BEL'TYUKOV, B. A.

   "Solution of a Class of Second Order Linear Differential Equations With
the Aid of Functional Series," Tr. Irkutskogo un-ta. ser. fiz. -matem., Vol 8,
No 1, pp 9-11, 1953

   The author uses the method of iterative integrals to obtain the
general solution of a second order differential equation whose coeffi-
cients are functions of the independent variable. He then applies the
formula for the solution to several special cases of the equation.
This is a sequel to an earlier work by Yu. V. Rudnev (Uch. zap. MGU,
1946, No 100, 113-126). (RZhMat, No 6, 1955)

Sum. No. 681, 7 Oct. 55

AUTHOR: Bel'tyukov, B. A.

TITLE: An Approximate Solution of Fredholm Integral Equations
         (Priblizhennoye resheniye integral'nykh uravneniyakh
         Fredgol'ma)

ABSTRACT: The approximate construction of a solution of a Fred-
    holm linear integral equation of the second kind by means of
    breaking down the interval of integration into parts and re-
    placing a given kernel by a degenerate kernel on each part of
    the interval is proposed. Examples are cited. There are no
    evaluations of error.

                                          N. P. Sergeyev

Card 1/1

BEL'TYUKOV, B.A.

One approximate method for solving Volterra's integral equations.
Sib. mat. zhur. 2 no.5:789-791 S-O '61.   (MIRA 15:3)
        (Integral equations) (Approximate computation)

BEL'TYUKOV, B.A.

Method for solving a Fredholm second-order integral equation.
Trudy Nauch.ob'ed.prep. fiz.-mat. fak.ped,inst.Dal'.Vost. 1:15-18
'62.   (MIRA 17:3)

1. Irkutskiy gosudarstvennyy pedagogicheskiy institut.

S/044/62/000/004/057/099
C111/C333

AUTHOR: Bel'tyukov, B.A..

TITLE: On the solution of systems of integro-differential
               equations

PERIODICAL: Referativnyy zhurnal, Matematika, no. 4, 1962, 59,
               abstract 4B272. ("Uch. zap. Irkutskogo gos. ped. in-ta",
               1960, no. 17, 147-157)

TEXT: By reducing the system of integro-differential equations

$$\frac{dz_i}{dx} + \sum_{m=1}^{n} \left[p_{im}(x) z_m(x) - \int_a^b k_{im}(x,s) \, f_m(s, \lambda z_m(s)) ds \right] = 0$$

$i = 1,2,\ldots,n$, to a system of non-linear integral equations, the author
determines in the neighborhood of $\lambda = 0$ a unique solution holomorphic
in λ which satisfies the given initial conditions. It is assumed that
the functions $f_m(s,v)$ are holomorphic in v in the neighborhood of v=0,

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On the solution of systems ...   S/044/62/000/004/057/099
                                       C111/C333

the coefficients $p_{ik}(x)$ are continuous in $a \leqq x \leqq b$ and the kernels
are regular in the square $a \leqq x, s \leqq b$.

[Abstracter's note : Complete translation.]

Card 2/2

L 54901-65   EWT(d)   IJP(c)
ACCESSION NR: AR5016327

UR/0044/65/000/006/B095/B095
518:517.948

SOURCE: Ref. zh. Matematika, Abs. 6B498

AUTHOR: Bel'tyukov, B. A.

TITLE: m-Analog of Zeydel's method for linear integral Fredholm equations

CITED SOURCE: Dokl. 3-y Sibirsk. konferentsii po matem. i mekhan., 1964. Tomsk, Tomskiy un-t, 1964, 81-82

TOPIC TAGS: integral equation, approximation calculation, Fredholm equation

TRANSLATION: An equation of the form

$$\varphi(x) = f(x) + \lambda \int_a^b K(x,y)\varphi(y)\,dy, \qquad (1)$$

is considered, where $f(x)$ and $K(x,y)$ are bounded real functions. The square $D(a \le x \le b, \ a \le y \le b)$ is subdivided by straight lines $x = x_i$ and $y = y_i$ into m^2 squares D_{ij}. An iteration process is constructed:

$$\varphi_{(n)}(x) = f(x) + \lambda \int_a^b K_1(x,y)\varphi_{(n)}(y)\,dy + \lambda \int_a^b K_2(x,y)\varphi_{n-1}(y)\,dy, \quad n = 1, 2, 3 \dots, \qquad (2)$$

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ACCESSION NR: AR5016327

It is asserted that the process (2) uniformly converges to the solution of equation (1) for any arbitrary function $f(x)$ and any choice of initial approximation $\varphi_{(0)}(x)$, if the first characteristic number of the kernel

$$K^*(x, y, \lambda) = K_{ij}^*(x, y), \ (x, y) \in D_{ij}, \ (J = 1, \ldots, m)$$ (3)

is larger than unity in modulus. With the help of estimation of the first characteristic number of the kernel (3), from the above one can obtain an effective sufficient condition for convergence of the process (2). It is noted that in the disk

$$|\lambda| < \frac{B - B_1}{BB_1},$$ (4)

where

$$B = \left\{ \int_a^b \int_a^b K^2(x, y) \, dx \, dy \right\}^{\frac{1}{2}},$$

$$B_1 = \left\{ \int_a^b \int_a^b K_1^2(x, y) \, dx \, dy \right\}^{\frac{1}{2}},$$ (5)

$$B_2 = \left\{ \int_a^b \int_a^b K_2^2(x, y) \, dx \, dy \right\}^{\frac{1}{2}},$$

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L 54901-65
ACCESSION NR: AR5016327

the process (2) converges faster than the method of successive approximations.
I. Shelikhova

SUB CODE: MA   ENCL: OO

Card 3/3

L 45603-65   EWT(d)   IJP(c)

ACCESSION NR: AR5006661

S/0044/65/000/001/B067/B067

SOURCE: Ref. zh. Matematika, Abs. 1B306

AUTHOR: Bel'tyukov, B. A.

TITLE: On the approximate solution of Fredholm's integral equations by Bateman's method

CITED SOURCE: Uch. zap. Irkutskiy gos ped. in-t, vyp. 20, 1964, 177-184

TOPIC TAGS: integral equation, approximation method

TRANSLATION: Described here is a modification of Bateman's method consisting in the approximation of the kernel of the equation by means of degenerate kernels of form

$$R'(s, g) = \begin{vmatrix} 0 & f_1(s) & \cdots & f_n(s) \\ g_1(g) & a_{11} & \cdots & a_{1n} \\ \cdots & \cdots & \cdots & \cdots \\ g_n(g) & a_{n1} & \cdots & a_{nn} \end{vmatrix} : \det \| a_{ik} \|.$$

Card 1/2

L 45603-65

ACCESSION NR: AR5008661

where $f_r(x) = P(x, y_r)$, $g_m(y) = -K(x_m, y)$, $a_{mr} = P(x_m, y_r)$;

$P(x, y) = \int_a^b K(x, t) K(y, t) dt$. L. Rakovshchik.

SUB CODE: MA   ENCL: 00

Card 2/2

L 55249-65   EWT(d)   IJP(c)

ACCESSION NR: AP5015121   UR/0376/65/000/004/0545/0556

AUTHOR: Bel'tyukov, B. A.

