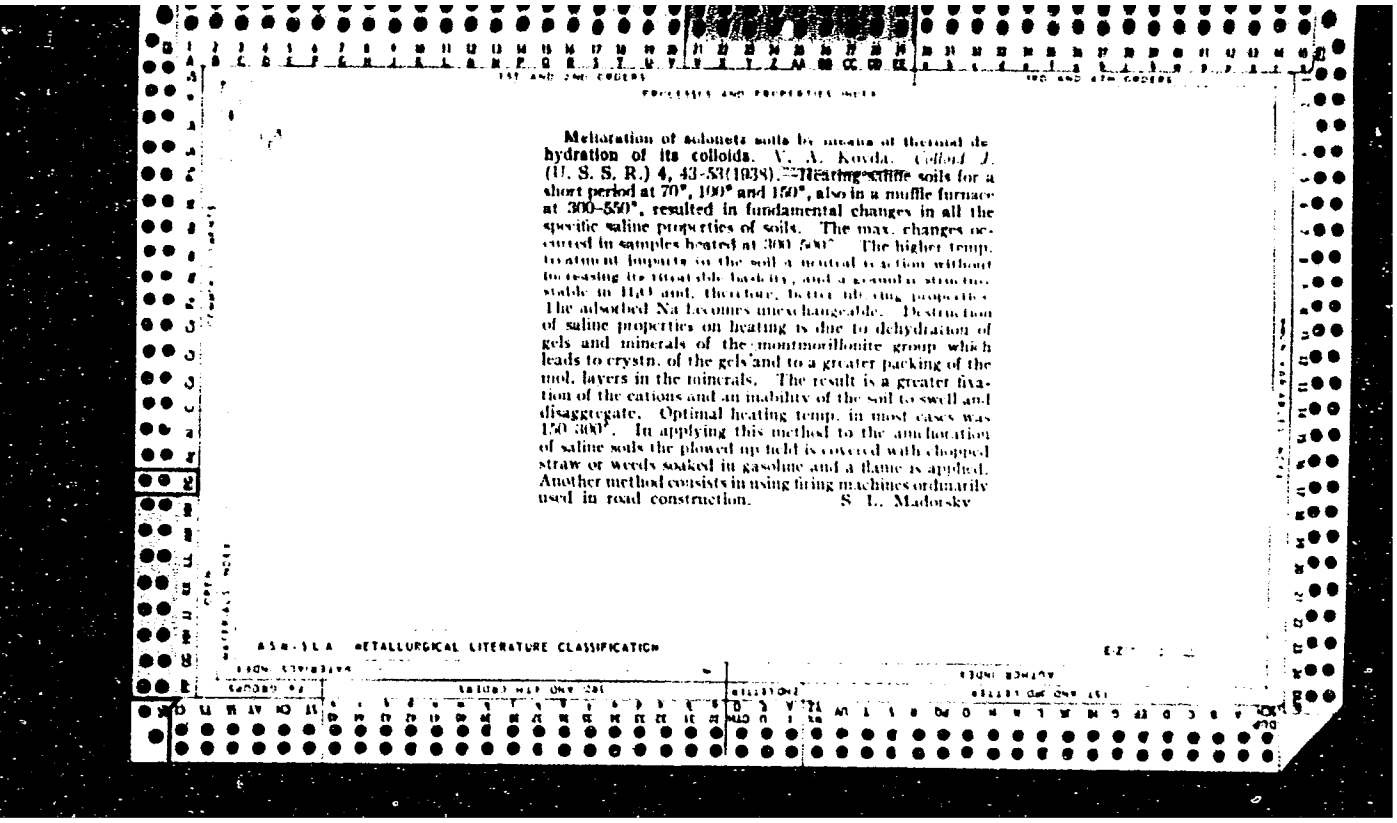

Melioration of solonets soils by means of thermal dehydration of its colloids. V. A. Kovda. *Colloid J.* (U. S. S. R.) 4, 43-53(1938).—Heating saline soils for a short period at 70°, 100° and 150°, also in a muffle furnace at 300–550°, resulted in fundamental changes in all the specific saline properties of soils. The max. changes occurred in samples heated at 300-500°. The higher temp. treatment imparts to the soil a neutral reaction without increasing its titratable basicity, and a granular structure stable in H$_2$O and, therefore, better subserving properties. The adsorbed Na becomes unexchangeable. Destruction of saline properties on heating is due to dehydration of gels and minerals of the montmorillonite group which leads to crystn. of the gels and to a greater packing of the mol. layers in the minerals. The result is a greater fixation of the cations and an inability of the soil to swell and disaggregate. Optimal heating temp. in most cases was 150-300°. In applying this method to the amelioration of saline soils the plowed up field is covered with chopped straw or weeds soaked in gasoline and a flame is applied. Another method consists in using firing machines ordinarily used in road construction. S. L. Madorsky

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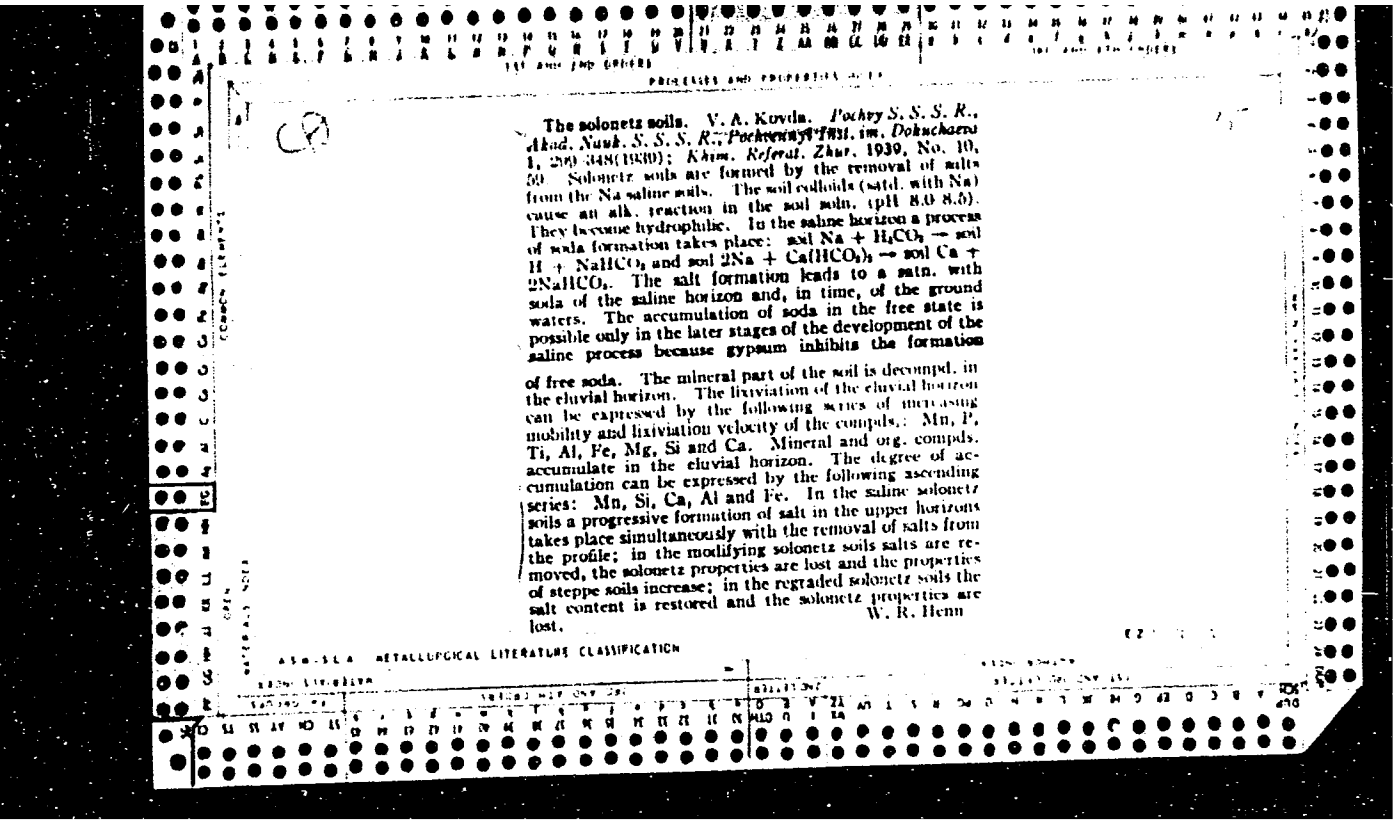

