RYZHKOV, S.V., kand.tekhn.nauk

Cylindrical probe for measuring low speeds of ships. Sudostroenie 29 no.7:60-61 Jl '63. (MIRA 16:9)
(Ships--Speed)

RYZHKOV, S.V.; GORBATSEVICH, A.B.

Electric defibrillation in sudden cardiac arrest in surgical patients. Vest.khir. 84 no.1:51-56 Ja '60. (MIRA 13:10)
(HEART FAILURE)

ACC NR: AT7002850 (N) SOURCE CODE: UR/3239/66/000/003/0025/0029

AUTHOR: Ryzhkov, S. V.

ORG: none

TITLE: Calculation of marine-boiler bisectional steam superheaters with a spray-type desuperheater

SOURCE: Nikolayev. Korablestroitel'nyy institut. Sudostroyeniye i morskiye sooruzheniya, no. 3, 1966. Sudovyye energeticheskiye ustanovki (Ship power equipment), 25-29

TOPIC TAGS: steam boiler, steam superheater, heat transfer coefficient, heat absorption, ~~marine equipment~~ ship component, thermodynamic calculation

ABSTRACT: A method for the heat calculation of two-stage convection superheaters with interstage spray-type desuperheaters for high-parameter marine boilers is described. During steady operation, when the temperature and volume of gases before the superheater remain stable, the heat absorption of the superheater depends on the volume of steam passing through it. A decrease in the volume of steam lowers the heat absorption and increases the temperature of the steam. An analysis shows that changes in heat absorption depend on the correlation between

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APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446520016-2"

ACC NR: AT7002850

the water equivalents of combustion products and superheated steam, the magnitude of the heat-transfer coefficient and heated surface, and also upon the characteristics of the flow of gases and steam. A method of calculating the temperature and enthalpy of the combustion products beyond the first stage of the superheater, from which all other necessary values can be determined, is described. To simplify calculations, the correction factors necessary for direct flow and counter flow are plotted graphically and can be used when the volume of water sprayed into the desuperheater does not exceed 10% of the steam capacity of the boiler.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 001

Card 2/2

RYZHKOV, S.V.

Use of radioactive gold in the treatment of malignant tumors; survey of the literature. Vest. khir. 84 no. 2:129-133 F '60. (MIRA 14:1)

(CANCER) (GOLD—ISOTOPES)

35750
S/124/62/000/003/027/052
D237/D302

10.3000

AUTHOR: Ryzhkov, S.V.

TITLE: Experimental method of determining heat transfer by radiation and conduction in the case of a cylinder in air stream

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 3, 1962, 94, abstract 3B591 (Tr. Nikolayevskogo korablestroit, in-ta, 1961, no. 22, 61 - 63)

TEXT: It is suggested that in determining the radiant and conductive part of the streamlining flow, initial experiments are performed under the conditions of free convection. As radiant and conductive flows are independent of the character of the motion, such experiments permit determination of the correction for radiation and conduction also in the case of forced convection. Experiments on the transverse flow about a cylinder in an aerodynamic tube are used as an example. Diameter of the cylinder was 22 mm, and the law of heat transfer was obtained in the form: $N = 0.231\ R^{0.62}$. A com-

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Experimental method of determining ...

parison with the results of M.A. Mikheyev is made and the discrepancy in the values of the coefficients is explained by different turbulence conditions. [Abstractor's note: Complete translation].

Card 2/2

RYZHKOV, S. V.; ROSTOV, M. L.; ROMANOV, V. N.; YAKIMENKO, V. G.

Use of radioactive gold (Au^{198}) in radical operations for stomach cancer. Vop. onk. 8 no.2:51-56 '62. (MIRA 15:2)

1. Iz kliniki fakul'tetskoy khirurgii No. 1 (nach. - prof. V. M. Sitenko) Voyenno-meditsinskoy ordena Lenina akademii im. S. M. Kirova.

(STOMACH--CANCER) (GOLD--ISOTOPES)

ALEKSANDROV,N.N.; RYZHKOV, S.V.; SUKOVATYKH, L.S.; CHALISOV, I.A.; CHESNOKOV, G.B.;KISELEVA, Ye.I.; BUBNOVA, R.N.; RAMZEN-YEVDOKIMOV, I.G.; SHAMOV, Vladimir Nikolayevich, prof., zas. deyatel' nauki, red.; VOLKOV,L.F., red.; KOSTAKOVA,M.S., tekhn.red.; LEBEDEVA,Z.V., tekhn.red.

[Wounds of the skull and brain in acute radiation sickness]Raneniia cherepa i golovnogo mozga pri ostroi luchevoi bolezni. Pod red. V.N. Shamova. Leningrad, Medgiz, 1962. 174 p. (MIRA 15:3)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Shamov).
(RADIATION SICKNESS) (BRAIN—WOUNDS AND INJURIES)
(SKULL—WOUNDS AND INJURIES)

ZERNOV, A.I.; LISITSIN M.S. [deceased]; POPOV, V.I., prokhodtsev, I.I.; RESHETOV, A.I.; RYZHKOV, S.V.; SITENKO, V.M.; CHISTOVICH, A.N.

Results in the treatment of cancer patients with semicarbazide and cadmium. Vop. onk. 9 no.6:114-116 '63. (MIRA 17:8)

1. Iz Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova (nachal'nik - prof. P.P. Goncharov). Adres avtorov: Leningrad, K-9, ul. Lebedeva, 6, Voyenno-meditsinskaya ordena Lenina akademiya imeni Kirova.

RYZHKOV, S.V.; ROSTOV, M.L.

External radiation during the application of Au-198 in clinical surgery. Med.rad. no.11:32-35 '61. (MIRA 14:11)

1. Iz kliniki fakul'tetskoy khirurgii No.1 (nach. - prof. V.M. Sitenko) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.

(COLD--ISOTOPES) (RADIATION PROTECTION)

PHASE I BOOK EXPLOITATION SOV/6055

Aleksandrov, N. N., S. V. Ryzhkov, L. S. Sukovatykh, I. A. Chalisov, G. B. Chesnokov, Ye. I. Kiseleva, R. N. Bubnova, I. G. Ramzen-Yevdokimov

Raneniya cherepa i golovnogo mozga pri ostroy luchevoy bolezni (Cranial and Cerebral Injuries in Acute Radiation Sickness). Leningrad, Medgiz, 1962. 176 p. 3500 copies printed.

Ed. (Title page): V. N. Shamov, Acting Member of the Academy of Medical Sciences USSR, Honored Scientist, Professor; Eds.: Shamov, Vladimir Nikolayevich, Professor, and L. F. Volkov; Tech. Eds.: M. S. Kostakova and Z. V. Lebedeva.

PURPOSE: This book is intended for surgeons in general and neurosurgeons in particular, and may also be useful to physicians who might have to treat victims of atomic explosions.

COVERAGE: The book describes the results of numerous animal experiments investigating important peculiarities of the

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clinical course, therapy, and outcome of infected cranial and cerebral injuries in subjects affected by penetrating radiation. Special features of the clinical phenomena and diagnostics of cerebral injuries and complications due to intracranial infection in acute radiation sickness are dealt with, and results of surgical and several kinds of antibiotic therapy are given. Basic methods for the use of antibiotics are presented. In the experiments, cranial and cerebral injuries were infected by cultures of suppurative infection-producing agents, bone splinters were left in the wounds, and primary surgical treatment was delayed for three days after irradiation and injury. Even under these conditions, satisfactory therapeutic results were obtained. The experiments indicate the desirability of extending the indications for the use of primary blind sutures [pervichnykh glukhikh shvov]. This investigation of cranial and cerebral injuries combined with radiation effects was conducted at the Academy of Military Medicine of the Order of Lenin imeni S. M. Kirov by a collective of authors under the leadership of Doctor of Medical Sciences N. N. Aleksandrov. There are 850 references: 579 Soviet, 219 English, 29 German, 20 French, 1 Italian, I Swedish, and 1 Hungarian.

TABLE OF CONTENTS:

S

USSR / Human and Animal Morphology (Normal and Pathological).
Circulatory System. Blood Vessels.

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 2953

Author : Ryzhkov, T. F.
Inst : Rostov-on-Don Medical Institute
Title : Intra-Organic Distribution and Caliber of Portal Vein Branches of the Liver in Man

Orig Pub : Tr. Otchetn. Nauchn. konferentsii (Rostovsk.-n/D. med. in-t) za 1956 g., Rostov-na-Donu, 1957, 147-149

Abstract : On 50 specimens of the liver (L) of humans of various ages and sexes it was demonstrated that the right and left branches of the portal vein of the liver (PVL) enter their respective lobes close to the inferior surface of L. The number of secondary branches of PVL in the right lobe of L is 4-6, in the left lobe 3-4; they are also distributed closer to the inferior surface

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RYZHKOV, T. F.