TITLE: Analog of the Runge-Kutta method for solving nonlinear Volterra integral equations

SOURCE: Differentsial'nyye uravneniya, no. 4, 1965, 545-556

TOPIC TAGS: integral equation, approximation calculation

ABSTRACT: The author obtains a series of formulas with errors of order of magnitude h^2, h^3 and h^4 for solution of

$$\varphi(x) = \int_a^x G[x, y, \varphi(y)]\,dy \quad (x \in [a, b]). \qquad (1)$$

This method is simpler but in a sense a more perfect general form of an extension of the Runge-Kutta method. Orig. art. has: 29 formulas.

ASSOCIATION: Irkutskiy gosudarstvennyy pedagogicheskiy institut (Irkutsk State Pedagogical Institute)

SUBMITTED: 25Nov64   ENCL: 00   SUB CODE: MA

NO REF SOV: 003   OTHER: 005

Card 1/1

BEL'TYUKOV, B.A. (Irkutsk)

Relation between the coincidence method of exchanging a
nucleus for a degenerated one. Zhur. vych. mat. i mat.
fiz. 5 no.2:340-342 Mr-Ap '65.   (MIRA 18:5)

BEL'TYUKOV, B.A.

Analogue of the Runge-Kutta method of solving nonlinear integral
equations of the Volterra type. Dif. urav. 1 no.4:545-556 Ap '65.
(MIRA 18:5)

1. Irkutskiy gosudarstvennyy pedagogicheskiy institut.

BEL'TYUKOV, B.A.

Distinction between the method of expansion into series over the parameter and the method of successive approximations in solving nonlinear integral equations. Diff. urav. 1 no.6:773-785 Je '65.
(MIRA 18:7)

1. Irkutskiy pedagogicheskiy institut.

BEL'TYUKOV, B.A.

Construction of fast converging iterative algorithms for
solving integral equations. Sib. mat. zhur. 6 no.6:1415-
1419 N-D '65.   (MIRA 18:12)

L 44071-66   EWT(d)/T/EWP(1)   IJP(c).

ACC NR: AP6022232   SOURCE CODE: UR/0140/66/000/002/0020/0025

AUTHOR: Bel'tyukov, B. A. (Irkutsk)

ORG: none

TITLE: Use of the partial averaging method to construct a degenerate approximating kernel

SOURCE: IVUZ. Matematika, no. 2, 1966, 20-25

TOPIC TAGS: Fredholm equation, degeneracy, error correction, integral equation

ABSTRACT: The author presents a new generalized method of constructing degenerate approximating kernels for substitution of kernel k(x,y) in approximate solutions to Fredholm's integral equations of the second order. The method involves the calculation of simpler quadratures, hence rectifies the deficiencies inherent in methods calling for difficult quadratures of function products as submitted earlier by the author. Several examples are illustrated and their properties are analyzed. A comparative analysis establishes relations between the kernel substitution method and an analog of the subdomain method used in solving differential equations. It is concluded that error calculations evolved previously for substitutions of a degenerate kernel can be utilized to evaluate error factors for the subdomain approach. Orig. art. has: 14 formulas.

SUB CODE: 12/ SUBM DATE: 24Nov64/ ORIG REF: 006/ OTH REF: 001
Card 1/1   UDC: 517.948

MIKHAYLOV, G.K.; BEL'TYUKOV, G.V.

      Works of G.A. Maksimovich on speleology. Peshchery no.4:113-117
      '64.   (MIRA 18:5)

      1. Permskiy gosudarstvennyy universitet.

BEL'TYUKOV, K.G., inzhener.

Fine white sand as admixture for mortars and concretes used in
ornamental patterns. Nov.v stroi.tekh. no.8:51-59 '56. (MLRA 9:11)
(Concrete) (Decoration and ornament, Architectural)

BEL'TYUKOV, K. G.

BEL'TYUKOV, K.G., inzh.

Experiments in coating large blocks. Nov. v stroi. tekh.
no.12:53-64 '57.   (MIRA 11:1)
            (Concrete blocks—Testing)

BEL'TYUKOV,N.A., polkovnik meditsinskoy sluzhby

The Issyk-Kul sanatorium and its resort and climatological
therapeutic factors. Voen.-med.zhur._no.6:52-56 Je '51. (MIRA 9:9)
(ISSYK-KUL--SANATORIUMS)

BEL'TYUKOV, V. I;MOGENDOVICH, M. R.

Muscular reception (proprioception) and internal organs. Usp. sovrem. biol. 33 no.2:161-172 Mar-Apr 1952.   (CLML 22:2)

1. Molotov.

1092. UTILIZATION OF RESIDUAL HEARING IN WORK CONNECTED WITH PRONUNCIATION AMONGST DEAF AND DUMB CHILDREN (Russian text) - Beltyukov V.I. and Masyunin A.M. Inst. of Defectol., Acad. of Paedag. Scis, Moscow - In the book: Ostatochnyi slukh u tugoukhikh i glukhonemykh detei, Moscow 1957 (88-98)

The presence of residual hearing in the majority of deaf and dumb cases is of substantial significance in work connected with speech formation, pronunciation habits, elimination of pronunciation defects and incorrect accent, etc. For a training experiment connected with elimination of speech defects, 10 deaf and dumb pupils of various classes were enrolled, all of them being receptive, with the aid of sound amplifying apparatus, to a sound frequency up to 1,024-2,048 and even higher, and able to differentiate on hearing the vowel sounds. In the presentation of speech material to these pupils, a sound amplifying apparatus was made use of, but the utilization of functions other than the hearing one, was excluded. The principle of elaborating the hearing differentiations served as the basis of this training experiment; the differentiations of articulation were elaborated later on. In the first stage of the experiment, the pupil had to catch the difference in syllables such as 'Asha' and 'Asa', and in the next stage, he had to pronounce these syllables independently, imitating the teacher. Control of pronunciation was accomplished by the pupil with the aid of a reversed microphone. It was found that vowels are quite easily corrected with the exception of 'Y'. Amongst the consonants the more intensive sounds, M, N, and V, were easily corrected, but the consonants P and L were corrected with difficulty. Hissing consonants were comparatively easily rectified, but whistling ones only with difficulty. As the overwhelming majority of the deaf and dumb (93%) substitute in pronunciation the soft consonants with hard ones, the authors carried out an experiment for the elimination of this defect. It was found that it was only difficult to achieve softening of the first consonant, but once achieved, the following soft consonants were pronounced correctly by force of habit.   Radina - Moscow (S)

Bel'Tyukov, V.I.

AUTHOR: None Given   3-6-28/29

TITLE: A Book Dedicated to the Most Important Discoveries in
               Physiology (Kniga, posvyashchennaya glavneyshim otkrytiyam
               fiziologii)

PERIODICAL: Vestnik Vysshey Shkoly, 1957, # 6, pp 95-96 (USSR)

ABSTRACT: The article is an editorial summary of two reviews given
               by V. I. Bel'tyukov, Candidate of Biologic Sciences of the
               Molotov Medical Institute (Molotovskiy meditsinskiy insti-
               tut) and L. B. Gubman, Candidate of Biologic Sciences of
               the Molotov Pedagogic Institut (Molotovskiy pedagogicheskiy
               institut) on the book by K.P.Golysheva and S.I.Gal'perin -
               "Physiology of Man and Animal". The two scientists arrive
               at the conclusion that the methodologically proper examinat-
               ion of the correlation between physiology and psychology, the
               impartial exposition of the history of physiology, in
               particular the reestablishment of the priority of V.M.
               Bekhterev's and of other Russian scientists' teachings, the
               maintenance of unity between theory and practice - are the
               undoubted merits of the book. The authors have successfully
Card 1/2   solved the problem of compiling a manual which correctly

3-6-28/29

Book Dedicated to the Most Important Discoveries in Physiology

reflects the present level of physiology and complies with the tasks of higher pedagogical and university education.