The solonetz soils. V. A. Kovda. *Pochvy S. S. S. R., Akad. Nauk. S. S. S. R., Pochvennyi Inst. im. Dokuchaeva* 1, 209-348(1939); *Khim. Referat. Zhur.* 1939, No. 10, 50. Solonetz soils are formed by the removal of salts from the Na saline soils. The soil colloids (satd. with Na) cause an alk. reaction in the soil soln. (pH 8.0-8.5). They become hydrophilic. In the saline horizon a process of soda formation takes place: soil Na + H_2CO_3 → soil H + $NaHCO_3$ and soil 2Na + $Ca(HCO_3)_2$ → soil Ca + $2NaHCO_3$. The salt formation leads to a satn. with soda of the saline horizon and, in time, of the ground waters. The accumulation of soda in the free state is possible only in the later stages of the development of the saline process because gypsum inhibits the formation of free soda. The mineral part of the soil is decompd. in the eluvial horizon. The lixiviation of the eluvial horizon can be expressed by the following series of increasing mobility and lixiviation velocity of the compds.: Mn, P, Ti, Al, Fe, Mg, Si and Ca. Mineral and org. compds. accumulate in the eluvial horizon. The degree of accumulation can be expressed by the following ascending series: Mn, Si, Ca, Al and Fe. In the saline solonetz soils a progressive formation of salt in the upper horizons takes place simultaneously with the removal of salts from the profile; in the modifying solonetz soils salts are removed, the solonetz properties are lost and the properties of steppe soils increase; in the regraded solonetz soils the salt content is restored and the solonetz properties are lost.

W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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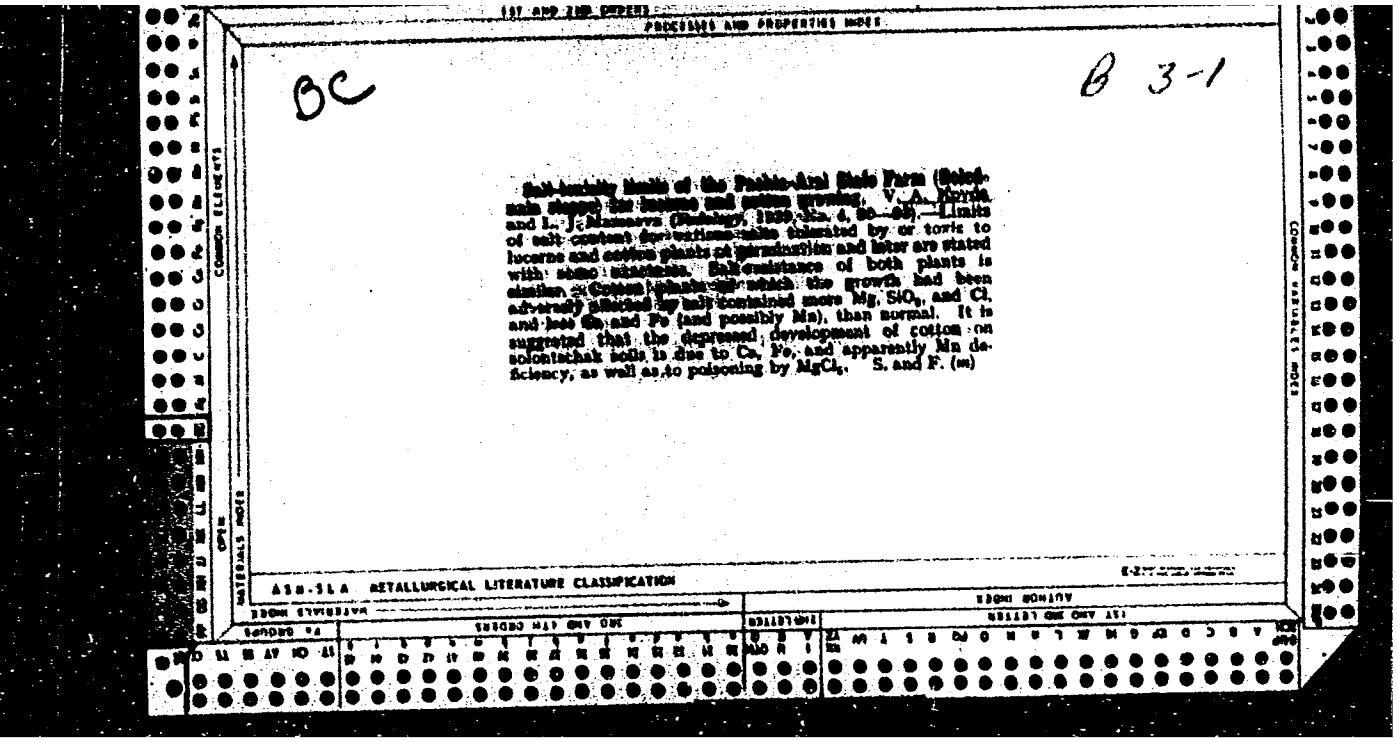

BC

B 3-1

Salt-tolerance trials at the Pusht-i-Kuh State Farm (Seistan region) for lucerne and cotton growing. V. A. Novikova and L. J. Mamaeva (Pochvovd., 1939, No. 4, 80—98).—Limits of salt content for various soils tolerated by or toxic to lucerne and cotton plants at germination and later are stated with some statistics. Salt-resistance of both plants is similar. Cotton (shaby silt) which the growth had been adversely affected by salt contained more Mg, SiO_3, and Cl, and less Ca and Fe (and possibly Mn), than normal. It is suggested that the depressed development of cotton on solonetchak soils is due to Ca, Fe, and apparently Mn deficiency, as well as to poisoning by $MgCl_2$. S. and F. (m)

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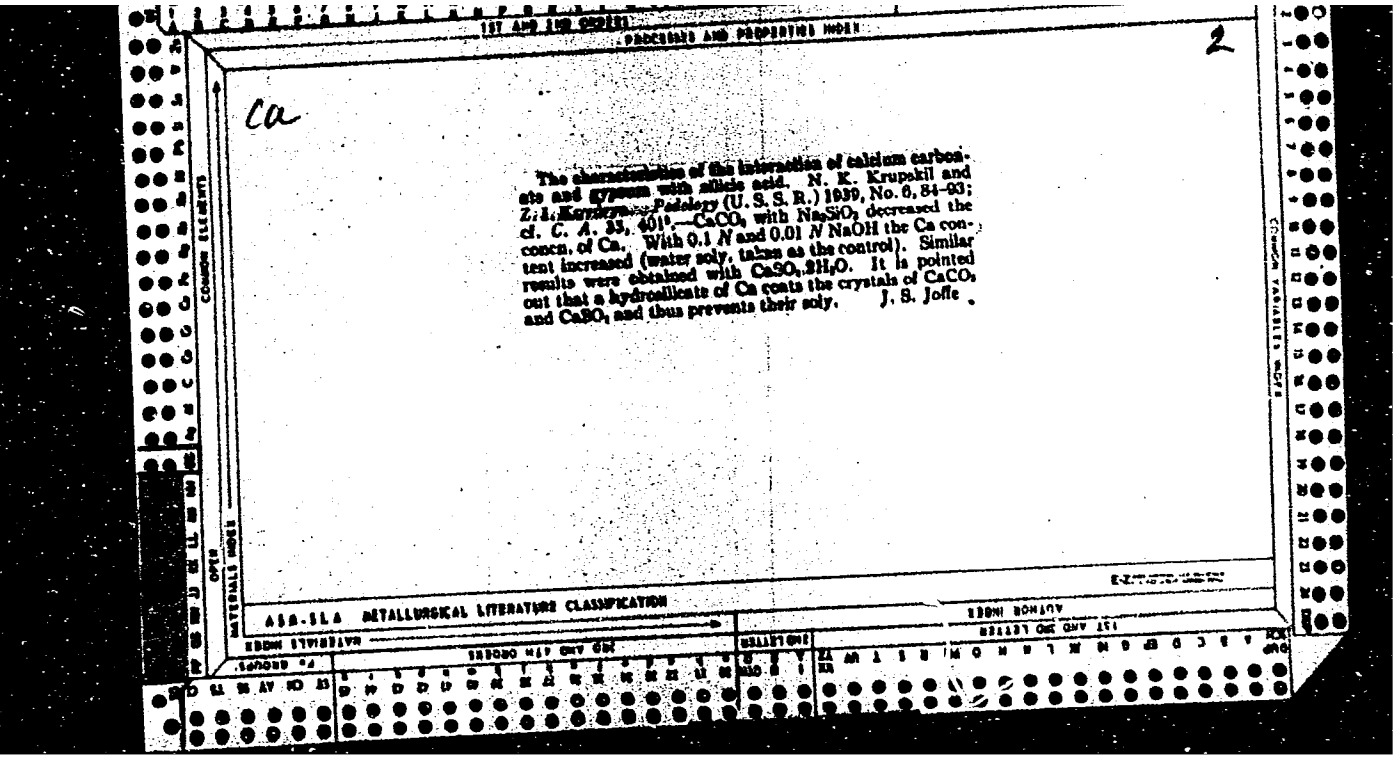