Early deep interrow subsoiling in controlling black scurf of potatoes. Zashch. rast. ot vred. i bol. 6 no.6:31-32 Je '61. (MIRA 16:4)

1. Vsesoyuznyy institut rasteniyevodstva, Leningrad.

(Potatoes—Diseases and pests) (Rhizoctonia)

RYZHKOV, T.F., kand.med.nauk

Use of a grid system in stereoroentgenography. Vrach.delo supplement '57:59-60 (MIRA 11:3)

1. Kafedra normal'noy anatomii (zav.-prof. P.A.Sokolov) Rostovskogo meditsinskogo instituta.
(RADIOGRAPHY)

RYZHKOV, T.F., kandidat meditsinskikh nauk

Syringe with valve plunger for continuous action. Khirurgiia no.9: 76-77 S '54. (MLRA 7:12)

1. Iz kafedry normal'noy anatomii Rostovskogo-na-Donu meditsinskogo instituta (zav. doktor meditsinskikh nauk prof. P.A.Sokolov)

(ANESTHESIA, LOCAL, apparatus and instruments, syringe for continuous action)
(SYRINGES, continuous action syringe in local anesth.)

RYZHKOV, T.G.; VOLKOV, A.N. (Sochi)

Methodology for an experimental study of the effect of Matsesta public baths (hydrogen sulfide) on experimental cholesterol atherosclerosis. Vrach.delo supplement '57:94 (MIRA 11:3)
(HYDROGEN SULFIDE--PHYSIOLOGICAL EFFECT)
(ARTERIOSCLEROSIS)

RYZHKOV, Yuriy Dmitriyevich

(gialuronidaza) B. Proteus vulgaris

Dissertation for candidate of a Medical Science degree. Chair of Biological Chemistry (head, Prof. N.N. Ivanovskiy), Saratov Medical Institute, 1951

RYZHKOV, V.V.; VOIKOV, A.N.

Effect of Matsesta hydrogen sulfide baths on cholesteremia and the development of experimental cholesterol atherosclerosis in rabbits. Vop.kur.fizioter. i lech. fiz. kul't. 23 no.1:3-7 '58. (MIRA 11:3)

1. Iz Sochinskogo sanatoriya imeni K.Ye.Voroshilova (nach. Ye.D. Bulashevich, nauchnyy rukovoditel' - doktor meditsinskikh nauk K.Yu.Turgel')

(CHOLESTEROL)
(MINERAL WATERS, SULFUROUS--PHYSIOLOGICAL EFFECT)

RYZHKOV, V..

Advantages of the consolidation of automotive transportation units of construction enterprises. Avt. transp. 37 no.2:32 F '59.
(MIRA 13:1)

(Novosibirsk Province--Transportation, Automotive)

RYZHKOV, V.L.

Effect of some metabolites on somatic mutations in Erysimum cheiranthoides L. Dokl. AN SSSR 152 no.1:205-207 S '63. (MIRA 16:8)

1. Institut mikrobiologii AN SSSR. Chlen-korrespondent AN SSSR. (Plants--Metabolism) (Erysimum)

RYZHKOV, Vitaliy L.

"The physiology of viruses as a basis for the chemotherapy of virus diseases" (II)
Report to be submitted for the 2nd Intl. Symposium of Chemotherapy, Naples Italy 14-17 Sep 1961

RYZHKOV, V. L., Head, Section of Plant Viruses, Institute of Microbiology, Academy of Sciences USSR, Moscow.

43406

S/051/62/013/005/012/017
E202/E192

AUTHORS: Ryzhkov, V.A., and Fedyushin, B.T.

TITLE: Temperature dependence of the electroluminescence of the ZnS-Cu, Cl single crystals

PERIODICAL: Optika i spektroskopiya, v.13, no.5, 1962, 721-723

TEXT: Using single crystals of ZnS-Cu, Cl obtained by the gaseous phase Zn + H_2S reaction, the authors studied the relation between the brightness of the electroluminescence and temperature. The latter was controlled thermostatically over 110 - 375 °K to within ± 1 °K. The direction of the exciting electrical field was coaxial with the axis of the main growth of the crystal. The average value of electroluminescence at various fixed voltages ranging from 1 to 3.2 kV, and 300 c.p.s. were plotted against the above temperature range. The brightness was also plotted against frequency ranging up to 2 kc/s, for a constant 2.4 kV, as three isotherms of 292, 215 and 113 °K. Observations regarding the relations between the phase of the main brightness peak and temperature and frequency showed that the phase changes only

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very weakly with temperature but increases with the increasing frequency. These results confirmed the work of A.N. Georgobianin and M.V. Fok (Opt. i spektr., 9, 1960, 775) showing that freeing of the trapped polarisation electrons is due to the field and not due to the thermal mechanism.
There are 4 figures.

SUBMITTED: October 9, 1961

SOV/26-59-3-7/47

17(4)

AUTHOR: Ryzhkov, V.I. Corresponding Member of the USSR AS; (Moscow)

TITLE: The Study of the Culture of Tissues

PERIODICAL: Priroda, 1959, Nr 3, pp 35 - 43 (USSR)

ABSTRACT: In recent years an important progress has been noted in the cultivation of tissues thanks to the new methods of treating cells for tissue cultures used by Dülbeck in 1952. At present, methods have been developed for the mass cultivation of tissues. The cultivation of tissue has assumed industrial significance. A number of firms are engaged in cultivating and selecting all kinds of tissues for the needs of scientific laboratories and plants making anti-virus vaccine. The author points out that successes have been obtained recently in the cultivation of tissues of plants. It is possible to grow not only roots isolated from plants, but

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The Study of the Culture of Tissues

also small pieces of swollen tissues and of various other vegetable tissues. He then deals with the genetics of tissues, stating that the entire process of embryonic development is one of more and more differentiation and an ever increasing division of work among the various tissues. The specialization of the tissues is connected with the loss of some functions by their cell elements inherent to the non-differentiated embryonic cells. This is especially clearly expressed in the fact that many cell elements slacken in their capability of multiplication or loose it entirely. The author further deals with the tissues of tumors and the change of the hereditary properties of the cell. The article also treats chromosomes in tissue cultures, their longitudinal division, increase, the number of chromosomes in man, etc. The author reports on the pharmacology of tissue cultures and the culti-

The Study of the Culture of Tissues

vation of viruses in tissues, the cytotoxic effect produced by the virus and the experiments with the help of which the concentration of the virus in a given liquid or tissue can be established (determining the titre of a virus) Speaking of latent viruses, the author states that research in this field is only beginning. The real part they play in the life of man and animal will probably be better known in the next few years. In conclusion the author deals with the problem concerning the extent to which individual cell elements having obtained independence, maintain the capability of uniting. The lower organisms possess this property, but the cells of the higher multicellulars retain it to a very poor extent. There are 4 photographs and 1 Soviet reference.

ASSOCIATION: Institut mikrobiologii Akademii nauk SSSR (Institute of Microbiology of the USSR Academy of Sciences)

RYZHKOV, V.L.

Cytoplasmic differentiation in the formation of species. Zhur. ob.biol. 20 no.1:16-22 Ja-F '59. (MIRA 12:2)
(PROTOPLASM) (HEREDITY)

RYZHKOV, V.L.

Studying tissue culture. Priroda 48 no.3:35-43 Mr '59.
(MIRA 12:3)

1. Institut mikrobiologii AN SSSR, Moskva. Chlen-korrespondent AN SSSR.
(TISSUE CULTURE)

RYZHKOV, V.L.

E22

USSR/Virology. Plant Viruses.

Abs Jour: Ref. Zhur.-Biol., No 7, 1957, 28711

Author : Ryzhkov, V.L.
Inst : Not given.
Title : Method of Metabolites and Antimetabolites in the Study of Virus Reproduction in Tobacco Mosaic Virus (TMV).

Orig Pub: Metod metabolitov i antimetabolitov v izuchenii razmnozheniya virusa mozaichnoy bolezni tabaka (VTM). Izv. AN SSSR, ser. biol., 1957, No 1, 41-54.

Abstract: A review of experimental data lately obtained by the author and collaborators, as well as those obtained by investigators abroad. It was shown that TMV reproduction depends on various metabolites. Sucrose, glucose, and a number of organic acids stimulate virus

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USSR/Virology. Plant Viruses.