AVAILABLE: Library of Congress

rd 2/2

USSR / Human and Animal Physiology. Heart.   T

Abs Jour   : Ref Zhur - Biol., No 15, 1958, No. 70152

Author   : Beltyukov, V. I.
Inst   : Molotov Medical Institute
Title   : Influence on the Heart of Condenser Stimulation of Skeletal
             Muscle

Orig Pub   : Tr. Molotovsk. med. in-ta, 1957, No 26, 33-37

Abstract   : In the gastrocnemius and femoral muscles of the frog
             stripped of skin a Sheminskiy interruptor, with condensors
             of one and two microfarads, and with a rheostat at the
             output terminal, was used to apply varying amounts of
             electrical stimulation. In spinal frogs changes of
             cardiac activity were not evident following stimulation;
             in some experiments there was a diminution in amplitude of
             the cardiac contractions. In bulbar and thalamic frog
             preparations, 69 percent of the frogs exhibited slowing of

Card 1/2

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Card 2/2

BEL'TYUKOV, V.I.; MOGENDOVICH, M.P.

"Human and animal physiology"by K.P. Golyshev and S.I. Gal'perin.
Reviewed by V.I. Bel'tiukov, M.R. Mogendovich. Fiziol. zhur.
44 no.3:268-269 Mr '58.   (MIRA 11:4)
        (PHYSIOLOGY) (GOLYSHEV, K.P.) (GAL'PERIN, S.I.)

BEL'TYUKOV, V.I.

Second conference of physiologists, biochemists and pharmacologists
of the Ural region. Fiziol.zhur. 45 no.1:119-122 Ja '59.
(MIRA 12:2)

(PHYSIOLOGY--CONGRESSES)
(PHARMACOLOGY--CONGRESSES)

BEL'TYUKOV, V.I., dotsent (Perm')

B.F. Verigo, first physiologist in the Urals. Trudy Perm. gos.
med. inst. 43:73-83 '63.   (MIRA 17:6)

BEL'TIUKOV, V.P.

Pneumatic speed control for carburetor engines. Avt.i trakt.prom.
no.8:9-10 Ag '56.   (MLRA 9:10)

1. Tomskiy politiekhnichesity institut.
(Governors (Machinery))   (Motortrucks--Engines)

Bel,Tyukov, U. P.

BEL'TYUKOV, V.P.

Analytical expression of external characteristics of internal
combustion engines. Izv.TPI 85:79-82 '57.   (MIRA 10:12)

1.Predstavleno prof. doktorom tekhn.nauk V.K. Nechayevym.
          (Automobiles—Engines)

BEL'TYUKOV, V.P., starshiy predodavatel'.

Determining twisting moment on the axle of baffle plates placed
in a gas flow.. Izv.vys.ucheb.zav.;mashinostr.^:no.2:98-107. '58.
                                        (MIRA 11:12)

1. Tomskiy politekhnicheskiy institut.
                (Pneumatic control)

BEL'TYUKOV, V.P., starshiy prepodavatel'

Using pneumodynamic speed control in carburetor engines. Izv. vys. ucheb. zav.; mashinostr. no.3/4:104-111 '58.   (MIRA 12:5)

1. Tomskiy politekhnicheskiy institut.
             (Pneumatic control)
             (Motortrucks--Engines)

AUTHOR: Bel'tyukov, V.P.   113-58-7-12/25

TITLE: The Analytical Determination of the Maximum Speed of the
              Motion of the Automobile (Analiticheskoye opredeleniye
              maksimal'noy skorosti dvizheniya avtomobilya)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 7, pp 25-26 (USSR)

ABSTRACT: The article discusses two formulae expressing the maximum
              speed of an automobile as established in 1956 by V.V. Bekman
              (Ref. 2). It is pointed out that his second (approximate)
              formula yields truer results for trucks, while the first
              (accurate) formula is more applicable to light cars.
              There are 2 graphs and 3 Soviet references.

ASSOCIATION: Tomskiy politekhnicheskiy institut (The Tomsk Polytechnic
              Institute)

              1. Automobiles--Velocity   2. Mathematics--Applications

Card 1/1

BEL'TYUKOV, V.P., Cand Tech Sci —(diss) "Study of pneumodynamic

regulators of the velocity of carburetor engines." Tomsk, 1959.

16 pp with graphs (Min of Higher Education USSR. Tomsk Order of

Labor Red Banner Polytech Inst im S.M. Kirov), 150 copies (KL,32-59,103)

-16-

BEL'TYUKOV, V.P., kand.tekhn.nauk,dotsent

Determination of the principal vector and principal moment of inertia of a link of a plane mechanism. Izv.vys.ucheb.zav.;mashinostr.no.1: 9-12 '63.

(MIRA 16:5)

1. Krasnoyarskiy politekhnicheskiy institut.
      (Mechanical movements)

BEL'TYUKOVA, A. A.

Bel'tyukova, A. A. "Experiments on the use of albucide for treatment of trachoma,"
Trudy Medinstituta (Izhev. gos. med. in-t), Vol. VII, 1949, p. 272-73

SO: U-3850, 15 June 53, (Letopsis 'Zhurnal 'nykh Statey, No. 5, 1949)

BEL'TYUKOVA, A.A.

BEL'TYUKOVA, A.A., dotsent

Streptomycin and PAS in treating introcular tuberculosis. Oft.
zhur. 12 no.2:106-110 '57.   (MIRA 10:11)

1. Iz kliniki glaznykh bolezney (zav. - prof. A.M.Rodigina)
L'vovskogo meditsinskogo instituta.
                (STREPTOMYCIN)   (SALICYLIC ACID)

                (EYE--TUBERCULOSIS)

BEL'TYUKOVA, A.A., dotsent; GOGINA, N.D., ordinator

Treatment of tuberculosis of the eyes with antibiotics and
with new drugs. Pat.,klin.i terap.tub. no.8:218-221 '58.

(MIRA 13:7)

1. Iz glaznoy kliniki (zav. - prof. A.M. Rodigina) L'vovskogo
meditsinskogo instituta.
    (EYE--TUBERCULOSIS)   (STREPTOMYCIN)
    (ISONICOTINIC ACID) (SALICYLIC ACID) (SANASINE)

BEL'TYUKOVA, A.A., dotsent

Tuberculin therapy in intraocular tuberculosis. Pat., klin.
i terap.tub. no.8:222-224 '58.   (MIRA 13:7)

1. Is glaznoy kliniki (zav. - prof. A.M. Rodigina) L'vovskogo
meditsinskogo instituta.
     (TUBERCULIN)   (EYE--TUBERCULOSIS)

BEL'TYUKOVA, K.G.

History of the study of plant bacteriosis during the Soviet regime
in the Ukraine. Mikrobiol.zhur. 9 no.2/3:12-21 '48.   (MLRA 9:12)

1. Z viddilu bakterioziv roslin (zav. - K.G.Bel'tyukova) Institutu
mikrobiologii imeni akad. D.K.Zabolotnogo Akademii nauk URSR.
        (UKRAINE--PLANT DISEASES)

BEL'TYUKOVA. K.G.