Ca

2

The characterization of the interaction of calcium carbonate and gypsum with silicic acid. N. K. Krupskii and Z. A. Kaydyra. *Pedology* (U. S. S. R.) 1939, No. 6, 84-93; cf. *C. A.* 33, 401⁹.—$CaCO_3$ with Na_2SiO_3 decreased the concn. of Ca. With 0.1 *N* and 0.01 *N* NaOH the Ca content increased (water soly. taken as the control). Similar results were obtained with $CaSO_4.2H_2O$. It is pointed out that a hydrosilicate of Ca coats the crystals of $CaCO_3$ and $CaSO_4$ and thus prevents their soly. J. S. Joffe

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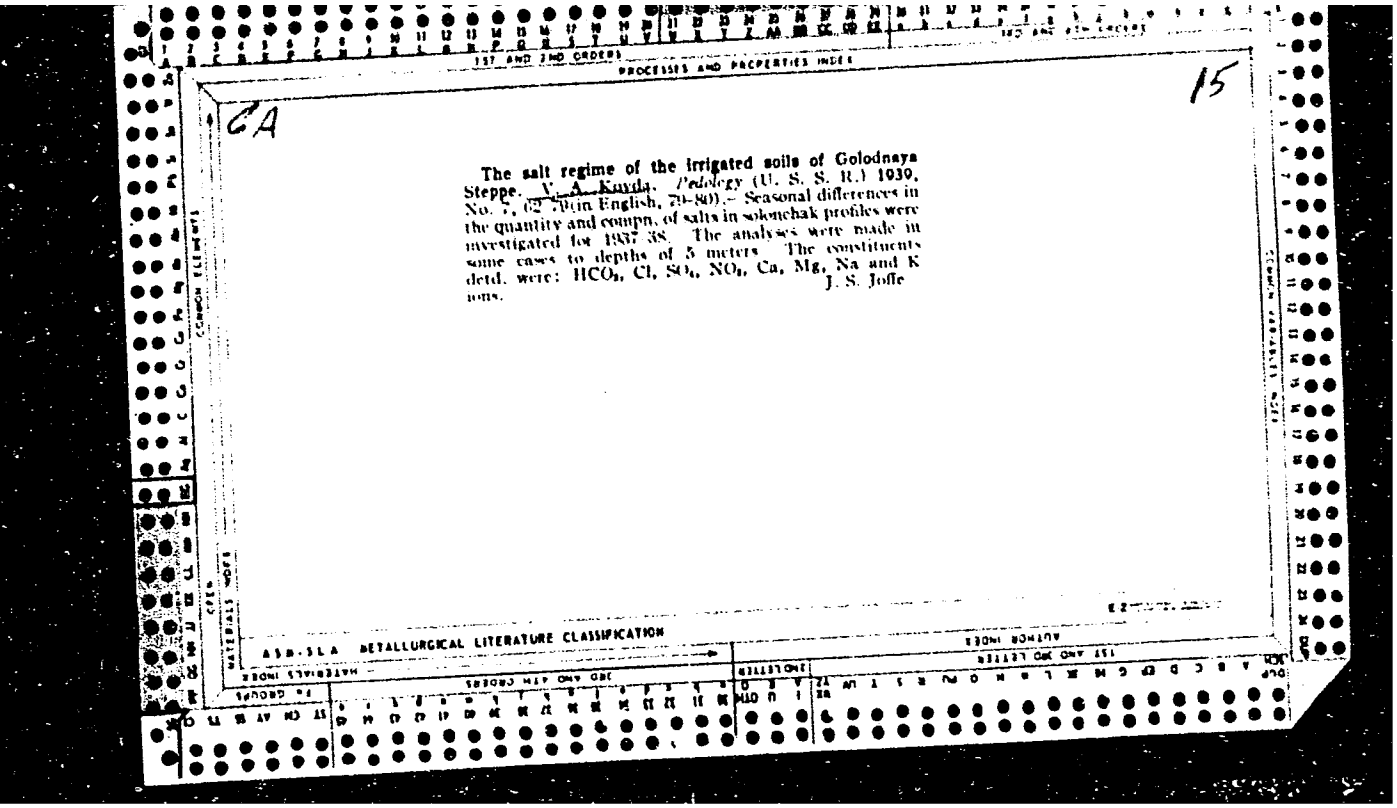

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CA

The salt regime of the irrigated soils of Golodnaya Steppe. V. A. Kovda. *Pedology* (U. S. S. R.) 1939, No. 7, 62-79 (in English, 79-80).—Seasonal differences in the quantity and compn. of salts in solonchak profiles were investigated for 1937-38. The analyses were made in some cases to depths of 5 meters. The constituents detd. were: HCO_3, Cl, SO_4, NO_3, Ca, Mg, Na and K ions.

J. S. Joffe

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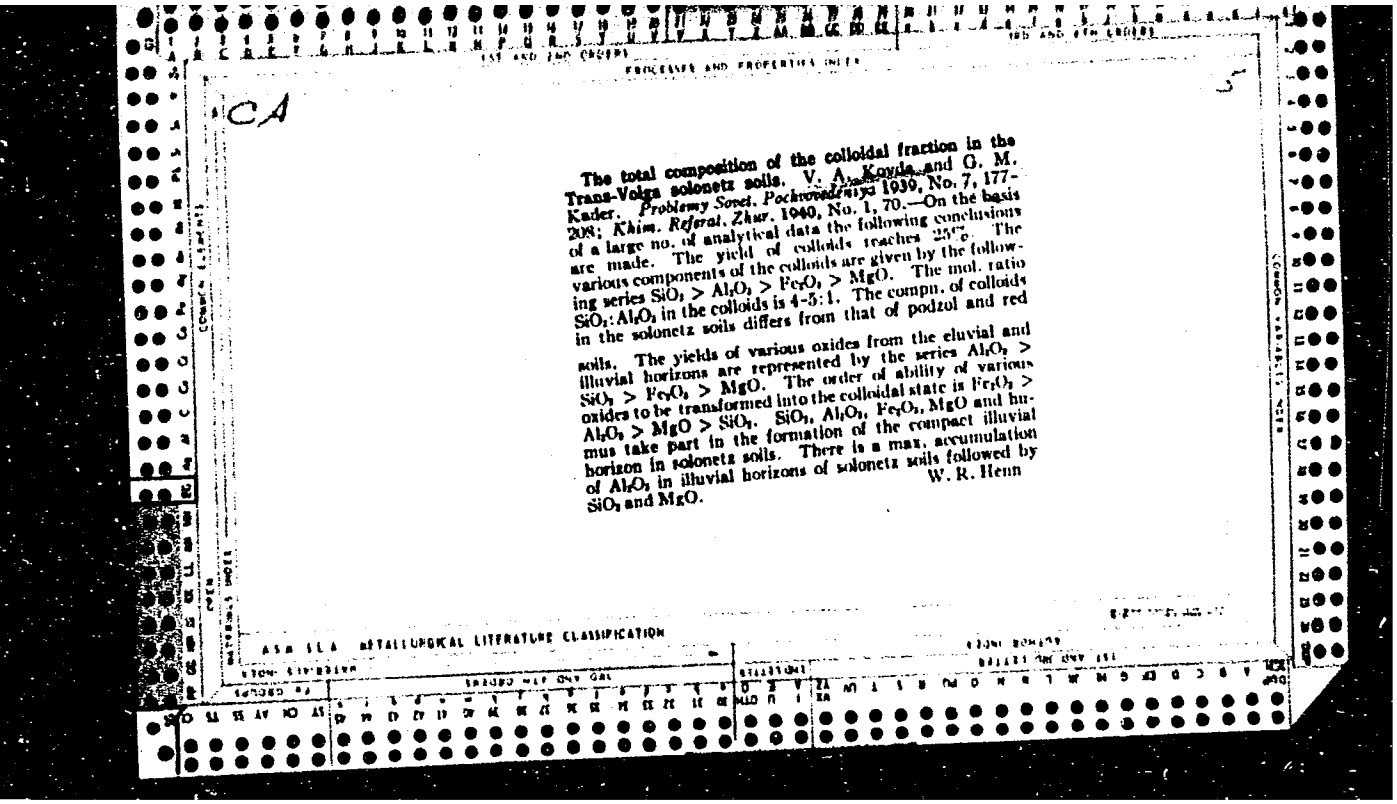