Abs Jour: Ref. Zhur.-Biol., No 7, 1957, 28711.

and thiourea -- inhibitors of polyphenoloxidase activity -- stimulated TMV reproduction. Also, the stimulating effect of riboflavin was observed. 5-6-dimethylbenzimidazole, acrichin [sic! - acridin?], rivanol inhbited TMV reproduction. This effect was removed by riboflavin. The latter experiments show the significance of respiratory systems, dependent on flavones, for TMV reproduction. In exeriments with Be it was shown that the activity of phosphatase is necessary for TMV reproduction. Acridin preparations proved to be universal inhibitors of virus reproduction. In the author's opinion, a study of physiological conditions of virus reproduction should in the future open prospects of TMV cultivation on synthetic nutrient media. Bibl. 50 refs.

Card : 3/3

3

RYZHKOV V.I.

AUTHOR: Ginzburg, Z.L., Engineer, 128-58-4-15/18

TITLE: Scientific-Technical Session on Progressive Technology of Casting Molds (Nauchno-tekhnicheskaya sessiya po progressivnoy tekhnologii liteynoy formy)

PERIODICAL: Liteynoye Proizvodstvo, 1958, No. 4, pp 28-30 (USSR)

ABSTRACT: A conference on the technology of casting molds - organized by the NTOMAShPROM of the Khar'kov Oblast' - convened in Khar'kov on 14-16 November 1957. More than 200 delegates from plants, research institutes, vuzes and other organizations of the Khar'kov and other regions participated. Problems of earth-mold casting were discussed. A total of 24 reports were delivered on hardening and exothermic mixes and the mechanized processes in USSR and abroad. B.A. Noskov and V.I. Ryzhkov (KhPI) gave information on molding sand and clay available in the Khar'kov economic region. The following reports were also heard: V.V.Ryabova - on the use of carbon dioxide, at NKMZ, for chemical strengthening of molds, which has reduced the drying period and cut the consumption of generator gas, improved the quality of castings, and nearly

Scientific-Technical Session on Progressive Technology of Casting Molds

doubled the production of molds; N.Kh. Ivanov - on the use of the same quick-hardening mixes, with cold carbon dioxide, at the Slavyanskiy mashinostroitel'nyy zavod (Slavyansk Machinebuilding Plant); Engineer D.A. Lur'ye (Giprostanok) - on modern methods and an installation for production of carbon dioxide; Engineer Ye.P. Tolmachev of the Voroshilovgradskiy teplovozostroitel'nyy zavod (Voroshilovgrad Diesel-Locomotive Plant) - on experience with molding sand milled in a special vibration mill, which solves the problem of obtaining castings with a clean surface not only with shell molds, but also with conventional molding methods; A.Ya. Izmalkov - on the oil-less binder "P" used at the plant "Serp i Molot"; A.I. Veynik - on the theory of forced cooling of castings and the experience in this method at the Novo-Kramatorskiy i Minskiy stankostroitel'nyy zavodov (Novo-Kramatorsk and Minsk Machine Tool Plants) which developed this method in the production of large castings; I.V. Ryzhov - on the physico-chemical nature of sand crust (on castings) and the ways of eliminating this crust by producing a de-oxidizing atmosphere between the mold and the metal, casting in vacuum, or crystallization-preventive additions to water glass; P.G. Novikov (of TsNIITMASh) - on

Scientific-Technical Session on Progressive Technology of Casting Molds

results of the collective work of TsNIITMASh and NKMZ on technological problems of the production of large molds, and the new method of forced or controlled cooling of castings in the ground, as well as on the experiments with a system of universally applicable cast parts; B.K. Dymshin of the Khar'kovskiy turbinnyy zavod (Khar'kov Turbine Plant) and Engineer I.Ye. Gabey (NKMZ) - on exothermic mixes for heating the feeding heads of steel and cast iron castings; M.L. Turovskiy - on investigation of internal stresses at the Khar'kovskiy zavod transportnogo mashinostroyeniya (Khar'kov Plant of Transport Machines); V.S. Ladnov - on mechanized casting into shell molds by shot-strewing the mold boxes, being introduced at the same transport machine plant; K.I. Kostinenko - on the organization of boxless molding at the plant Rostsel'mash; N.A. Gerasimov of the Kremenchugskiy zavod dorozhnykh mashin (Kremenchug Road Machine Plant) - on casting parts in molds produced under pressure up to 100 kg/cm^2, without mold boxes, which nearly completely eliminates the necessity of machining the castings and greatly reduces the consumption of foundry materials and metal; A.M. Petrichenko of the Khar'kovskiy

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avtodorozhnyy institut (Khar'kov Auto-Road Institute) - on the experience of the Chinese Democratic Republic with semi-permanent molds for thin-wall castings; Ye.A. Sukhodol'skaya of the Khar'kovskiy politekhnicheskiy institut (Khar'kov Polytechnical Institute) - on some peculiarities of foundry technology in China; V.D. Bezuglov of the Khar'kovskiy zavod zubovrachebnykh materialov (Khar'kov Plant of Dentistry Materials) - on self-hardening plastics "AST" which is readily machineable, well suited for decorative correction of surface faults on metal castings, and also for making light core boxes, press-molds for wax patterns, etc. The conference recommended that the Khar'kov Sovnarkhoz organize the exploitation of molding sands and clays in the region and a centralized production of carbon dioxide. The conference pointed out the necessity of extensive use of quick-drying mold mixes, forced cooling of castings, exothermic mixes for heating the feeding heads, and the necessity to introduce the shell-mold and the chill-casting methods. The method of making molds

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under high pressure was recommended for use. The importance of the Khar'kov Dentistry Materials Plant and KhTZ work with self-hardening plastics for foundry use was emphasized.

AVAILABLE: Library of Congress

1. Castings-Scientific reports

RYZHKOV, V. I.

Ethylcellulose as a base for airplane lacquers. V. I. Ryzhkov. *Trudy Nauch.-Issledovatel. Inst. Aviatsion. Material. Informatsion Sbornik* No. 6, 39-55(1935).—Linen, specially prepd. for airplane use, was treated with a lacquer contg. ethylcellulose 8%, cresol and Ph_3PO 0.32% each, and a solvent (C_6H_6 40, C_7H_8 40, EtOH 20 parts) at 30°. The resulting films cannot stand up against benzene or water and are not suited for airplane use.

B. Z. Kamich

RYZHKOV, V.A.; FEDYUSHIN, B.T.

Temperature dependence of the electroluminescence of ZnS-Cu, Cl single crystals. Opt.i spektr. 13 no.5:721-723 N '62. (MIRA 15:12)

(Luminescent substances)

RYZHKOV, V.I.; LOYDINA, G.I.

Interaction of the nucleic acid of the virus of tobacco mosaic disease with plastids and cell walls of plants. Vop. virus. 7 no. 1:108-110 Ja-F '61. (MIRA 14:4)

1. Institut mikrobiologii AN SSSR, Moskva.
(NUCLEIC ACID) (VIRUSES DISEASES OF PLANTS)

RYZHKOV, V. L.

Ryzhkov, V. L. Mutations and Diseases of the Chloroplast, State Publishing House of Sovkhoz and Kolkhoz Literature, Moscow, 1933, 192 pp. 464 R99

So: SIRA SI - 90-53, 15 Dec., 1953

RYZHKOV, V. L.

KARACHEVSKIY, I. K. /Co-author/ See: RYZHKOV, V. L. "Experiments on the Artificial Transmission of Virus Diseases of Tomato," 1934.

SO: SIRA, SI 90-53, 15 December 1953

RYZHKOV, V. L.

Ryzhkov, V. L., Ed. Virus Diseases of Plants in Crimea and in the Ukraine, State Publishing House of Crimea ASSR, Simferpol, 1934, 124 pp. 464.32 R99V

So: SIRA SI - 90-53, 15 Dec., 1953

RYZHKOV, V. L.

Ryzhkov, V. L., and Karachevskiy, I. K. "Experiments on the Artificial Transmission of Virus Diseases of Tomato," in Virus Diseases of Plants in Crimea and in the Ukraine, State Publishing House of Crimea ASSR, Simferopol, 1934, pp. 7-30. 464.32 R99V

So: SIRA SI - 90-53, 15 Dec., 1953

RYZHKOV, V. L.

Ryzhkov, V. L. "Filtrable Viruses as a Cause of Virescence of Flowers," in Virus Diseases of Plants in Crimea and in the Ukraine, State Publishing House of Crimea ASSR, Simferopol, 1934, pp. 59-73. 464.32 R99V

So: SIRA - 90-53, 15 Dec., 1953

RYZHKOV, V. L.

