

AKHVERDIYEV, B.A., Cand Phys Math Sci -- (diss) "Study of  
certain physical properties of petroleum fractions of the  
~~Bakinsky~~ <sup>Baku</sup> deposit." Baku, Pub House of Azerbaydzhan Pedagogical  
Inst, 1959, 16 pp with graphs (Min of Education AzSSR.  
Azerbaydzhan State Pedagogical Inst im V.I. Lenin) 150 copies  
(KI, 34-59, 110)

ABASZADE, A.G. ; AKHVERDIYEV, B.A. ; AMIRASLANOV, A.M. ; BAGIRZADE, M.M.

Studying the thermomolecular properties of certain esterans.  
Dokl.AN Azerb.SSR 16 no.9:837-840 '60. (MIRA13:12)

1. Azerbaydzhanskiy gosudarstvennyy pedagogicheskiy institut.  
(Liquids--Thermal properties) (Viscosity)

ABASZADE, A.K.; AMIRASLANOV, A.M.; AKHVERDIYEV, B.A.; BAGIRZADE, M.M.

Investigating the thermal molecular properties of some new ether  
preparations. Dokl.AN Azerb.SSR 17 no.11:1017-1022 '61.  
(MIRA 15:2)

(Ethers---Thermal properties)

AKHVERDIYEV, G.G.

Two cases of echinococcosis of the spleen. Azerb. med. zhur.  
no.10:64-66 0 '61. (MIRA 15:6)

(SPLEEN--HYDATIDS)

AKHVERDIYEV, G.I.; TRIFEL', M.S.

Protecting the underground utilities of cities from corrosion.  
Gaz. prom. 8 no.2:43-46 '63. (MIRA 17:8)

BAYASANOV, D.B.; AKHVERDIYEV, G.I.

Remote control gauge for measuring the difference in the "pipe-ground" potentials in case of cathodic protection of underground structures. Gaz. delo no.9:17-19 '64.

(MIRA 17:11)

1. Azerbaydzhanskiy politekhnicheskiy institut.

ZEYNALOV, M.M.; AKHVERDIYEV, N.T.

Some characteristics of the Astrakhanka mud volcanoes. Azerb.  
nefti. khoz. 40 no. 3:11-13 Mr '61. (MIRA 14:5)  
(Kobystan--Mud volcanoes)

AKHVERDIYEV, N.T.

Fracturing in carbonate rocks of Upper Cretaceous sediments in  
the Pirsagatchay-Tudarchay interfluvium (northern Kobystan).  
Azerb.neft.khoz. 41 no.3:5-7 Ag '62. (MIRA 1641)  
(Kobystan--Rocks, Carbonate)



ALI-ZADE, Ak.A.; AKHVERDIYEV, N.T.; KHALILOV, E.A.

Stratigraphy of Campanian sediments in the Kobystan oil- and gas-bearing region. Dokl. AN Azerb. SSR 20 no.2:33-37 '64. (MIRA 17:6)

1. Institut geologii AN AzerSSR.

AKHVERDIYEV, O.G.

Hemodynamics in aged persons. Azerb.med.zhur. 40 no.1:47-52  
Ja '63. (MIRA 16:3)  
(~~BLOOD-CIRCULATION~~) (GERIATRICS)

AKHVERDIYEV, O.G.

Influence of Baku weather on hemodynamics of practically healthy  
elderly and senile persons. Vop. geron. i geriat. 4:83-86 '65.  
(MIRA 18:5)

1. Otdel kardiologii Azerbaydzhanskogo IEKM AMN SSSR, Baku.

AKHVERDIYEV, O.G.

Changes in the cardiovascular system in elderly and senile  
persons. Azerb. med. zhur. 41 no.8:50-57 Ag '64.

(MIRA 18:11)

AKHVERDOV, A.A.; MIRZOYEVA, N.V.

Results of collecting, preserving, and planting wild herbaceous plants in the Botanical Garden of the Academy of Sciences of the Armenian S.S.R. Biul.Bot.sada [EriV,] no.8:37-45 '49. (MLRA 9:8)  
(Armenia--Plants--Collection and preservation)

USSR/Cultivated Plants - Ornamental.

H.

Abs Jour : Ref Zhur - Biol., No 10, 1958, 44395

Author : Akhverdov, A.A.

Inst : Botanical Garden AS Armenian SSR

Title : Data on the Biology of the Iris in the Flora of Armenia.

Orig Pub : Byul. Botan. sada AN ArmSSR, 1957, No 16, 5-11

Abstract : 14 species of iris grow in Armenia. They are divided into three groups according to their decorative and biological ecological peculiarities. 1. Highly decorative irises from the section *Oncocyclus*. 2. Decorative from the section *Apogon* and *Pogoniris*. 3. Less decorative from the section *Reticulata*. The article reports the results of the observations on the development of *Iris elegantissima* D. Sosn. in the Botanical Garden of the Academy of

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USSR/Cultivated Plants - Ornamental.