CA

The total composition of the colloidal fraction in the Trans-Volga solonetz soils. V. A. Kovda and G. M. Kader. *Problemy Sovet. Pochvovedeniya* 1939, No. 7, 177–208; *Khim. Referat. Zhur.* 1940, No. 1, 70.—On the basis of a large no. of analytical data the following conclusions are made. The yield of colloids reaches 25%. The various components of the colloids are given by the following series $SiO_2 > Al_2O_3 > Fe_2O_3 > MgO$. The mol. ratio $SiO_2:Al_2O_3$ in the colloids is 4–5:1. The compn. of colloids in the solonetz soils differs from that of podzol and red soils. The yields of various oxides from the eluvial and illuvial horizons are represented by the series $Al_2O_3 > SiO_2 > Fe_2O_3 > MgO$. The order of ability of various oxides to be transformed into the colloidal state is $Fe_2O_3 > Al_2O_3 > MgO > SiO_2$. SiO_2, Al_2O_3, Fe_2O_3, MgO and humus take part in the formation of the compact illuvial horizon in solonetz soils. There is a max. accumulation of Al_2O_3 in illuvial horizons of solonetz soils followed by SiO_2 and MgO.

W. R. Henn

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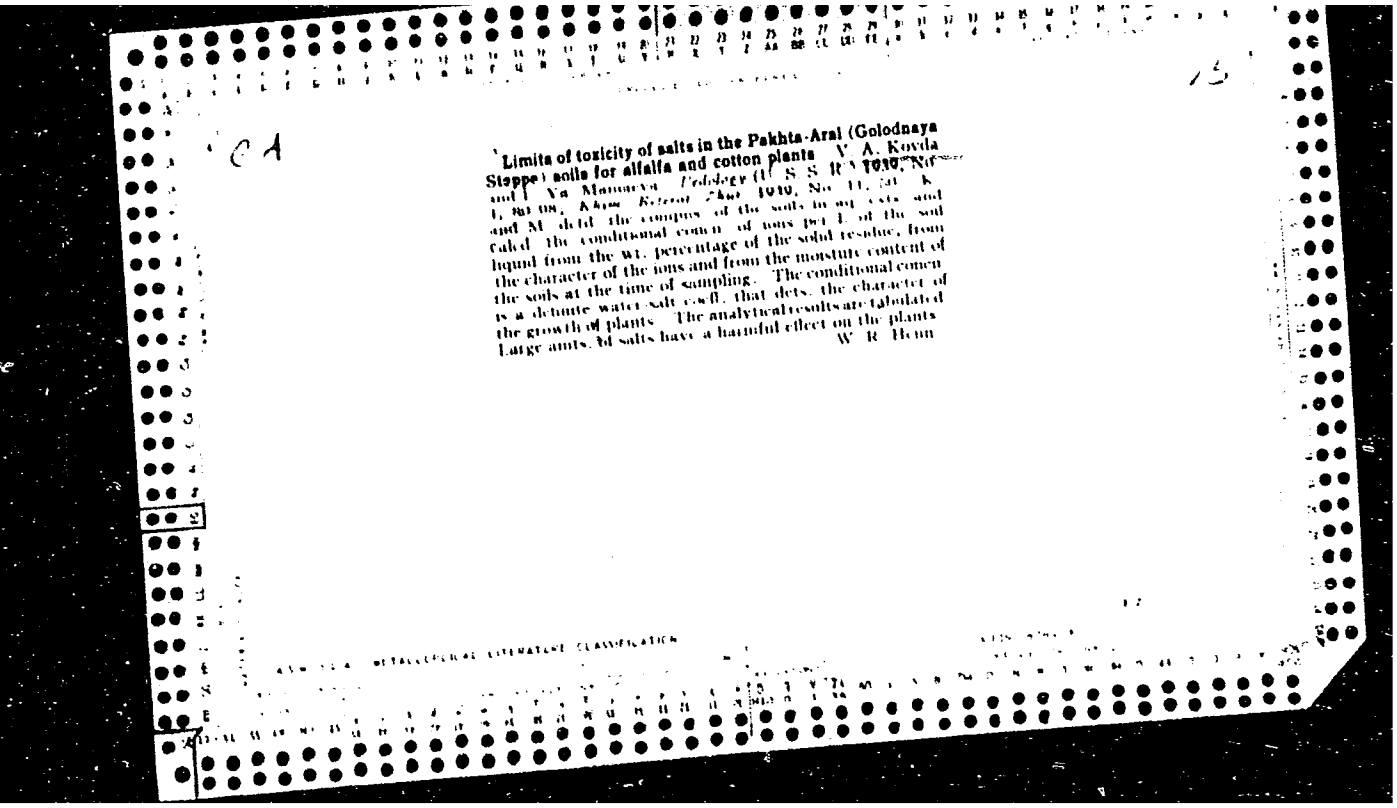

Limits of toxicity of salts in the Pakhta-Aral (Golodnaya Steppe) soils for alfalfa and cotton plants V. A. Kovda and [illegible] Va Mamaeva Pochvovedenie (U.S.S.R.) 1940, No. 11, [illegible] K. [illegible], Akad. Nauk Kazakh. SSR. and M. detd. the compns. of the soils in ext. vats and calcd. the conditional concn. of ions per l. of the soil liquid from the wt. percentage of the solid residue, from the character of the ions and from the moisture content of the soils at the time of sampling. The conditional concn. is a definite water-salt coeff. that dets. the character of the growth of plants. The analytical results are tabulated. Large amts. of salts have a harmful effect on the plants. W. R. Horn