Ryzhkov, V. L., and Mikhailova, P. V. "On the Nature of Pseudocommunis sp.," in Virus Diseases of Plants in Crimea and in the Ukraine, State Publishing House of Crimea and Simferopol, 1934, pp. 114-121. 464.32 R99V

So: SIRA SI - 90-53, 15 Dec., 1953

RYZHKOV, V. L.

Ryzhkov, V. L. Virus Diseases of Plants, General and Special Virology, State Publishing House of Sovkhoz and Kolkhoz Literature, Moscow, 1935, 245 pp. 464.32 R99

So: SIRA SI - 90-53, 15 Dec., 1953

RYZHKOV, V. L.

Ryzhkov, V. L. "Virus Diseases of Plants," in Abstracts of Reports of the All Union Conference on the Study of Ultra-microbes and Filtrable Viruses (14-18 December 1935), Publishing House of the Academy of Science USSR, Moscow, 1935, pp. 5-7. 448.39 AK1

So: SIRA SI - 90-53, 15 Dec., 1953

RYZHKOV, V. L.

Ryzhkov, V. L. "Ultra-viruses and Species Formation," in Abstracts of Reports of the All Union Conference on the Study of Ultramicrobes and Filtrable Viruses (14-18 December 1935), Publishing House of the Academy of Science USSR, Moscow, 1935, p. 40, 448.39 AK1

So: SIRA SI - 90-53, 15 Dec., 1953

RYZHKOV, V. L.

Ryzhkov, V. L. "Virus Diseases of Plants and Their Control," Zashchita Rastenii, no. 1, 1935, pp. 88-96. 421 P942

So: SIRA SI - 90-53, 15 Dec., 1953

RYZHKOV, V. L.

Ryzhkov, V. L. "Virus Diseases of Plants and Nature of Filtrable Viruses," Trudy Vsesoiuznoi Akademii Sel'skokhoziaistvennykh Nauk imeni V. I. Lenina, no. 5, 1936, pp. 11-12. 464.32 V96

So: SIRA SI - 90-53, 15 Dec., 1953

RYZHKOV, V. L.

Ryzhkov, V. L., and Mikhailova, P. V. "Virus Diseases of Solanaceae," Trudy Vsesoiuznoi Akademii Sel'skokhoziaistvennykh Nauk imeni V. I. Lenina, no. 5, 1936, pp. 112-118. 464.32 V96

So: SIRA SI - 90-53, 15 Dec., 1953

"Tasks and Organization of Scientific-Research Works in Virus Diseases of Plants in U. S. S. R.," Trudy Vsesoiuznoi Akademii Sel'skokhoziaistvennykh Nauk imeni V.I. Lenina, no.6, 1936, pp. 119-122. 464.32 V96

So: SIRA- S1-90-53, 15 Dec 1953

AM

Ryzhkov [Ryjkoff] (V. L.). Иммунитет растений к болезням, вызываемым фильтрующимся вирусом. [Immunity of plants from diseases caused by filterable viruses.]—*Bull. appl. Bot. Select.*, *1937*, Ser. II, 11, pp. 81–105, 1937. [English summary.]

In this survey the author gives a list of the more important and best studied plant viruses with the reactions of 24 host plants to them, and then briefly reviews the work done in the investigation of inter- and intraspecific immunity of various plants from the viruses, the resistance of individual plants within species or varieties, and acquired immunity. A bibliography of 70 titles is appended.

RYZHOV, V. L.

RYZHKOV, V. L. "Mendelizing and Non-Mendelizing Leaf Variegation in Petunia Hybrids," in Symposium Dedicated to the Memory of Academician V. N. Liubimenko, Publishing House of the Academy of Science Ukrainian SSR, Kiev, 1938, pp. 349-368. 452.4 K54

SO: SIRA - SI. 90-53, 15 Dec. 1953

RYZHKOV, V. L.

Ryzhkov, V. L. "Recent Studies on the Purifcation of Filtrable Viruses," Mikrobiologiia, vol. 6, no. 6, 1937, pp. 830-840. 448.3 M582

So: SIRA - 90-53, 15 Dec., 1953

RYZHKOV, V.L.

Ryžkov [Ryjkoff] (V. L.) & Vovk (A. M.). **A new disease of the Onion (Allium cepa).**—*C. R. Acad. Sci. U.R.S.S.*, xvi, 1, pp. 69–72, 2 figs., 1937.

An account is given of a disease of the onion which was first observed in 1936 attacking large numbers of the plants grown at the Agricultural Experimental Station of Alexeyevka, near Kharkoff. Besides a severe stunting of the bulbs (from an average of 5·08 cm. to one of 2·35 cm. in the Zittau onion), the disease is characterized by a mosaic-like mottling on the leaves, ranging from minute, more or less elongated specks to more or less wide light green or cream-coloured bands, and various malformations of the floral organs, resulting in the production of a very considerably reduced yield in seed (from an average of 5·54 gm. to 0·96 gm. in the authors' tests) the viability of which is also very much diminished (from 76·3 to 46·8 per cent.). Seedlings grown from seeds collected from diseased plants were much weaker than seedlings from healthy onion seeds, and developed a less powerful root system. The diseased bulbs did not reach maturity, and instead of being normally spheroidal they retained an elongated shape; the greater part of those that were stored germinated during the autumn, and failed to survive until the next planting season. Histologically the disease re-

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sulted in the loss of differentiation of the mesophyll, the palisade cells being indistinguishable from the cells of the deeper layers, hypoplasia of the stomata, and not infrequent formation of four instead of two guard cells, due to additional divisions. In heavily affected cells intracellular inclusions were found, consisting of homogeneous bodies, of which one or two, seldom more, were observed lying close to the nucleus. The disease was easily transmitted by rubbing the leaves of healthy plants with emery paper wetted with the juice of diseased plants, the incubation period lasting from 10 to 14 days. The disease is stated to differ from yellow dwarf [*R.A.M.*, xvi, p. 724] in that it does not attack the flowers, and is attributed to an undescribed virus.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446520016-2

PROCESSES AND PROPERTIES INDEX

Some facts about the method of the accumulation of the virus of tobacco mosaic in the plants. V. L. Ryzhkov and V. P. Gromyko. *Microbiology* (U. S. S. R.) 7, No. 8, 970-88(1938); *Khim. Referat. Zhur.* 1939, No. 7, 41; cf. C. A. 32, 6692[4]; 33, 1293[7], 8900[4]. The amt. of proteins in the healthy plants and in those affected with the virus diseases was investigated. Heating a tobacco ext. in a phosphate buffer soln. (0.1 mol. of Na_2HPO_4) to 70° caused the formation of a coagulum of the "healthy" proteins leaving the virus proteins in the filtrate. The amt. of proteins in plants varies greatly, but in most cases of the mosaic disease it is increased, especially the amt. of those proteins which are not coagulated at 70°. The proteins which are coagulated at 70° are evidently reserve proteins and no decrease of their content was observed in cases of the mosaic disease. An infiltration of halves of the diseased and of the infected leaves of tobacco was performed with the hydrolyzate of egg albumin and with water, resp. The virus titer was detd. from the no. of necroses. In all expts. an increase of the virus content during the introduction of the hydrolyzate was observed. R. and G. consider that the virus is formed with the help of the synthesizing action of protease at the expense of the more simple proteins than the proteins of the protoplasm. Considering the established fact of the virus increase from the action of the hydrolyzate R. and G. insist that this was the 1st case which detd. the dependence of the virus titer from feeding. W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446520016-2"

RYZHKOV, V

"Recent Research on Cytoplasmic Heredity in Plants," Usp. sovr, biol., 8, 390-403, 1938

RYZHKOV, V. L.

RYZHKOV, V. L., and GROMYKO, E. P. "A New Method for the Purification of the Tobacco Mosaic Virus," Comptes Rendus (Duklady) de l'Academie des Sciences de l'URSS, vol. 19 no. 3, 1938, pp. 203-205. 511 P444

So: SIRA - SI. 90-53, 15 Dec. 1953

RYZHKOV, V. L.

RYZHKOV, V. L., and SUKHOV, K. S. "Virus of Tobacco Mosaic Tested for Its Power of Fermentative Activity," Comptes Rendus (Doklady) de l'Academie des Sciences de l'URSS, vol. 21, no. 5, 1938, pp. 265-268. 511 P444.