M.

Abs Jour : Ref Zhur - Biol., No 10, 1958, 44395

Sciences of the Armenian SSR. A description of the species is given. The locations of natural growth and the soils where these species were found are given. *I. elegantissima* develops better under cultured conditions than under natural conditions. Regular watering has the greatest effect on the improvement of the decorative qualities of this species. The conditions for its cultivation and propagation are described. -- N.S. Lebedeva

Card 2/2

AKHVERDOV, A.A.; MIRZOYEVA, N.V.

A case of anomaly in *Leontodon asper* Waldst. et Kit. Biul. Bot.  
Sada [Izv.] no.16:111-113 '57. (MIRA 10:9)  
(Abnormalities (Plants)) (Armenia--Leontodon)



AKHVERDOV, A.A.; MIRZOYEVA, N.V.

Duration of the virgin period, time of the first flowering and germination of wild species of the flora of Armenia in cultivation. Trudy Bot. inst. AN Arm. SSR 13:53-93 '62.

(MIRA 16:7)

(Armenia—Plant introduction)

AKHVERDOV, A.A.; MANAKYAN, V.A.

*Pseudovesicaria digitata* (C.A. Mey.) Rupr. on Mount Aragats  
in Armenia. Izv. AN Arm. SSR. Biol. nauki 16 no.4:85-91'63.  
(MIRA 16:6)

1. Botanicheskiy institut AN ArmSSR.  
(ARAGAYS, MOUNT—PSEUDOVESIGARIA)

AKHVERDOV, A.A.; MIRZOYEVA, N.V.

Behavior of Alpine plants transferred to the zone of the gravelly  
wormwood semideserts. Trudy Bot. inst. AN Arm.SSR 14:91-121 '64.  
(MIRA 18:3)

ALIYEV, R.K.; GAUZER, Ye.G.; IGONETS, G.Ya.; AKHVERDIYEV, S.M.

"Hepavit," a new vitamin-rich liver preparation, its raw materials  
and production. Izv.AN Azerb.SSR.Ser.biol.i med.nauk 3:95-100 '61.  
(MIRA 14:7)

(Liver extract)

AKHVERDOV, I., doktor tekhn. nauk; SHAPIRO, Ya., kand. tekhn. nauk;  
RUDITSER, R., inzh.

Manufacturing three-dimensional prefabricated room units by a  
method of concreting on a horizontal stand. Zhil. stroi. no.1:  
7-10 '64. (MIRA 18:11)

1. Chlen-korrespondent AN BSSR (for Akhverdov).

AKHVERDOV, I. N.

USSR/Engineering  
Concrete

Jun 48

"Submarine Concrete Pouring by the 'Ascending  
Solution' Method," G. Z. Lokhvitskiy and I. N.  
Akhverdov, Engineers, 2 pp

"Gidrotekh Stroi" No 6

Theoretical discussion of principles involved.

15/49156

1. AKHVERDOV, I. N.
2. USSR (600)
4. Concrete Construction
7. New method of placing concrete in massive structures. Stroi.prom. 30 no. 12, 1952

9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

~~AKHVERDOV, I.N., kandidat tekhnicheskikh nauk; GODZIYEV, H.S., kandidat tekhnicheskikh nauk; OVADOVSKIY, I.M., kandidat tekhnicheskikh nauk; KAUFMAN, B.N., kandidat tekhnicheskikh nauk, redaktor; ROSTOVTSSEVA, M.P., redaktor; PERSON, M.N., tekhnicheskiv redaktor~~

[Lightweight concrete] Legkii beton. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1955. 98 p. (MIRA 8;6)  
(Lightweight concrete)



~~AKHVERDOV~~, I.N., kandidat tekhnicheskikh nauk; OVADOVSKIY, I.M., kandidat tekhnicheskikh nauk; TUMANISHVILI, V.A., inzhener; POPOV, A.N., kandidat tekhnicheskikh nauk, nauchnyy redaktor; BEGAK, B.A., redaktor izdatel'stva; BOROVBNEV, N.K., tekhnicheskiy redaktor

[Prestressed reinforced concrete floor slabs in the building industry; manufacture and use] Napriazhenno armirovannye plity-nastily v stroitel'stve; izgotovlenie i primenenie. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 96 p. (MLRA 9:10)  
(Prestressed concrete)  
(Concrete slabs)

AKHVERDOV, I.N., kandidat tekhnicheskikh nauk.