25805

Bakterial'nye bolezni porazhayushchie zernobobovye kul'tury v usloviyakh USSR. mikrobiol zhurnal. T. XI, vyp. 2. 1949. S. 3-21. -NA UKR. Yaz. Rezyume na Rus yaz, Rezyume na Rus, yaz.

SO: Letopis' No. 34

1. BEL'TYUKOVA, K. G.

2. USSR (600)

4. Kok-Saghyz

7. Effect of different methods of treating kok-saghyz seeds upon their germination and susceptibility to disease, Mikrobiol. zhur., 14, no. 1, 1952.

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

BEL'TYUKOVA, K.G.

Data on the investigation of bacterial diseases of kok-saghyz on the territory of the Ukrainian S.S.R. First report: On the diseases of different organs of kok-saghyz caused by B.necrosis Kal. Mikrobiol.zhur.14 no.2:5-19 '52.
(MLRA 6:11)

1. Z viddilu bakteriosiv roslin (zav. - K.H.Bel'tyukova) Institutu mikrobiologii im.akad. D.K.Zabolotnogo Akademii nauk URSR.
(Ukraine--Kok-saghyz--Diseases and pests) (Diseases and pests--Kok-saghyz--Ukraine)

BEL'TYUKOVA, K. G.

Development of the science on bacterioses of plants in the Ukraine.
Mikrobiol.zhur. 16 no.1:11-14 '54   (MLRA 8:4)

(PLANTS, diseases,
    bact., research in Russia)

BEL'TYUKOVA, K.G.

Adaptive variability of phytopathogenic bacteria. Mikrobiol. zhur.
17 no.2:41-55 '55   (MLRA 10:5)

1. Z Institutu mikrobiologii AN URSR
        (BACTERIA,
            phytogenic, adaptive variability, review) (Uk)

BEL'TYUKOVA, K.G.

Diagnosing bacterial infections of the bean from the external appearance of the plant. Mikrobiol. zhur. 17 no.2:62-66 '55 (MLRA 10:5)

1. Z Institutu mikrobiologii AN URSR
       (BEANS--DISEASES AND PESTS)

BEL'TYUKOVA, K.G.

Studies on the effect of bacterol on certain phytopathogenic bacteria.
Mikrobiol. zhur. 17 no.4:22-24 '55   (MLRA 10:5)

1. Z Institutu mikrobiologii AN URSR
        (ANTISEPTICS, effects,
            bacterol on phytopathogen. bact.) (Uk)

Bel'Tyukova, K.G.

BEL'TYUKOVA, K.G.; MATISHEVS'KA, M.S.

Results of experiments in treating clover and alfalfa seeds with silicate bacteria. Mikrobiol. zhur. 19 no.4:45-47 '57.

(MIRA 11:1)

1. Z Institutu mikrobiologii AN URSR.
        (BACTERIA, SILICATE)   (SEEDS)   (LEGUMES)

BEL'TYUKOVA, K.O. [Bel'tiukova, K.H.]; KULIKOVSKAYA, M.D. [Kulikovs'ka, M.D.]

Arenarin as an effective remedy in controlling bacterial cancer
and other tomato diseases and as a factor increasing their pro-
ductivity. Mikrobiol.zhur. 21 no.3:13-25 '59. (MIRA 12:10)

1. Z Institutu mikrobiologii AN URSR.
(ANTIBIOTICS)
(PLANTS dis)

BEL'TIYUKOVA, K. I.

Bel'tiyukova, K. I., Samostsvetova, E. A., and Lebedeva, O. P.
"Bacterial 'Ryaboukha' of Makhorka and Cigar Tobacco, and Its
Causal Agents," Biulleten' Vsesoiuznogo Nauchno-Issledovatel'-skikh
Instituta Tabachnoi i Makhorochnoi Promyshlennosti imeni A. I.
Mikoiana, no. 126, 1936. pp. 5-16. 69.9 K86

SO: SIRA S. 90-53, 15 DEC 1953

BEL'TYUKOVA, K. I,

"On the Specialization of Phytomonas tabaca Wolf and Foster on Certain Host Plants," Biulleten' Vsesoiuznogo Nauchno-Issledovatel'skogo Instituta Tabachnoi i Makhorochnoi Promyshlennosti imeni A. I. Mikoiana, no. 126, 1936, pp. 17-34. 69.9 K86

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

BEL'TIUYKOVA, K. I.

Bel'tiuykova, K. I. and Lebedeva, O. P. "Viability and Virulence
of Phytomonas tabaca Overwintering in Materials Providing the
Principal Sources of Infection," Biulleten' Vsesoiuznogo
Nauchno-Issledovatel'skikh Instituta Tabachnoi i Makhorochnoi
Promyshlennosti imeni A. I. Mikoiana, no126, 1936, pp. 35-49.
69.9 K86

SO: SIRA 90-53, 15 DEC 1953

BEL'TYUKOVA, K. I.

"Bacterial Wilt of Makhorka," Biulleten' Nauchno-Issledovatel'skogo Instituta Tabachnoi i Makhorochnoi Promyshlennosti imeni A. I. Mikoiana, no. 126, 1936, pp. 57-63. 69.9 K86

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

BC

a-4

PROCESSES AND PROPERTIES INDEX

Bacteriophagy in putrefaction of potatoes. K. I. BELTIUKOVA (Microbe Variability Conf., 1936, 433—449).—A lot of bacteriophages were isolated from rotting potatoes, from soil, and from cultures of certain plant saprophytes and pathogens. The pH limits of lysis of spore-forming bacteria are wider than for non-sporiferous bacteria. The phages are rapidly inactivated by sunlight. They withstand desiccation and storage at 30° for over 3 months, and retain their activity after 2 years in Gottinger broth.

R. T.

METALLURGICAL LITERATURE CLASSIFICATION

Influence of fertilizers upon the resistance of Nicotiana rustica to bacterial leaf spot. A. A. Popova and K. I. Bel'tyukova. Pre-oyuz. Nauch.-Issledovatel. Inst. Tabach. Makhorochn. Prom. No. 135, 19 (8, 1938). Physiologically acid fertilizers reduce the infection of "makhorka" on limestone soils and increase it on the chernozem soils. P alone increases the infection. K is the most effective fertilizer constituent in reducing infection. Nitrates are more efficient than ammonia sources of N in reducing infection.   J. S. Joffe

CA

11C

PROCESSES AND PROPERTIES INDEX

The effect of phytohormones on the changeability of microörganisms. N. G. Kholodnyi and K. I. Bel'tyuk. *Microbiology* (U. S. S. R.) 8, No. 1, 7–17(1939); *Khim. Referat. Zhur.* 1939, No. 11, 43.—The development of a no. of microörganisms (*Bact. solanisorum, Bact. curvum, Bact. phytophthorum, Bact. subtilis, Bact. mycoides, Bact. fluorescens liquefaciens, Azobacter chroococcum, Saccharomyces cerevisiae*) in nutritive media with addns. of sterile solns. of β-indolylacetic acid (0.01% and lower) as well as exts. from the seeds and from some organs (tubers, stems) of higher plants (potatoes, corn, wheat, tomatoes) was investigated. In most cases under the influence of the added solns. an unusual growth of microörganisms was observed. This growth led to the formation of tissues of irregular form and size grouped into colonies of unusual type and structure. In a no. of cases the changes were transmitted to several succeeding generations of the plants. Cases of arrests of the increase of growth of microörganisms and of their physiol. functions (the hindering of yeast fermentation) were observed.