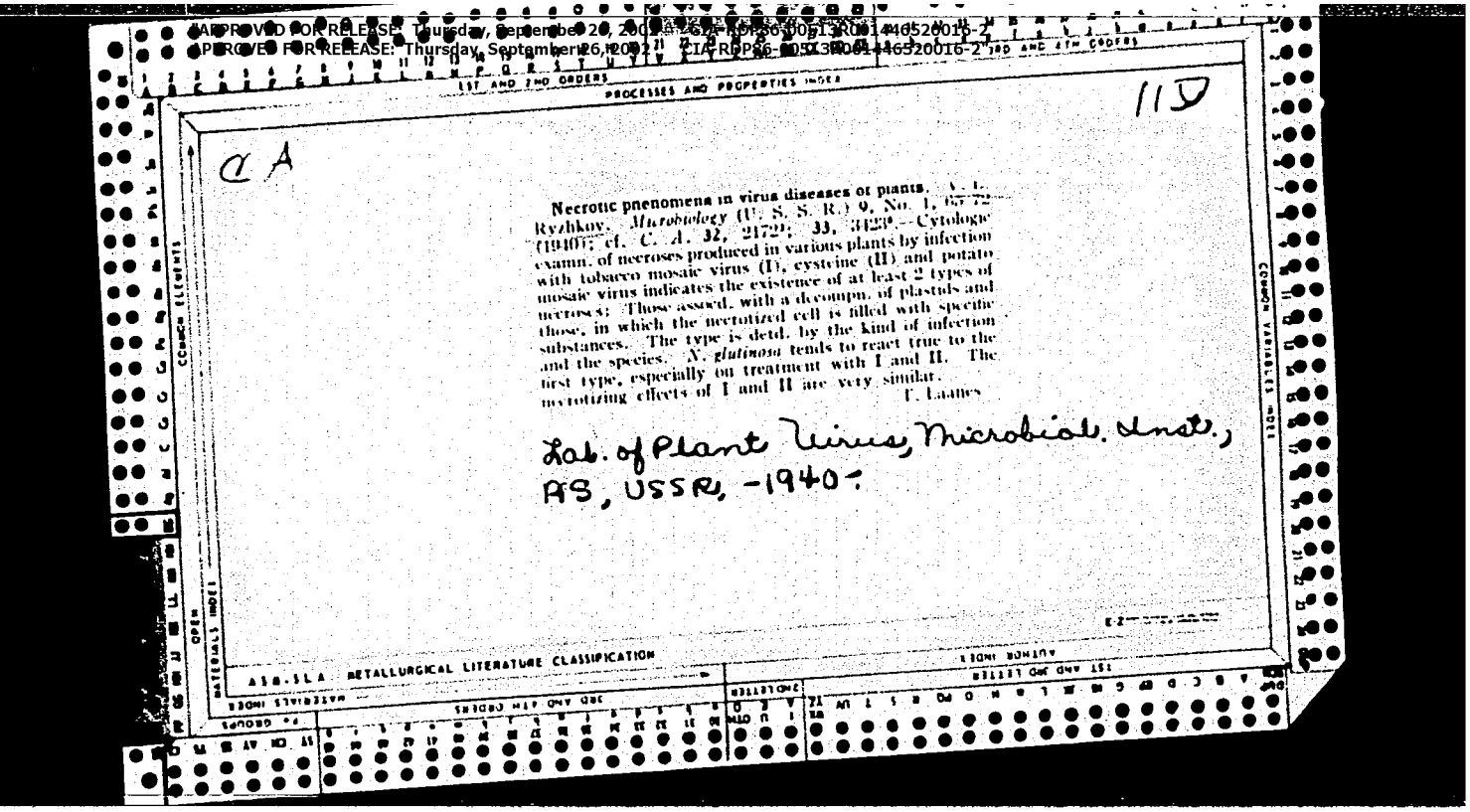
SO: SIRA - SI. 90-53, 15 Dec. 1953

Accumulation of virus of tobacco mosaic in plants when nitrogen is withheld from them. V. L. Ryzhkov and V. A. Smirnova. *Compt. rend. acad. sci. U. R. S. S.* 23, 95–7 (1939)(in English).—Growth expts. disclosed that the absence of N from tomatoes attacked by tobacco mosaic does not lower the titer of the virus in the juice of starving plants but renders the attack more virulent. The virus of tobacco mosaic is shown to be a parasitic protein. 1
A. H. Krappe

Biochemical changes in oats affected with the virus disease "sakuklivanie." V. L. Ryzhov, M. N. Vorob'eva and E. P. Gromuko. *Compt. rend. acad. sci. U. R. S. S.* 24, 501-3(1939)(in English).—Tests disclosed that (1) oat leaves show no important N-content change; the dwarfs increase somewhat in total N and decrease in protein N; (2) the content of reducing and nonreducing sugars and starch is increased by the disease; (3) the ratio carbohydrates: N favors the classification of the disease with the yellows, though there also are some typical symptoms of mosaic; (4) the P metabolism is greatly affected by the disease; the leaves of sick plants decrease in lipoid P and increase in P combined in compds. sol. in 0.05 *N* HCl; (5) the decrease in lipoid P appears to be related to the reduction and disintegration of plastids. 5 references.

A. H. Krappe

METALLURGICAL LITERATURE CLASSIFICATION



11D

CA

Necrotic phenomena in virus diseases of plants. A. L. Ryzhkov. *Microbiology* (U. S. S. R.) 9, No. 1, 67-72 (1940); cf. *C. A.* **32**, 2172; **33**, 3129. — Cytologic examn. of necroses produced in various plants by infection with tobacco mosaic virus (I), cysteine (II) and potato mosaic virus indicates the existence of at least 2 types of necroses; those assocd. with a decompn. of plastids and those, in which the necrotized cell is filled with specific substances. The type is detd. by the kind of infection and the species. *N. glutinosa* tends to react true to the first type, especially on treatment with I and II. The necrotizing effects of I and II are very similar.

T. Laames

Lab. of Plant Virus, Microbiol. Inst., AS, USSR, -1940-

CA

11D

The tobacco mosaic virus content of tomato plastids. V. L. Ryzhkov and V. A. Smirnova. *Microbiology* (U.S.S.R.) 9, 178-80(in English, 181)(1940); cf. C. A. 33, 1450⁶.—The chloroplasts were isolated by the method of Granick (cf. *C. A.* 33, 1008⁹) from leaves of diseased plants. The plastids do not absorb the virus at pH 4.6 and at 7.6. A contact of the virus with young plastids is necessary for formation of the mosaic. T. Laanes

AS, Micro. Inst., Moscow, -1940-

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446520016-2"

RYZHKOV, V.

"New Developments on Cytoplasmic Heredity in Plants," Usp. sovr. biol., 13, 371-373, 1940

RYZHKOV, V. L.

RYZHKOV, V. L. "Nature of the Filtrable Viruses and the Problem of Their 'Physiology'," in Virus Diseases of Plants and Measures for Their Control, Work of the Conference on Virus Diseases of Plants 1940, Publishing House of the Academy of Science USSR, Moscow, 1941, pp. 14-21. 464.32 So8

SO: SIRA - SI. 90-53, 15 Dec. 1953

RYZHKOV, V. L.

RYZHKOV, V. L., and OVCHAROVA, T. P. "Anatomical Changes in Cotton by Leaf Roll Disease," in Virus Diseases of Plants and Measures for Their Control, Works of the Conference on Virus Diseases of Plants 1940, Publishing House of the Academy of Science USSR, Moscow, 1941, pp. 191-196. 464.32 So8

SO: SIRA-SI. 90-53, 15 Dec. 1953.

RYZHKOV, V. L.

RYZHKOV, V. L., and SMIRNOVA, V. A. "Liquid Crystals of the Virus of the Tobacco Mosaic (Nicotina virus 1 Allard)," Comptes Rendus (Doklady) de l'Academie des Sciences de l'URSS, vol. 31, no. 9, 1941, pp. 930-932. 511 P444

SO: SIRA - SI. 90-53, 15 Dec. 1953

"Paracrystallic Structure of the Tobacco Mosaic Virus and Its Place in General Biology" (p. 211) by Rizhkov, V. L. and Smirnova, V. A.

SO: Journal of General Biology (Zhurnal Obshechey Biology) Vol. III, No. 3, 1942.

"Problem of the Evolution of Ultraviruses," Mikrobiologiya, 11, 4, 149-159, 1942

RYZHKOV, V. L.

RYZHKOV, V. L. "On the Mechanism of the Accumulation of Virus and Its Biological Activity in Plants," Mikrobiologiia, vol. 12, no. 1, 1943, pp. 37-43. 448.3 M582

SO: SIRA - SI. 90-53. 15 Dec. 1953

RYZHKOV, V. L.