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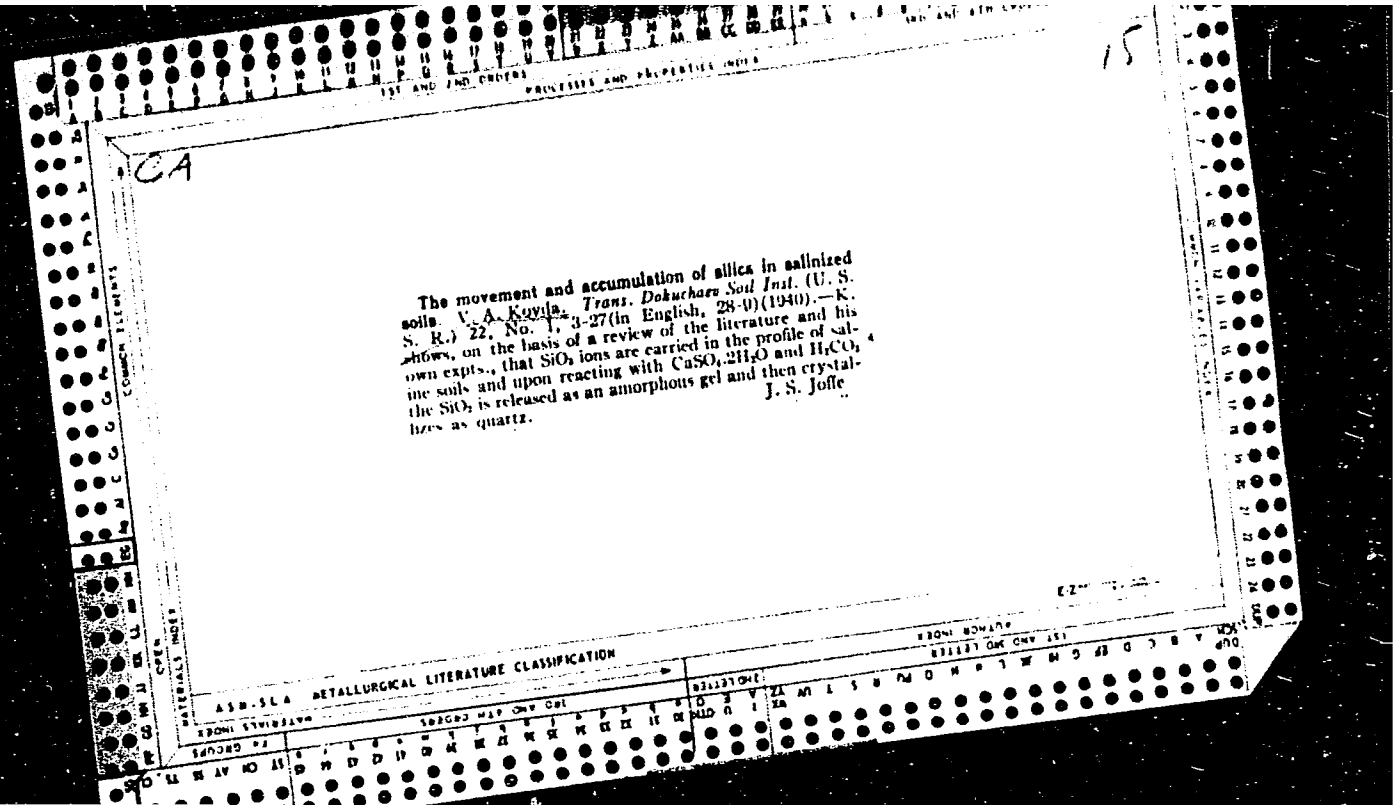

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The movement and accumulation of silica in sallnized soils. V. A. Kovda. *Trans. Dokuchaev Soil Inst.* (U. S. S. R.) 22, No. 1, 3-27(in English, 28-0)(1940).—K. shows, on the basis of a review of the literature and his own expts., that SiO_3 ions are carried in the profile of saline soils and upon reacting with $CaSO_4.2H_2O$ and H_2CO_3 the SiO_2 is released as an amorphous gel and then crystallizes as quartz.

J. S. Joffe

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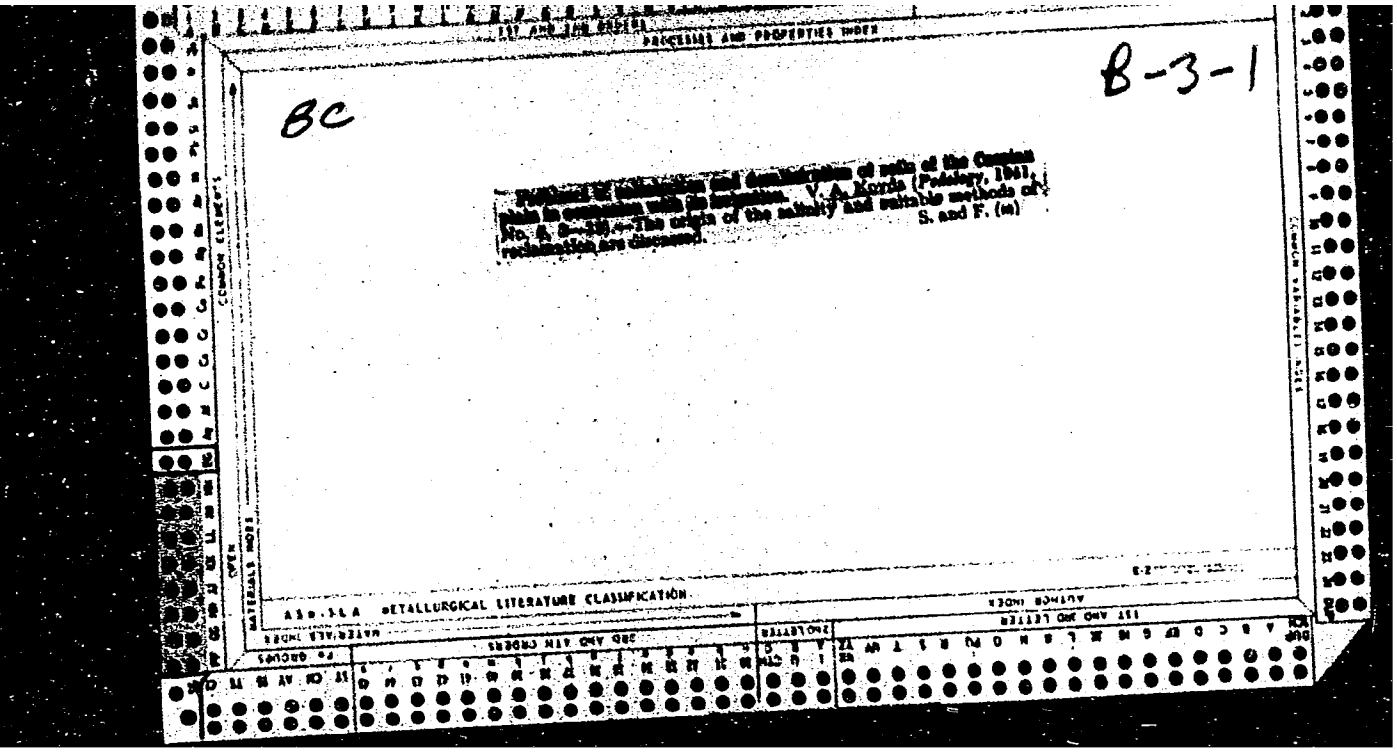

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KOVDA, V. A.

"Principal Results of the Works of the Dokuchayev Soil Institute and Uzbek Affiliate of the Academy of Sciences of the USSR in Goludnaya Steppe in 1941," Pochvev., No 7, 1942

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KOVDA, V. A.