W. R. Henn

Microbiol Inst, AS USSR

A S M - S L A METALLURGICAL LITERATURE CLASSIFICATION

The antagonistic and stimulating effects of B. mesentericus on Bact. malvacearum, the agent of cotton gummosis. K. I. Bel'tyukova. *Mikrobiol. Zhur., Akad. Nauk U. R. S. R.* 7, No. 1-2, 209-22 (in English, 222) (1940).—The cause of the antagonistic action is the toxic substance excreted by *B. mesentericus.* This substance passes through filters and is thermostable and specific. Its antagonistic effect depends considerably on its accumulation in the substrate. At lower concns. a stimulating effect (synergy) on *Bact. malvacearum* is observed. Lab. expts. on the application of cultures of *B. mesentericus* to the disinfection of cotton seeds affected with gummosis showed a considerable lowering of the percentage of affection of the cotyledons with gummosis when there was sufficient accumulation of the toxic substance. Small doses stimulated the disease. Twelve references.

W. R. Henn

BEL'TYUKOVA, K. I.

"Chemico-thermic Method of Treating Cotton Seeds," Mikrobiologia, vol. 15, no. 2, 1946
pp. 153-158.   448.3 M582

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

BEL'TYUKOVA, K.I.

"Bacterial Symbionts of the Cicada Philaenus Spumarius," Mikrobiol.   15,
No. 6, 1946.

Inst. Microbiol. and Epidemiol im. Zabolotnyy, Kiev.

BEL'TYUKOVA, K. I.

BEL'TYUKOVA, K. I. "On the relationship among certain fluorescent phytopathogenic bacteria", Mikrobiol. zhurnal, Vol. X, No. 1 1948, p. 18-26 (In Ukranian, resume in Russian), - Bibliog: 7 items.

SO: U-3042, 11 March 53, (Lopotis 'Zhurnal 'nykh Statey, No. 7 1949).

BEL'TYUKOVA, K. I. and BAKALINSKAYA, Ye. A.

"Results of an Investigation of Bacterioses Infecting Grain Crops in the Ukrainian SSR, Report II, Bacterial Mottling of Sorghum", Mikrobiol Zhur, Kiev, Vol. 12, Issue 1, pp 3-10, 1950.

1. BEL'TYUKOVA, K.I.

2. USSR (600)

7. "Bacterial Diseases Which Infect Grain-Legume Crops in Ukrainian SSR Conditions.
    Report III. Bacteriosis of the Pea", Mikrobiolog. Zhurnal, Vol 12, No 2,
    1950, pp47-58

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

BEL'TIUKOVA, K.I.

Bakterial'nye bolezni kauchukono-
sov (Bacterial diseases of rubber plants). Kiev,
Izd. Akad. nauk USSR, 1952. 73 p.

SO: Monthly List of Russian Accessions, Vol. 6, No. 1, April 1953
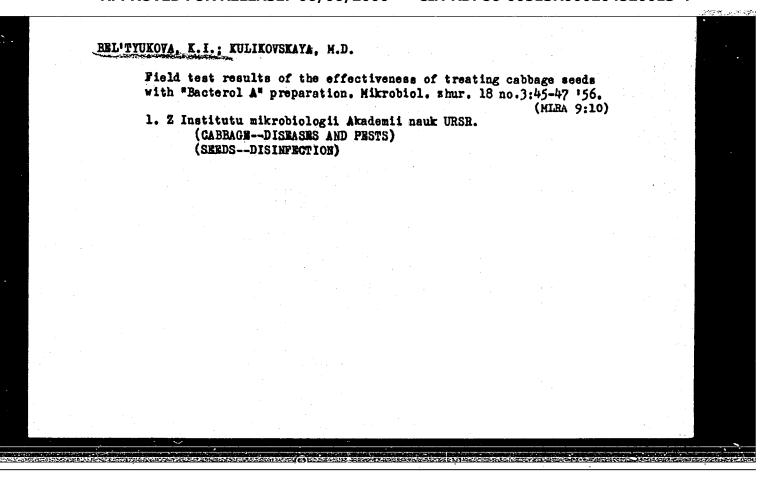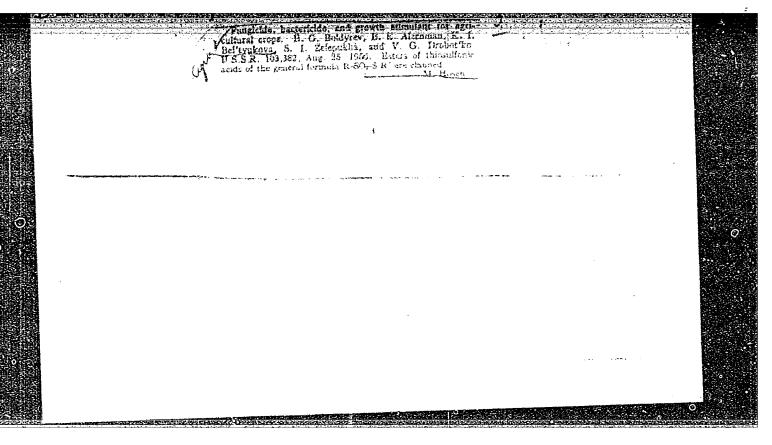
BEL'TYAKOVA, K.I.

BEL'TYAKOVA, K   I

Bakterial'nyye bolezni mnogoletnikh bobovykh
trav (bacterial diseases of perennial leguminous grasses)
Kiyev, izd-vo akademii nauk Ukrainskoy SSR, 1954.

79 P. illus., tables.

At head of T. -P.: Akademiya nauk Ukrainskoy SSR.
Institut Mikrobiologii.

"Literatura": P. 76-(80)

BEL'TYUKOVA, K.I.; KULIKOVSKAYA, M.D.

Field test results of the effectiveness of treating cabbage seeds
with "Bacterol A" preparation. Mikrobiol. zhur. 18 no.3:45-47 '56.

(MLRA 9:10)

1. Z Institutu mikrobiologii Akademii nauk URSR.
     (CABBAGE--DISEASES AND PESTS)
     (SEEDS--DISINFECTION)

Fungicide, bactericide, and growth stimulant for agri-
cultural crops. B. G. Boldyrev, L. E. Alferman, L. I.
Bel'gakova, S. I. Zelepukha, and V. G. Drobot'ko.
U.S.S.R. 103,382, Aug. 25 1956. Esters of thiosulfonic
acids of the general formula R-SO₂-S R' are claimed.
                                                M. Hrosh

Bel'tyukova, K.I.

AUTHORS: Bel'tyukova, K. I., and Boldyrev, B. G.   20-3-40/52

TITLE: Ethers of Thiosulfoacids as New Means of Combating Bacterial
              Plant Diseases (Efiry tiosul'fokislot - novyye sredstva
              dlya bor'by s bakterial'nymi boleznyami rasteniy).