RYZHKOV, V. L. and VOVK, A. M. "Biological Activity of Acyl Derivatives of the Virus of Tobacco Mosaic," Comptes Rendus (Doklady) de l'Academie des Sciences de l'URSS, vol. 38, no. 7, 1943, pp. 221-222, 511 P444

SO: SIRA - SI. 90-53, 15 Dec. 1953

RYZHKOV, V. L.

RYZHKOV, V. L. "Kok-saghyz Yellows," Comptes Rendus (Doklady) de l'Academie des Sciences de l'URSS, vol. 41, no. 2, 1943, pp. 90-92. 511 P444.

SO: SIRA - SI. 90-53. 15 Dec. 1953

RYZHKOV, V. L.

RYZHKOV, V. L. Fundamental Study of Virus Diseases of Plants, Publishing House of the Academy of Science USSR, Moscow, 1944, 224 pp. 464.32 R990

SO: SIRA - SI. 90-53. 15 Dec. 1953

CA

110

Influence of substances affecting enzymic action on the necrotic reaction produced by Nicotiana virus 1. V. I. Ryabkov and K. S. Sukhov. *Biokhimiya* 9, 151 (1944).

—NaF and CH_2ICO_2H inhibit certain enzymic reactions but are without effect in arresting the accumulation of tobacco mosaic virus. It follows that these enzymic reactions do not participate in the synthesis of the virus mol. Substances which do inhibit the accumulation of the mosaic virus are cysteine, ascorbic acid and vitamin B_1.

H. Priestley

Inst. of Microbiology, AS, USSR, Moscow. -1944-

RYZHKOV, V. L.

RYZHKOV, V. L., VOVK, A. M., and ALEKSEYEVA, T. S. "On the Physiological Peculiarities of the Yellow Strain of Tobacco Mosaic Virus." Comptes Rendus (Doklady) de l'Academie des Sciences de l'URSS, vol. 42, no. 2, 1944, pp. 84-86. 511 P444

SO: SIRA - SI. 90-53. Dec. 15, 1953

"The Experiments on Chemotherapy of Jaundice in Bombyx Mori," Mikrobiol., 14, No. 5, 1945. Inst. Micr., Acad. Sci., Moscow, -1945-.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446520016-2"

RYZHKOV, V. L.

RYZHKOV, V. L. "About the Visible Forms of Filtrable Viruses," Priroda, vol. 34, no. 5, 1945, pp. 70-74. 410 P933.

SO: SIRA - SI. 90-53. 15 Dec 1953.

CA

11 D

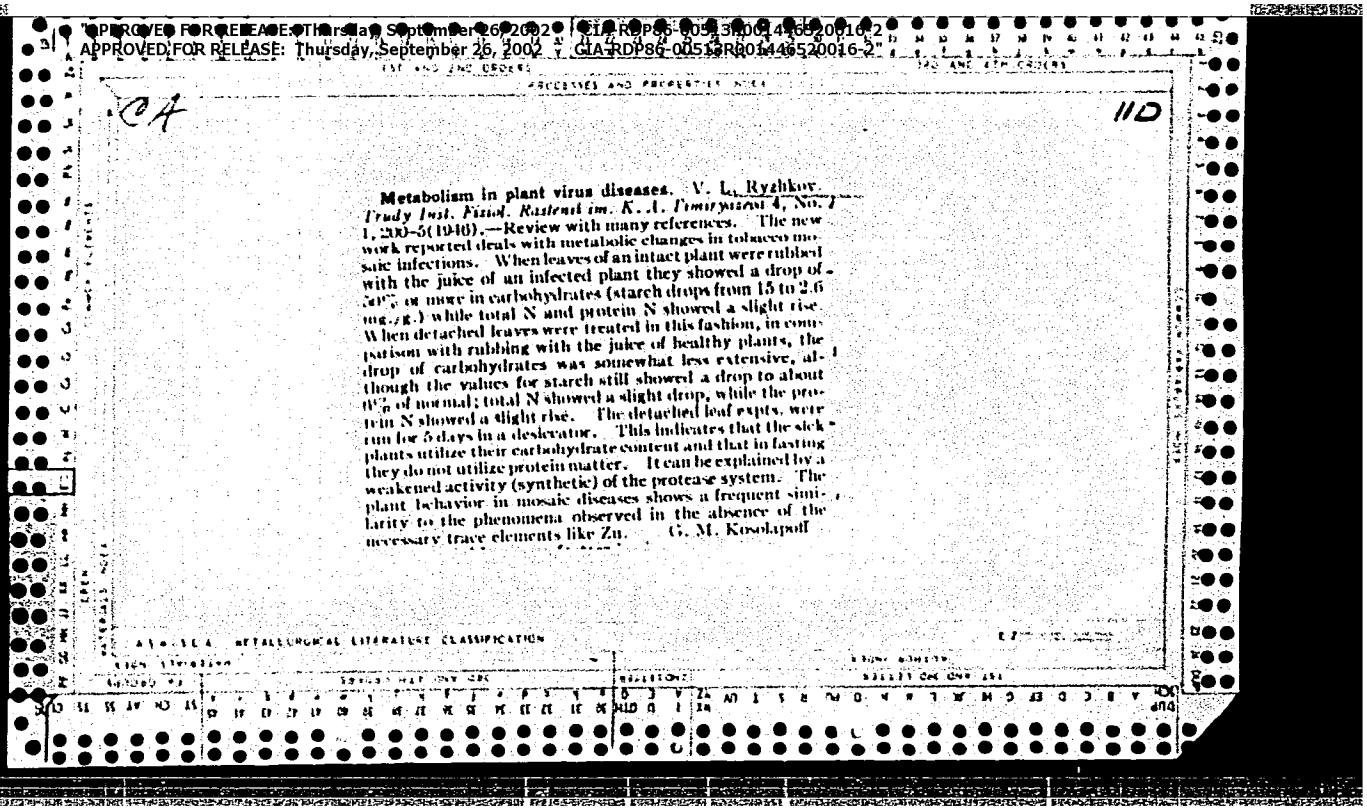
A defensive reaction of the plant cell. V. I. Ryzhkov (Moscow Med. Inst.). *Doklady Akad. Nauk S.S.S.R.* 47, 540-2; *Compt. rend. acad. sci. U.R.S.S.* 47, 520-2 (1945)(in English).—Tomato seeds were germinated on filter paper soaked in 0.5-1.0% soln. of a red sol. streptocide (*Na[p-sulfamylphenylazo]acetamido-8-hydroxy-3,6-naphthalenedisulfonate*) and under these conditions the developing roots assumed a deep red color. When these seedlings were transferred to H_2O or soil, the red coloration remained for months but newly formed roots were free of the stain. The streptocide was found to accumulate in the cells in an insol. state, forming within their protoplasm accumulations of red crystals. The ability of cells to accumulate and retain such crystals is a function of live cells, for mechanical injury or killing of the cells allowed the crystals to dissolve immediately. The hypothesis is advanced that the formation of the streptocide crystals and *virus* crystals both represent a defensive mechanism by cells, whereby foreign substances are accumulated in a mass within the protoplasm thus blocking further action by these substances. The streptocide was not always present in cryst. form for numerous cells were found which contained corpuscular bodies stained red by the dye.

J. E. Webster

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446520016-2"

RYZHKOV, V. L. Phytopathogenic Viruses, Publishing House of the Academy of Science USSR, Moscow, 1946, 226 pp. 464.32 R09F

SO: SIRA - SI. 90-53. 15 Dec. 1953



Metabolism in plant virus diseases. V. L. Ryzhkov. *Trudy Inst. Fiziol. Rastenii im. K. A. Timiryazeva* 4, No. 1, 200–5(1946).—Review with many references. The new work reported deals with metabolic changes in tobacco mosaic infections. When leaves of an intact plant were rubbed with the juice of an infected plant they showed a drop of 30% or more in carbohydrates (starch drops from 15 to 2.6 mg./g.) while total N and protein N showed a slight rise. When detached leaves were treated in this fashion, in comparison with rubbing with the juice of healthy plants, the drop of carbohydrates was somewhat less extensive, although the values for starch still showed a drop to about 60% of normal; total N showed a slight drop, while the protein N showed a slight rise. The detached leaf expts. were run for 5 days in a desiccator. This indicates that the sick plants utilize their carbohydrate content and that in fasting they do not utilize protein matter. It can be explained by a weakened activity (synthetic) of the protease system. The plant behavior in mosaic diseases shows a frequent similarity to the phenomena observed in the absence of the necessary trace elements like Zn. G. M. Kosolapoff

RYZHKOV, V. L.