"Soil Cover of Iran," Pochvoved., No 1, 1944

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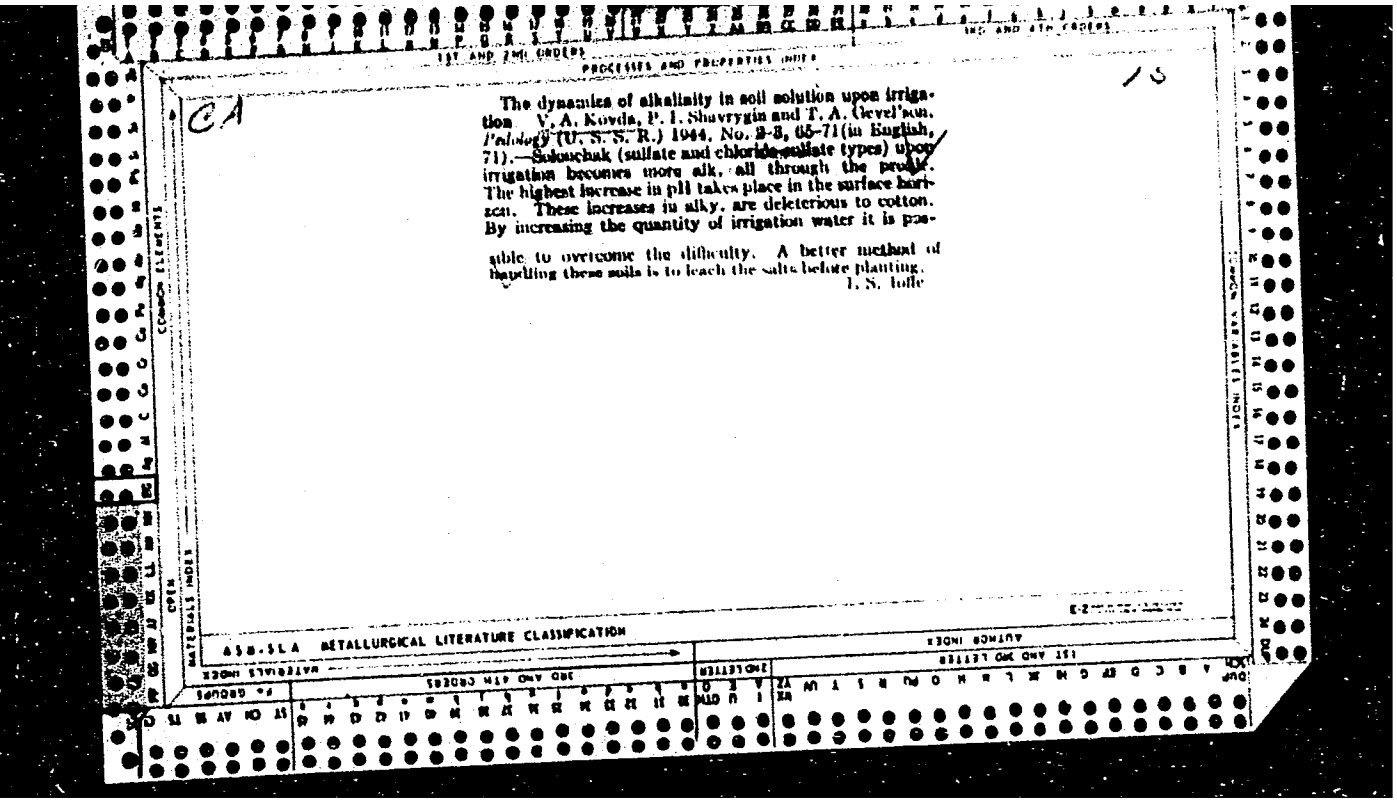

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The dynamics of alkalinity in soil solution upon irrigation. V. A. Kovda, P. I. Shavrygin and T. A. Gevel'son. *Pochvovedenie* (U. S. S. R.) 1944, No. 3-8, 65-71 (in English, 71).—Solonchak (sulfate and chloride-sulfate types) upon irrigation becomes more alk., all through the profile. The highest increase in pH takes place in the surface horizon. These increases in alky. are deleterious to cotton. By increasing the quantity of irrigation water it is possible to overcome the difficulty. A better method of handling these soils is to leach the salts before planting.

I. S. Ioffe

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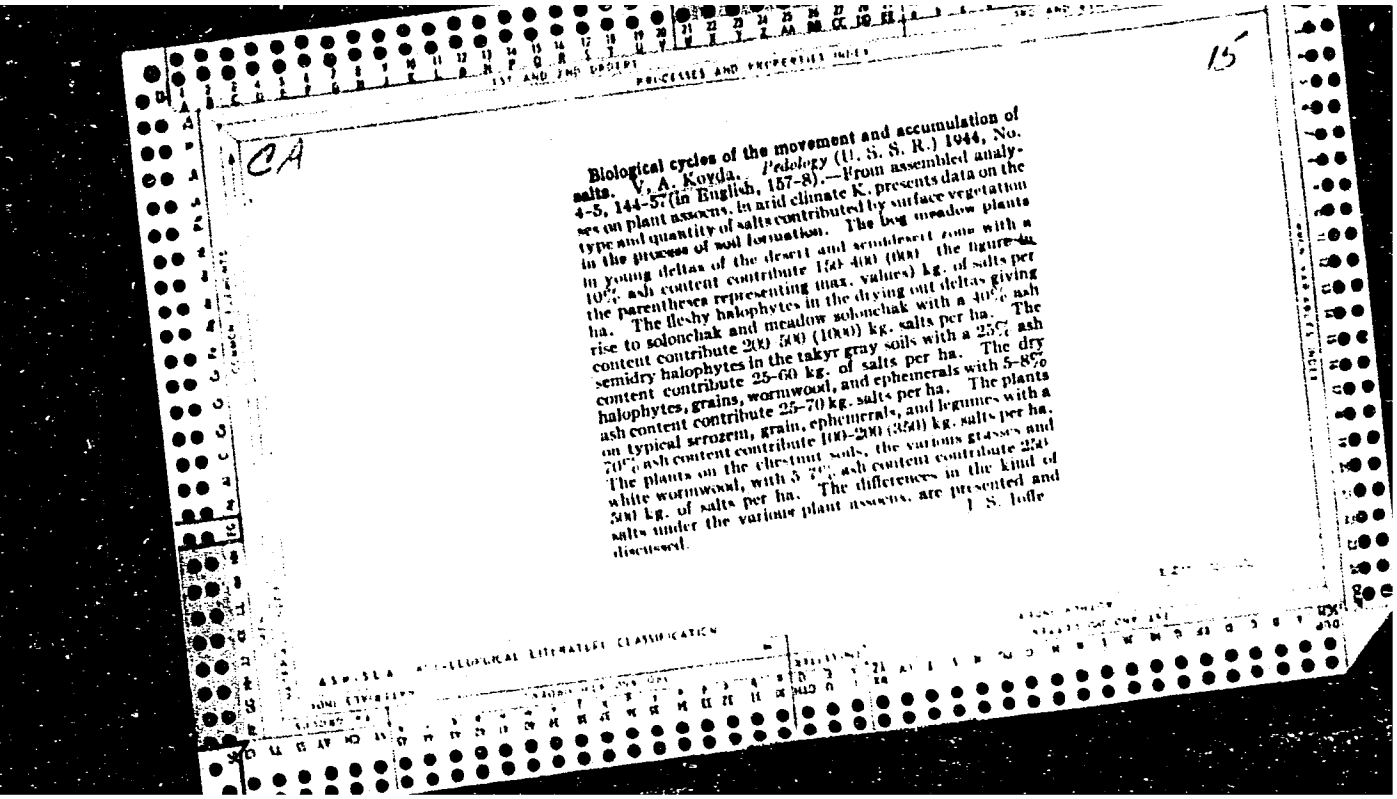

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Biological cycles of the movement and accumulation of salts. V. A. Kovda. *Pedology* (U. S. S. R.) 1944, No. 4-5, 144-57 (in English, 157-8).—From assembled analyses on plant assocns. in arid climate K. presents data on the type and quantity of salts contributed by surface vegetation in the process of soil formation. The hog meadow plants in young deltas of the desert and semidesert zone with a 10% ash content contribute 150-400 (800) the figure in the parentheses representing max. values) kg. of salts per ha. The fleshy halophytes in the drying out deltas giving rise to solonchak and meadow solonchak with a 40% ash content contribute 200-500 (1000) kg. salts per ha. The semidry halophytes in the takyr gray soils with a 25% ash content contribute 25–60 kg. of salts per ha. The dry halophytes, grains, wormwood, and ephemerals with 5–8% ash content contribute 25–70 kg. salts per ha. The plants on typical serozem, grain, ephemerals, and legumes with a 7[illegible]% ash content contribute 100–200 (350) kg. salts per ha. The plants on the chestnut soils, the various grasses and white wormwood, with 5 [illegible]% ash content contribute 250-300 kg. of salts per ha. The differences in the kind of salts under the various plant assocns. are presented and discussed.