ABSTRACT: The second author undertook an extensive synthetical work
              for the research of new bactericidal action based on the
              efficiency of two others: "Pseudoallizin" and ethane-
              thiosulphonic acid-ethyl ether against bacteria (re-
              ference 4). According to their structure the alkyl ethers
              (VII, VIII) of the alkan- and aren-thiosulphonic acids are
              closest to the allizin. The second author has synthesized
              80 such alkyl ethers (reference 4). Their antibacterial
              properties proved to be versatile: They have a bacterio-
              static effect (as required fungistatic and protistozid) upon
              gram-positive and -negative as well as acid proof bacteria,
              various fungi, protozoe and others. Their antibacterial
              properties vary within relatively narrow limits according
              to their structure. Most active are the isopropyl- and
              isobutyl ethers of the cited acids. Present work was carried
Card 1/4   out in order to find out about the effect of the ethers

Ethers of Thiosulfoacids as New Means of Combating   20-3-40/52
Bacterial Plant Diseases

Card 2/4

VII and VIII upon various kinds of bacteria. 40 different
strains of 22 phytopathogene bacteria (Tab. 1) were examined.
It was established that all ethers VII and VIII act
bacteriostatic upon all strains, and only rarely show no
bacteria-killing effect. Alkyl ethers VII of the cited acids
are most effective against the bactericidal action of plant
diseases of the species Xanthomonas. A certain tendency of an
increase of the resistance against these substances showed
the phytobacteria of the species Corynebacterium, and more
resistant are the kinds of the species Pseudomonas and
Erwinia (Fig. 1). Some ethers, nevertheless, were effective
against most resistant bacteria also in dilutions of
1 : 200 000 - 1 : 500 000. Alkyl ethers (VIII) of the
benzene-thiosulphonic acid are as much active against
Xanthomonas, as the ethers VII, but lacks behind as regards
the effect upon Corynebacterium and even more so as regards
Pseudomonas and Erwinia. Some alkyl ethers VIII of the same
thiosulphonic acid were highly active against Xanthomonas
and were effective even in a dilution of 1 : 1000 000, so
that they exceeded all other ethers. The introduction of

Ethers of Thiosulfoacids as New Means of Combating   20-3-40/52

Bacterial Plant Diseases

X-substituents into the p-position to the thio-ether-group
of the benzene-thiosulphonic acid lessens the activity; to
a small extent this holds for the groups: $- OCH_3$ $-Cl$ and
NH_2, to a larger extent for the groups: $-NO_2$ and $NHCOOCH_3$.

The discussed preparations are harmless under certain
conditions and at adequate application for the tissues of
seeds of more-years old leguminous green fodder, of kinds
of vegetables and corn. On the contrary, they improved the
germinating capacity, raised the weight and the size of the
germs, and reduced the number of infected germs. The results
of the experiments on fields with the treatment of seeds of
various agrilculturally useful plants (cabbage, lucern,
tomatos) are summarized in the tables 3 - 5.
There are 8 figures, 5 tables, and 7 references,
6 of which are Slavic.

ASSOCIATION: Institute for Microbiology of the AN of the Ukrainian SSR.
L'vov Polytechnical Institute   (Institut mikrobiologii
Akademii nauk USSR, L'vovskiy politekhnicheskiy institut).

Card 3/4

Ethers of Thiosulfoacids as New Means of Combating   20-3-40/52
Bacterial Plant Diseases

PRESENTED: January 2, 1957, by S. I. Vol'fkovich, Academician

SUBMITTED: October 27, 1956

AVAILABLE: Library of Congress

Card 4/4

BEL'TYUKOVA, K. I., Doc Biol Sci-- (diss) "Bacterial diseases of grain-legime crops, bean and pea." Kiev, 1958. 24 pp (Acad Sci Ukr SSR, Department of Biol Sci), 100 copies. List of author's works, pp,23-24 (18 titles) (KL, 18-58, 97)

-31-

BEL'TYUKOVA, K. I.

25-2-13/43

AUTHORS: Bel'tyukova, K.I. and Rashba Ye.Ya., Scientific Workers of
the Institute of Microbiology, AS Ukrainian SSR

TITLE: Useful Properties of Everlasting (Poleznyye svoystva
bessmertnika)

PERIODICAL: Nauka i Zhizn', 1958, # 2, pp 45-46 (USSR)

ABSTRACT: A group of co-workers of the Institute of Microbiology
of the Ukrainian SSR Academy of Sciences, engaged in research
on Ukrainian flora, disclosed that everlasting
grown on sands contains two substances having antibacterial
properties. One of them is the color of the plant –
helichrysine; the other is a resinous substance called are-
narine, which is of great importance in controlling the bac-
teria of agricultural plants. Arenarine, for instance, proved
to be very effective in destroying tomato cancer without being
detrimental to the tomato plant itself. Also, it exerts a
favorable influence on the germination of tomato seeds. In
all cases, whether the tomato plants were sprinkled with
a solution of arenarine (1:10,000) or the seeds were treated
with this antibiotic before seeding, the yields proved to be
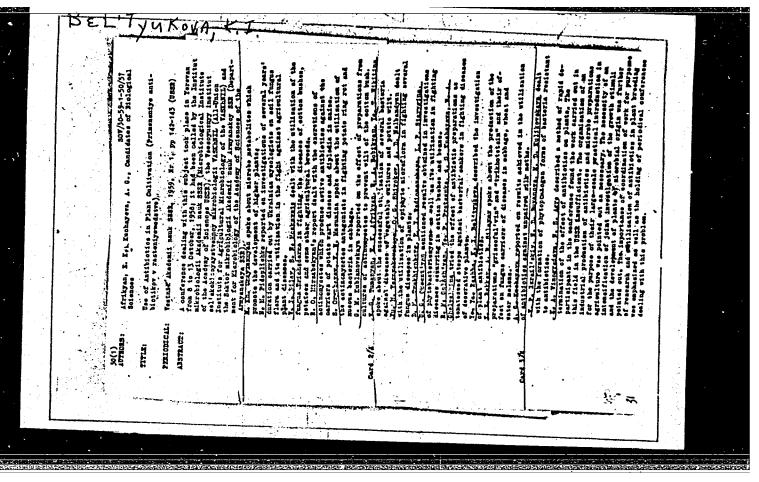
Card 1/2

Useful Properties of Everlasting   25-2-13/43

      by 11-26% higher than without applying arenarine.

ASSOCIATION: Institute mikrobiologii AN USSR (Institute of Microbiology,
         AS Ukrainian SSR)

AVAILABLE: Library of Congress

Card 2/2

BEL'TYUKOVA, K.I.

SOV/70-59-1-50/57

30(1)
AUTHORS: Afrikyan, E. K., Kucharyan, A. G., Candidate of Biological
             Sciences

TITLE: Use of Antibiotics in Plant Cultivation (Primeneniye anti-
             biotikov v rasteniyevodstve)

PERIODICAL: Vestnik Akademii nauk SSSR, 1959, Nr 1, pp 142-143 (USSR)

ABSTRACT: A conference dealing with this subject took place in Yerevan
             from 8 to 13 October, 1958. It had been called by the Institut
             mikrobiologii Akademii nauk SSSR (Microbiological Institute
             of the Academy of Sciences USSR), the Vsesoyuznyy institut
             sel'skokhozyaystvennoy Mikrobiologii VASKhNIL (All-Union
             Institute for Agricultural Microbiology of the VASKhNIL) and
             the Sektor mikrobiologii Akademii nauk Armyanskoy SSR (Depart-
             ment for Microbiology of the Academy of Sciences of the
             Armyanskaya SSR).