RYZHKOV, V. L., and MIKHAILOVA, P. V. "On the Etiology of the Leaf Roll in Tomatoes," Izvestiia Akademii Nauk SSSR, Seriia Biologicheskaia, no. 5, 1946, pp. 487-489.
511 Sa2B

SO: SIRA - SI. 90-53. 15 Dec. 1953

RYZHKOV, V. L., Prof.

pa 36T38

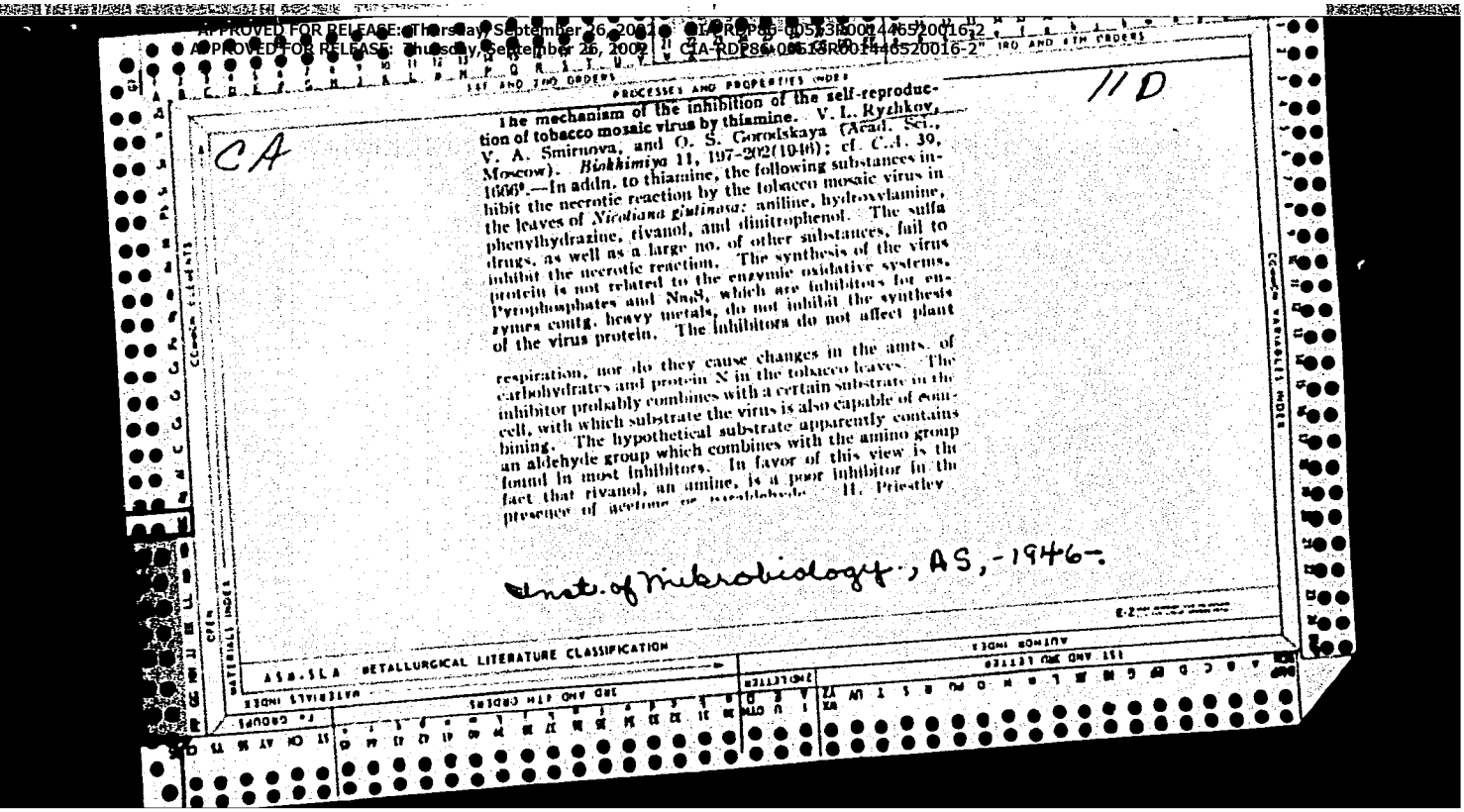
USSR/Medicine - Antibiotics Aug 1946
Medicine - Viruses

"Antibiotics and Viruses," Prof V. L. Ryzhkov, 2 pp

"Priroda" No 8

Chemotherapy for the treatment of certain bacterial diseases has become very popular in recent years. The success met in the treatment of bacterial diseases with antibiotics led to an attempt to use antibiotics for the treatment of virus diseases. Author conducted some experiments along this line with mosaic disease of the tobacco plant.

ID 36T38



PROCESSES AND PROPERTIES INDEX

CA

11D

The mechanism of the inhibition of the self-reproduction of tobacco mosaic virus by thiamine. V. L. Rychkov, V. A. Smirnova, and O. S. Gorokhovskaya (Acad. Sci., Moscow). *Biokhimiya* 11, 197–202(1946); cf. *C.A.* 39, 1666⁹.—In addn. to thiamine, the following substances inhibit the necrotic reaction by the tobacco mosaic virus in the leaves of *Nicotiana glutinosa*: aniline, hydroxylamine, phenylhydrazine, rivanol, and dinitrophenol. The sulfa drugs, as well as a large no. of other substances, fail to inhibit the necrotic reaction. The synthesis of the virus protein is not related to the enzymic oxidative systems. Pyrophosphates and NaaS, which are inhibitors for enzymes contg. heavy metals, do not inhibit the synthesis of the virus protein. The inhibitors do not affect plant respiration, nor do they cause changes in the amts. of carbohydrates and protein N in the tobacco leaves. The inhibitor probably combines with a certain substrate in the cell, with which substrate the virus is also capable of combining. The hypothetical substrate apparently contains an aldehyde group which combines with the amino group found in most inhibitors. In favor of this view is the fact that rivanol, an amine, is a poor inhibitor in the presence of acetone or acetaldehyde. H. Priestley

Inst. of Microbiology, AS, -1946-

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446520016-2"

KRENKE, A. N., and RYZHKOV, V. L. "Unstable Hereditary Factors of Nicotiana affinis (Variegated Leaves)," in Reports of the Scientific-Research Work for 1945, Department of Biological Science, Publishing House of the Academy of Science USSR, Moscow, 1947, pp. 41. 511 Ak144

SO: SIRA, SI 90-53, 15 December 1953

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446520016-2"

"The Nature of Viruses," in the book: Virusnyye bolezni (Virus diseases), Moscow, 1947

RYZHKOV, V. L.

RYZHKOV, V. L., and SMIRNOVA, V. A. "Inter-relationship of Virus of Tobacco Mosaic with Individual Elements of Plant Tissues," in Reports of the Scientific-Research Work for 1945, Department of Biological Science, Publishing House of the Academy of Science USSR, Moscow, 1947, pp. 151. 511 Ak144

SO: SIRA - SI. 90-53. 15 Dec. 1953

RYZHKOV, V. L.

RYZHKOV, V. L., and GORODSKAYA, O. S., "The Biochemistry of 'Yellows' Type of Virus Disease of Plants," in Reports of the Scientific Research Work for 1945, Department of Biological Science, Publishing House of the Academy of Science USSR, Moscow, 1947, pp. 151-152. 511 Ak144

SO: SIRA SI-90-53, 15 Dec. 1953.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446520016-2"

RYZHKOV, V. L.

"Methods of Chemotherapy of Virus Infections," in the book: Virusnyye bolezni (Virus Diseases), 8-9, Moscow, 1947

"The Research Into the Nature of Viruses in the USSR," ZhMEI (Journal of Microbiology, Epidemiology and Immunibiology), II, 31, 1947

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446520016-2"

FA 29T65

USSR/Medicine - Viruses May/Jun 1947
Medicine - Bacteria, Filterable Forms

"The Problem of a Natural System of Viruses," V. L. Ryzhkov, 10 pp

"Zhur Obshchey Biologii" Vol VIII, No 3

The present classification of viruses is perfectly chaotic, no distinction being made between forms created experimentally by way of a single mutation, and forms diverging considerably owing to evolution. A task of the near future is to determine the correct hierarchy of related virus groups. The study of the various criteria which might be applied to establish the distinctive features of different species of viruses shows that the ecologic geographic characters of a species are of particular importance. LC 29T65

C.A

Influence of oxygen excess or deficiency on necrotic effects in Nicotiana glutinosa and on accumulation of virus protein in tobacco mosaic disease. V. L. Ryzhkov and V. A. Smirnova. *Mikrobiologiya* 16, 215-51(1947). — Influence of atm. O_2 concn. on necrosis of virus-infected tobacco (*N. glutinosa*) leaves was studied in pure O_2 and in air:H_2 ratios from 15:1 to 1:15; the spread of necrosis was not checked. On isolated halves of *N. tabacum* leaves a 50% drop in O_2 concn. retarded self-propagation of the virus and lessened the virus titer. These results do not confirm the Woods-Du Buy hypothesis (*C.A.* 30, 4855[1]) concerning cyanide sensitivity of virus-infected tobacco leaves. The virus protein can accumulate independently of the plant's respiratory system; self-propagation is retarded but not stopped by O_2 deficiency.