J. S. Joffe

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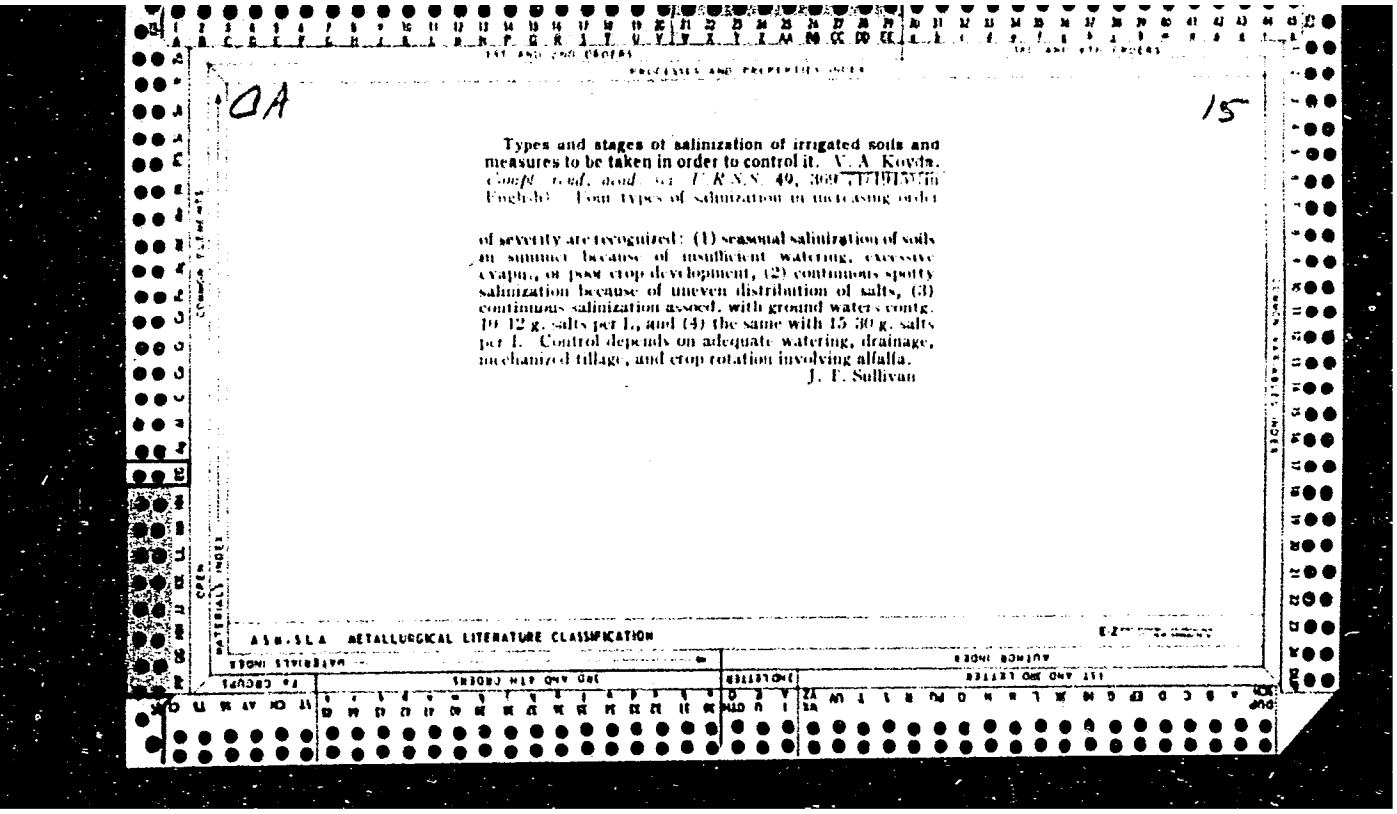

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Types and stages of salinization of irrigated soils and measures to be taken in order to control it. V. A. Kovda. *Compt. rend. acad. sci. U.R.S.S.* 49, 369–71(1945)(in English). Four types of salinization in increasing order of severity are recognized: (1) seasonal salinization of soils in summer because of insufficient watering, excessive evapn., or poor crop development, (2) continuous spotty salinization because of uneven distribution of salts, (3) continuous salinization assocd. with ground waters contg. 10–12 g. salts per l., and (4) the same with 15–30 g. salts per l. Control depends on adequate watering, drainage, mechanized tillage, and crop rotation involving alfalfa.
J. F. Sullivan

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KOVDA, V. A.

"Factors of Soil Formation," Pochvov. No 3, 1946.

V.V.Dokuchayev Soils Inst., AS USSR.

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KOVDA, V. A.

"Processes of Soil Formation in Deltas and Bottom Lands of the Rivers of the Continental Regions," Problems of Soil Science, Symposium 14, pp 101-123, 1946.

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KOVDA, VIKTOR ABRAMOVICH

KOVDA, VIKTOR ABRAMOVICH. Proizkhozhdenie i rezhim zasolennykh pochv. Moskva, 1946-47. 2 v. (Akademiia Nauk Soiuza SSR. Pochvennyi institut imeni V. V. Dokuchaeva.).
Summary in French.
"Spisok osnovnoi ispol'zovannoi literatury i materialov": v. 2, p. [358]-372.
CU DA MH NN DLC: Unclass.

SO: LC, Soviet Geography, Part I, 1951, Uncl.

"Genesis and Process of Accumulated Salts in Soils,"

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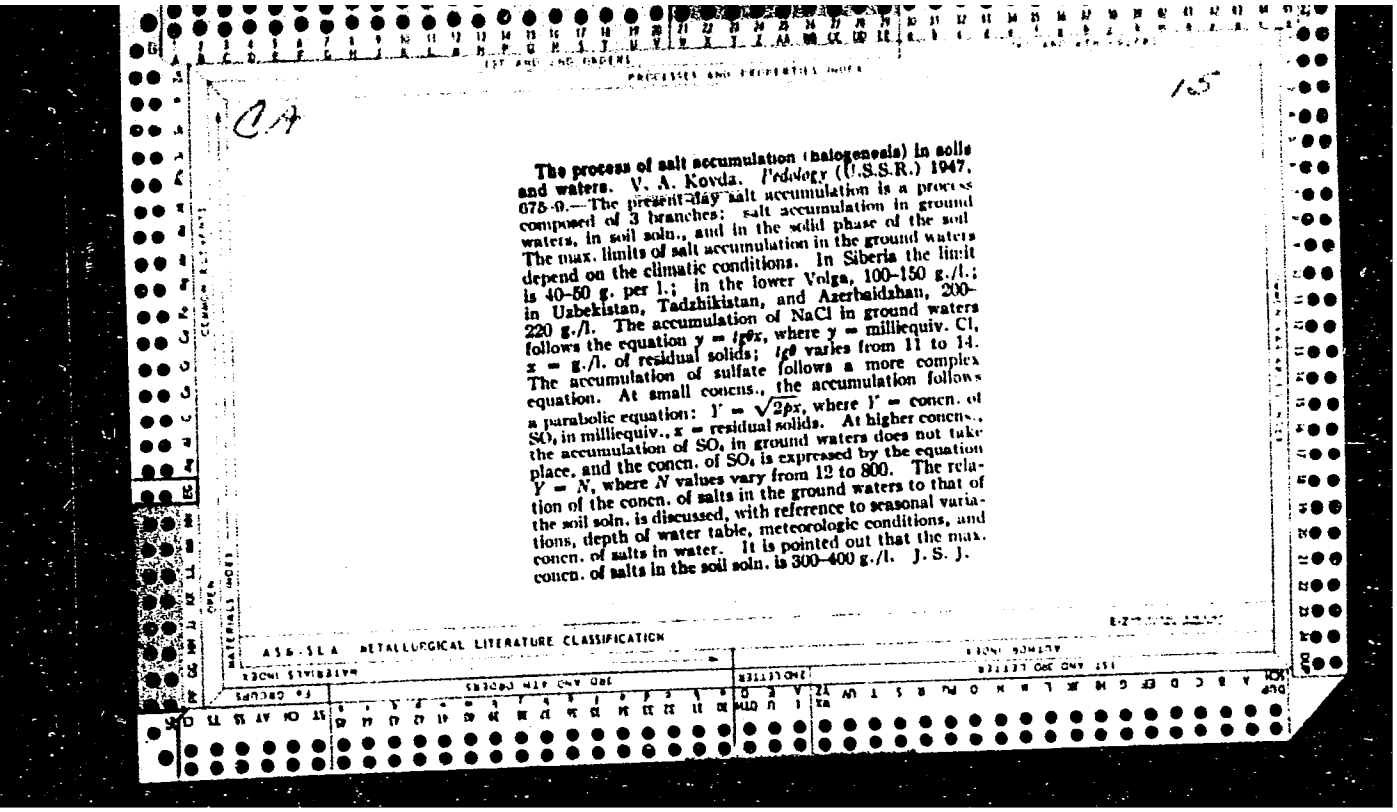