(text continues, largely illegible)

Card 1/4
Card 2/4

51

BEL'TYUKOVA, K.I. [Bel'tiukova, K.H.]

Prospects and objectives in research on bacterial diseases of plants during the coming seven-year plan. Mikrobiol.zhur. 21 no.2:6-9 '59.

(MIRA 12:9)

(PLANT DISEASES)

BEL'TYUKOVA, K.I. [Bel'tiukova, K.H.]; KULIKOVSKAYA, M.D. [Kulykovs'ka, M.D.];
GVOZDYAK, R.I. [Hvozdiak, R.I.]

Spraying tomatoes with arenarin. Mikrobiol.zhur. 21 no.4:31-34
'59.
(MIRA 12:11)
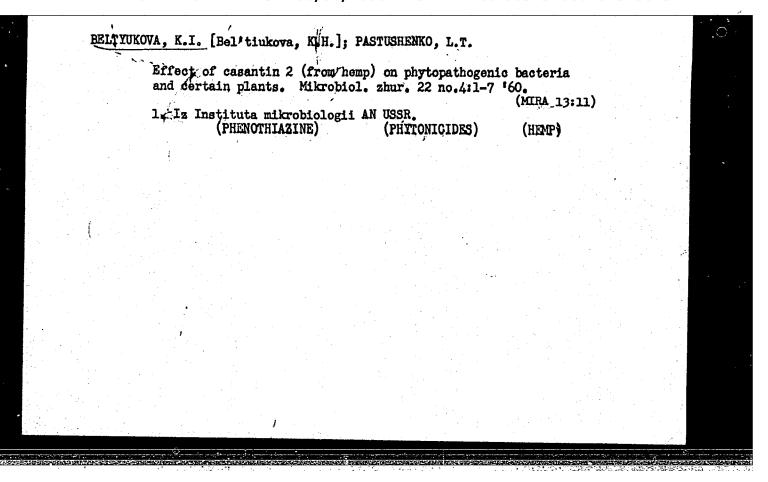
1. Iz Instituta mikrobiologii AN USSR.
              (ANTIBIOTICS)
              (PLANTS EDIBLE dis)

IZRAIL'SKIY, V.P., prof.; doktor biolog.nauk; SHUSTOVA, L.N., kand.med.
nauk; GORLENKO, M.V., doktor biolog.nauk; MURAV'YEV, V.P.;
BEREZOVA, Ye.F., doktor biolog.nauk; SUDAKOVA, L.V., mikrobiolog;
GRUSHEVOY, S.Ye., doktor sel'skokhoz.nauk; NEMLIYENKO, F.Ye.,
doktor biolog.nauk; BEL'TYUKOVA, K.I., doktor biolog.nauk; STARYGINA,
L.P., kand.biolog.nauk; PERSHINA, Z.G., kand.biolog.nauk; ART'YEM'YEVA,
Z.S., mikrobiolog; NOVIKOVA, N.S., kand.biolog.nauk; OSNITSKAYA, Ye.A.,
fitopatolog; YASHNOVA, N.V., fitopatolog-mikrobiolog; MIKZABEK'YAN,
R.O., kand.biolog.nauk; TETYUREVA, I.V., red.; PEVZNER, V.I., tekhn.red.

[Bacterial diseases of plants] Bakterial'nye bolezni rastenii. Izd.2.,
perer. i dop. Moskva, Gos.izd-vo selkhoz.lit-ry, 1960. 467 p.
(MIRA 13:7)

1. Chlen-korrespondent Ukrainskoy AN (for Murav'yev).
   (Bacteria, Phytopathogenic)   (Plant diseases)

BELTYUKOVA, K.I. [Bel'tiukova, K.H.]; PASTUSHENKO, L.T.

Effect of casantin 2 (from hemp) on phytopathogenic bacteria
and certain plants. Mikrobiol. zhur. 22 no.4:1-7 '60.
(MIRA 13:11)

1. Iz Instituta mikrobiologii AN USSR.
(PHENOTHIAZINE)   (PHYTONICIDES)   (HEMP)

BELTYUKOVA, Klavdiya Ignat'yevna [Bel'tiukova, K.H.]; DROBOT'KO, V.G.
        [Drobot'ko, V.H.], akad., otv. red.; KOVAL', V.A., red. izd-va;
        SKLYAROVA, V.E., tekhn. red.

        [Bacterial diseases in kidney beans] Bakterial'ni khvoroby kvasoli.
        Kyiv, Vyd-vo Akad.nauk URSR, 1961. 203 p.   (MIRA 14:12)

        1. Akademiya nauk USSR (for Drobot'ko).
                (Beans--Diseases and pests)

BEL'TYUKOVA, K.I. [Bel'tiukova, K.H.]

    All-Union conference on stalf rot of sorghum and corn. Mikro-
biol.zhur. 24 no.2:70-71 '62.   (MIRA 15:12)
                 (CORN (MAIZE)—DISEASES AND PESTS)
                (SORGHUM—DISEASES AND PESTS)

BEL'TYUKOVA, Klavdiya Ignat'yevna; RASHBA, Yelena Yakovlevna;
KULIKOVSKAYA, Mariya Dmitriyevna; MATYSHEVSKAYA, Mariya
Stepanovna; GVOZDYAK, Rostislav Il'ich; DROBOT'KO, V.G.,
akademik, otv. red.; SKUTSKAYA, M.P., red.izd-va;
KADASHEVICH, O.A., tekhn. red.

[Arenarin and its use in plant growing] Arenarin i ego pri-
menenie v rastenievodstve. Kiev, Izd-vo AN USSR, 1963. 1
163 p.   (MIRA 16:8)
              (Arenarin) (Plant diseases)

BEL'TYUKOVA, K.I. [Bel'tiukova, K.H.]; MATYSHEVSKAYA, M.S.
[Matyshevs'ka, M.S.]

Effect of gibberellin on the resistance of plants to diseases.
Mikrobiol. zhur. 25 no.3:64-70 '63.   (MIRA 17:1)

1. Institut mikrobiologii AN UkrSSR.

DROBOT'KO, V.G., otv. red.; AYZENMAN, B.Ye., red.;MANDRIK,T.P.,red.;
    BEL'TYUKOVA, K.I., red.; ZELEPUKHA, S.I., red.; NEGRASH,
    A.K., red.; KULIKOVSKAYA, M.D., red.; MATYSHEVSKAYA, M.S,,
    red.; POCHINOK, P.Ya., red.; SHVAYGER, M.O., red.;
    KUZNETSOVA, A.S., red.

    [Phytoncides in the national economy] Fitontsidy v narodnom
    khoziaistve. Kiev, Naukova dumka, 1964. 350 p.
                                            (MIRA 17:11)
    1. Akademiya nauk URSR, Kiev. Instytut mikrobiologii i vi-
    rusologii. 2. Institut mikrobiologii AN Ukr.SSR (for
    Zelepukha, Pochinok, Negrash, Kulikovskaya).

BEL'TYUKOVA, K.I. [Bel'tiukova, K.H.]; MATYSHEVSKAYA, M.S. [Matyshevs'ka, M.S.]

Use of microelements in controlling alfalfa and clover bacteriosis.
Mikrobiol.zhur. 26 no.4:66-70 '64.