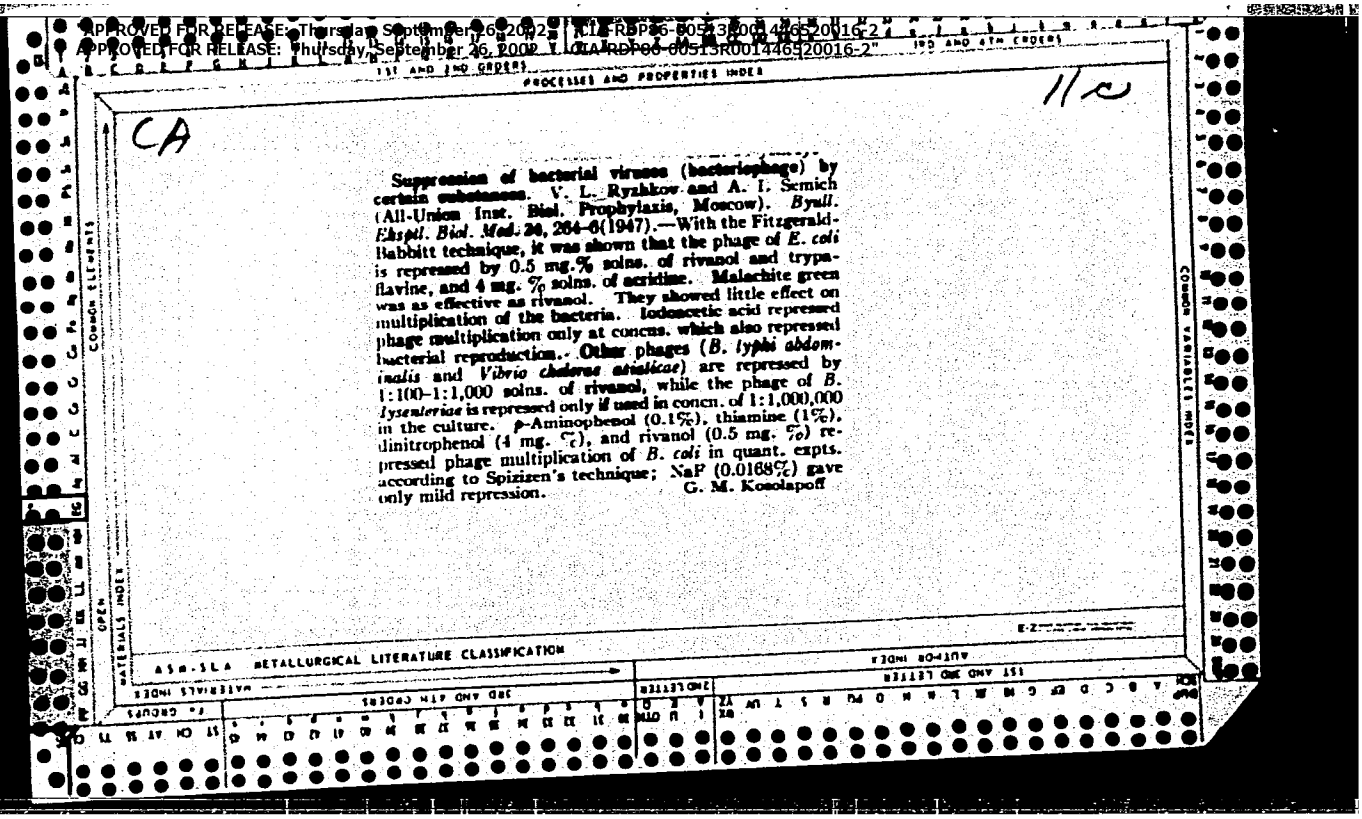
Julian F. Smith

Inst. Microbiol., AS USSR

RYZHKOV, V. L.

RYZHKOV, V. L. "Thirty Years of Studying Virus Diseases of Plants in the U.S.S.R.," Mikrobiologiia, vol. 16, no. 5, 1947, pp-- 448.3 M582 (Translation 6292,7 pp.)

SO: SIRA-SI-90-53, 15 Dec. 1953.



CA

11 2

Suppression of bacterial viruses (bacteriophage) by certain substances. V. L. Ryzhkov and A. I. Semich (All-Union Inst. Biol. Prophylaxis, Moscow). *Byull. Eksptl. Biol. Med.* 20, 264–6(1947).—With the Fitzgerald-Babbitt technique, it was shown that the phage of *E. coli* is repressed by 0.5 mg.% solns. of rivanol and trypaflavine, and 4 mg. % solns. of acridine. Malachite green was as effective as rivanol. They showed little effect on multiplication of the bacteria. Iodoacetic acid repressed phage multiplication only at concns. which also repressed bacterial reproduction. Other phages (*B. typhi abdominalis* and *Vibrio cholerae asiaticae*) are repressed by 1:100–1:1,000 solns. of rivanol, while the phage of *B. dysenteriae* is repressed only if used in concn. of 1:1,000,000 in the culture. *p*-Aminophenol (0.1%), thiamine (1%), dinitrophenol (4 mg. %), and rivanol (0.5 mg. %) repressed phage multiplication of *B. coli* in quant. expts. according to Spizizen's technique; NaF (0.0168%) gave only mild repression.

G. M. Kosolapoff

USSR/Medicine - Bacteriophage Oct 1947
Medicine - Bacteriolysis

"Some Chemical Preparations for Detoxicating Bacteria (Bacteriophage)," V. L. Ryzhkov, A. I. Semich, 2 pp

"Byulleten' Eksperimental'noy Biologii i Meditsiny" Vol XXIV, No 4

Results were obtained for various substances, among them: 0.1% para-amidophenol, 1% thiamin, 4 mg % dinitrophenol, 0.016% sodium fluoride, and 0.5% rivanol. Refers to work done by Fitzgerald and Rabbitt. It was discovered that these preparations were ineffective against B dysenteriae, B coli, and B typhi abdominalis unless their concentrations were

24T61

USSR/Medicine - Bacteriophage (Contd) Oct 1947

strong enough to detoxicate these bacilli. Submitted 26 May 1947 at the All-Union Research and Investigation Institute of Biological Prophylaxis and Infection, Moscow.

24T61

RYZHKOV, V. L.

PA 21T85

USSR/Medicine - Viruses Jan 1947
Medicine - Tobacco

"Effect of Electrolytes and Anaerobic Conditions on Some Necrotic Reaction of Nicotiana Glutinosa," V. L. Ryzhkov, V. A. Smirnova, 4 pp
Inst. Microbiol, ASUSSR

"Dok Ak Nauk SSSR" Vol LV, No 3

Nicotiana glutinosa leaves immersed in 0.1 M KNO_3, $Mg(NO_3)_2$ and a .01 percent solution of $ZnSO_4$ display lowering of sensitivity to the tobacco mosaic virus. Published 29 Jul 46 at the Institute of Microbiology, Academy of Sciences of the USSR.

21T85

1100 W-303 5/2/48

PA 2/49T64

USSR/Medicine - Plants, Diseases May/Jun 48
Medicine - Tobacco

"Effect of Ions of Magnesium and Acridine Preparations on the Storage of Virus Albumin of Mosaic Diseases of Tobacco," V. I. Ryzhkov, V. A. Smirnova, Inst of Microbiol, Acad Sci USSR, Moscow, 4 pp

"Mikrobiol" Vol XVII, No 3

Magnesium sulfate solutions inhibit autogenesis of virus albumin in mosaic diseases, if inoculated surface of leaf is immersed in solution. Immersion of tomato cotyledon inoculated with virus in 0.1 N solution of magnesium sulfate or 0.01% solution

2/49T64

USSR/Medicine - Plants, Diseases (Contd) May/Jun 48

of rivanol prevents mosaic diseases. Necrotic action of mosaic virus on Nicotiana glutinosa is inhibited by 0.001% tryporlavin; 0.05% trypoflavin infiltration of tobacco leaves considerably reduces virus reproduction. Albumin precipitate, however, again becomes infectious if freed from the preparation and redissolved.

2/49T64