C-4

15

The process of salt accumulation (halogenesis) in soils and waters. V. A. Kovda. *Pedology* (U.S.S.R.) 1947, 675-9.—The present-day salt accumulation is a process composed of 3 branches: salt accumulation in ground waters, in soil soln., and in the solid phase of the soil. The max. limits of salt accumulation in the ground waters depend on the climatic conditions. In Siberia the limit is 40–50 g. per l.; in the lower Volga, 100–150 g./l.; in Uzbekistan, Tadzhikistan, and Azerbaidzhan, 200–220 g./l. The accumulation of NaCl in ground waters follows the equation $y = tg\theta x$, where y = millequiv. Cl, x = g./l. of residual solids; $tg\theta$ varies from 11 to 14. The accumulation of sulfate follows a more complex equation. At small concns., the accumulation follows a parabolic equation: $Y = \sqrt{2px}$, where Y = concn. of SO_4 in millequiv., x = residual solids. At higher concns., the accumulation of SO_4 in ground waters does not take place, and the concn. of SO_4 is expressed by the equation $Y = N$, where N values vary from 12 to 800. The relation of the concn. of salts in the ground waters to that of the soil soln. is discussed, with reference to seasonal variations, depth of water table, meteorologic conditions, and concn. of salts in water. It is pointed out that the max. concn. of salts in the soil soln. is 300–400 g./l. J. S. J.

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVDA, V. A.

"Stabilization of Soil Grounds by Calcination and Heating," Pochvoved., No 5, 1947

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVDA, V. A.

"Processes of Contemporary Salt Accumulation in the Soil," Works of the Soil Institute im. C.C.Dokuchayev, Vol. 25, pp 60-82, 1947.

U-2392, 22 Sep 52

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

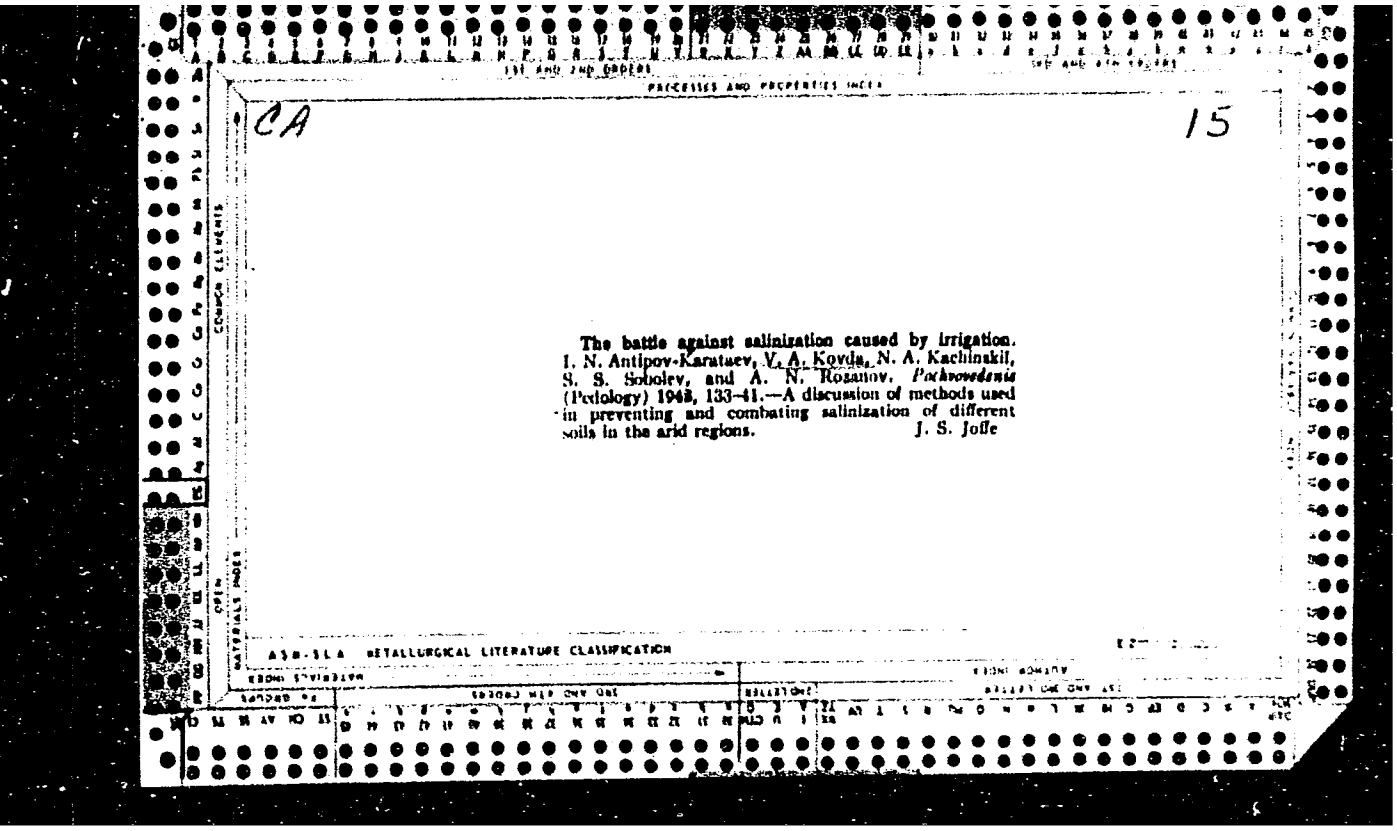
KOVDA, V.A.; KOMAROVICH, M.A.; LIKHTENSHTEYN, Ye.S.; SEGAL, B.I.; VAVILOV, S.I., akademik, redaktor; BRUYEVICH, N.G., akademik redaktor; BARDIN, I.P., akademik, redaktor; VOLGIN, V.P., akademik, redaktor; DEBORIN, A.M., akademik, redaktor; MINTS, I.I., akademik, redaktor; ORBELI, L.A., akademik, redaktor; PODGORNENSKAYA, TS.M., redaktor izdatel'stva; SHKOL'NIKOVA, S.A., tekhnicheskiy redaktor

[220th anniversary of the Academy of Sciences of the U.S.S.R.: in two volumes] 220 let Akademii nauk SSSR; v dvukh tomakh [Red. kollegiia S.I.Vavilov i dr. Sost. V.A.Kovda i dr.] Moskva. Vol. 1. 1948. 430 p. (MLRA 9:10)

1. Akademiya nauk SSSR. Yubileynaya sessiya, Moscow, 1945. (Academy of Sciences of the U.S.S.R.)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8



CA 15

The battle against salinization caused by irrigation. I. N. Antipov-Karataev, V. A. Kovda, N. A. Kachinskii, S. S. Sobolev, and A. N. Rozanov. *Pochvovedenie* (Pedology) 1948, 133–41.—A discussion of methods used in preventing and combating salinization of different soils in the arid regions. J. S. Joffe

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVDA, V. A.

Kovda, V. A. "A brief outline of the geology and topography of the Hungry Steppe", Trudy Pochv. in-ta im. Dokuchayeva, Vol. XXIX, 1948, p. 9-17, - Bibliog: 5 items.

SO: U-2888, 12 Feb. 53, (Letopis' Zhurnal 'nykh Statey, No. 2, 1949).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

KOVDA, V. A.

Kovda, V. A. "Ground water of the Hungry Steppe", Trudy Pochv. in-ta im. Dokuchayeva, Vol. XXIX, 1948, p. 43-74, - Bibliog: 19 items.

SO: U-2888, 12 Feb. 53, (Letopis' Zhurnal 'nykh Statey, No. 2, 1949).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8

24115 KOVDA, V. A. Idei B. B. Polynova v uchenii o zasolennykh pochvakh. (Doklad na zasedanii Uchen. Soveta Pochv. IN-TA Akad. Nauk SSSR, posvyashch. Chestvovaniyu B. B. Polynova). Problemy sov. pochvovedeniya, SB. 15, 1949, S. 7-17.

SO: Letopis, No. 32, 1949.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825620019-8"