(MIRA 18:10)

1. Institut mikrobiologii i virusologii AN UkrSSR.

BEL'TYUKOVA, K.I. [Bel'tiukova, K.H.]; KOROLEVA, I.B. [Korol'ova, I.B.];
SAMOYLENKO, V.I.

Use of Trichoderma 5320 (Trichoderma koningi Oud.) against Pseudomonas
lachrymans (Erw. Smith A.Bryan) Grssner, causative agent of the angular
leaf spot of cucumbers. Mikrobiol. zhur. 26 no.5:8-11 '64. (MIRA 18:7)

1. Institut mikrobiologii i vurusologii AN UkrSSR.

BEL'TYUKOVA, K.I. [Bel'tiukova, K.H.]; GALINSKAYA, M.S. [Halyns'ka, M.S.]

Effect of preplanting treatment of tomato seeds with arenarin on the increase in plant resistance to Corynebacterium michiganense, a causative agent of bacterial cancer. Mikrobiol. zhur. 27 no.2:48-52 '65.   (MIRA 18:5)

1. Institut virusologii i mikrobiologii AN UkrSSR.

BEL'TYUKOVA, K. N.

"Data on the Study of Gnats (Simuliidae, Diptera) of the Ural Foothills."
Cand Biol Sci, Molotov U Molotov, 1953. (RZhBiol, No 8, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR
Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

BEL'TYUKOVA, K.N.; BEY-BIYENKO, I.G.; BUYANOVA, O.F.; DETIHOVA, T.S.;
    RIRBERG, M.S.; SHLENOVA, M.F.

Preliminary report on the development of a system of measures for
the control of blood-sucking insects at the construction site of the
Krasnoyarsk Hydroelectric Power Station. Med.paraz. i paraz.bol. 27
no.1:20-26 Ja-F '58.   (MIRA 11:4)

1. Iz sektora entomologii Instituta malyarii, meditsinskoy parazito-
logii i gel'matologii Ministerstva zdravookhraneniya SSSR (dir. insti-
tuta - prof. P.G.Sergiyev, zav. sektorom - prof. V.N.Beklemishev).
Permskogo gosudarstvennogo universiteta i iz Krasnoyarskoy krayevoy
sanitarno-epidemiologicheskoy stantsii (glavnyy vrach S.I.Nozik)
        (INSECTS,
            control measures in rural construction zones, evaluation
            (Rus))

DETINOVA, T.S.; BELETSKIKH, K.N.

Repeated gonotrophic cycles in black flies (Simulidae) according
to observations in Krasnoyarsk Territory [with summary in English].
Med.paraz.i paraz.bol. 27 no.6:686-688 N-D '58.   (MIRA 12:2)

1. Iz Instituta malyarii meditsinskoy parazitologii i gel'minto-
logii Ministerstva zdravookhraneniya SSSR (dir. instituta - prof.
P.G. Sergiyev, zav. otdelom - prof. V.N. Beklemishev) i kafedry
zoologii bespozvonochnykh Permskogo gosudarstvennogo universiteta
(zav. kafedroy Yu. G. Mitrofanova).
          (FLIES,
             Simulidae, repeated gonotrophic cycles (Rus))

SHIPITSINA, N.K.; DETINOVA, T.S.; SHLENOVA, M.F.; BEL'TYUKOVA, K.N.;
    BUYANOVA, O.F.; BEY-BUYENKO, I.G.

Protection of Krasnoyarsk Hydroelectric Power Station construction
workers from biting midges. Med.paraz. i paraz.bol. 28 no.4:456-463
Jl-Ag '59.   (MIRA 12:12)

1. Iz sektora entomologii Instituta malyarii, meditsinskoy parazito-
logii i gel'mintologii Ministerstva zdravookhraneniya SSSR (dir. insti-
tuta - prof. P.G. Sergiyev, zav. sektorom - prof. V.N. Beklemishev) i
is Permskogo gosudarstvennogo universiteta.
            (DIPTERA)

L   45333-66   EWT(m)/EWP(t)/EII   IJP(c)   JD/JG

ACC NR: AP6024290   SOURCE CODE: UR/0075/66/021/007/0864/0867

AUTHOR: Karpenko, L. I. ; Fadeyeva, L. A. ; Beltyukova, S. V.

ORG: Institute of General and Inorganic Chemistry, AN UkrSSR, Laboratories in Odessa (Institut obshchey i neorganicheskoy khimii AN UkrSSR, Laboratorii v Odesse)

TITLE: Spark method for spectrographic determination of rare earths in solution

SOURCE: Zhurnal analiticheskoy khimii, v. 21, no. 7, 1966, 864-867

TOPIC TAGS: spectrographic analysis, chromatography, rare earth

ABSTRACT: A spectrographic method has been suggested for the direct analysis of solutions obtained during chromatographic separation of rare earths. A high-voltage condensed spark is used as an excitation source. The method permits the determination of Eu, Gd, Tb, Dy, Ho, Er, Tu, Yb, Lu, and Y in solution with a sensitivity of hundredths and thousandths parts of one milligram in 1 milliliter.

Card 1/2   UDC: 543.42

I. 45333-66

ACC NR: AP6024290

The standard experimental error is 6—8%. The method is accurate, universal and fast, permitting 100 determinations in 15—18 hours. Orig. art. has: 3 figures and 2 tables. [Based on authors' abstract]   [KP]

SUB CODE: 20/ SUBM DATE: 02Dec64/ ORIG REF: 009/

Card 2/2

VASILESCU, M.; BELU, A., fizician-cercetator; CONSTANTINESCU, Al.,
ing.-cercetator principal; HEITNER, A., chimist-cercetator

  Studies and research on rock mechanics with the aid cf
  photoelasticity. Studii geotehn fund constr hidro 6 3-44
  '63

  1. Seful laboratorului de modelare a constructiilor
    hidrotehnice (for Vasilescu).

LETU, N., ing.; POBORAN, V., ing.; HIRIAN, C., ing.; FAUR, Elvira, ing.;
VASILESCU, M., ing. ; CONSTANTINESCU, Al.; DUMITRU, M.; BELU, A.,fizician

Study on the timbering, choice of the most advantageous section
and the profile shape of the preliminary workings of seam 3 and
of the top drifts of the thin seams in the Jiu Valley mines.
Pt. 2. Rev min 15 no.1:12-21 Ja '64.

1. Institute of Hydrotechnic Research, Bucharest (for Vasilescu,
Constantinescu, Dumitru, Belu).

VASILESCU, M.; BELU, A.; CONSTANTINESCU, Al.; HEITNER, A.

Photoelastic studies on the behavior of the earth roof of
a gallery of water delivery under pressure. Studii cerc
mec apl 16 [i.e. 15] no.3:771-785 '64.

1. Institute of Hydrotechnic Studies and Research (for Heitner).
Submitted October 3, 1963.

BELU, C., ing.

Land organization. Rev geodezie 8 no.4,42,46 '64.

1. O.R.P.C.T.-Arges.

BELU, Gh.M., candidat in stiinte economice

Publication of the works of the First Conference on Statistics,
useful initiative for the development of statistic science in
Rumania. Probleme econ 16 no.3:129-134 Mr '63.

BELU, Gh., candidat in stiinte economice

"Industrial statistics" edited by [membru corespondent al Academiei
R.P.R.] Manea Manescu, [candidat in stiinte economice] Constantin
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