Methods for constructing reinforced concrete pile foundations  
for electric transmission and communication lines. Stroi. prom.  
34 no.8:29-31 Ag '56. (MLRA 9:10)

(Electric lines--Poles)

AKHVERDOV, I.N., Doc Tech Sci -- (diss) "Problems of the General  
Theory <sup>of concrete</sup> ~~on Beton~~ in Connection with Its Structural and Technologi-  
cal Peculiarities." Mos, 1957. 30 pp. (Acad of <sup>Construction</sup> ~~Structure~~ and  
Architecture USSR, Sci <sup>Res</sup> ~~Inst~~ Inst of <sup>Concrete</sup> ~~Betone~~ and <sup>Reinforced</sup> ~~Manufacturing~~  
<sup>Concrete</sup> ~~Reinforced Betone~~ NIIZhB), 120 copies. ~~Bibliography: pp. 21-22.~~  
(KL, 7-58, 110)

*AKHVERDOV, I.N.*

AKHVERDOV, I.N.; kand.tekhn.nauk; OVADOVSKIY, I.M., kand.tekhn,nauk

Experience in manufacturing large-diameter high-pressure reinforced concrete conduits. Stroi.prom. 35 no.6:6-9 Je '57. (MIRA 10:10)

(Pipe, Concrete)

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S/097/60/000/009/001/008  
A053/A026

AUTHORS: Akhverdov, I. N., Doctor of Technical Sciences,  
Shalimo, M. A. Engineer

TITLE: Influence of Vibration and Ultrasonic Oscillation on the  
Structure Formation of Cement Stone

PERIODICAL: Beton i zhelezobeton, 1960, No. 9, pp. 403-408

TEXT: Strength and other properties of cement stones depend largely on the density of the set coagulation structure of the cement paste. Therefore vibration should be considered as a means of obtaining maximum binding capacity of the cement. The author describes the process, which results in a more finely dispersed and denser coagulated structure of the cement paste. The redistribution of water is followed by an additional contraction of the system "cement-water". This can be proved by the results of experiments, which show a change in the volumetric weight of cement stone under different water-cement ratios in the cement paste, after having been subjected to vibration for a duration of 40 minutes. As can be seen in case of a water-cement ratio  $W/C = 0.23$ , the additional contraction as compared with a water-

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Influence of Vibration and Ultrasonic Oscillation on the Structure Formation of Cement Stone

cement ratio  $W/C = 0.265$  (which is the normal density of cement paste) amounts to an increase in volumetric weight equal to 5.5%. Additional contraction of the cement paste volume during the phase of coagulating structural formation brings about an increase in strength of the cement stone. To determine this increase due to additional contraction of the cement paste, 4 sets of samples  $10 \times 10 \times 10$  cm were prepared, while two values of water-cement ratio were used. Contraction was achieved by means of vibration with different frequencies, but with equal periods of duration. With frequencies ranging from 116 - 3,300 the volumetric weight increases 1.05 times and the strength of the cement stone 1.45 - 1.50 times, as compared with the volumetric weight and strength of the control samples processed by vibration with a frequency of 46.5 cps. Similar results were also obtained from experiments conducted by Yu. Ya. Stayerman. Experiments tending to show the amounts of  $Ca(OH)_2$  discharged by cement paste, revealed that in the case of cement paste, processed by vibration, the discharge was more intense than in case of paste unprocessed by vibration. Results of all tests showed that

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the strength of cement stone during the different phases of hardening, after vibration processing of the cement paste, is greater than the strength of corresponding samples obtained by hydration of cement in the customary way without preliminary vibration treatment. It follows that the strength of cement stone is depending upon its density, which develops during the coagulation process and structure formation of the cement paste. Considerable interest is presented by the results of vibration by means of ultra-sound. The article describes the ultrasonic treatment applied to cement paste, enclosed in molds 2 x 2 x 2 cm by means of a concentrator with a soldered-on membrane; at 250 v the amplitude of the oscillation amounted to 20 - 60 mk with a frequency of 20,000-25,000 cps. Experiments with surface vibration revealed that the penetration depth of ultrasonic waves depends on the concentration of the hard phase in the cement paste: the smaller the water-cement ratio, the less deep is the penetration of the ultrasonic wave. To ascertain the increase in strength of cement stone resulting from ultrasonic treatment, a number of samples were processed with ultra-sound of 20,000 cps

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frequency for periods varying from 0 to 540 seconds. The results of this experiment revealed that 180 seconds proved to be the optimum period, past which there was no more increase of strength to be observed. The increase in volumetric weight and in strength of the cement stone, as achieved by mechanical means, equals the increase obtained by vibration, due to peptization of the flocculi of the hard phase and due to a more even redistribution of water in the cement paste. These processes are rendered more effective under the influence of ultra-sound and in consequence of dispersion of particles. The author concludes that the increase in strength of cement stone processed by means of high frequency or ultra-sound is due to additional contraction as well as to displacement of a certain amount of free water as a result of activation of physico-chemical processes in the course of coagulation and structure formation. The basic difference between vibration and ultra-sound treatment consists in the way in which additional contraction is obtained; in the first case it is in consequence of breaking up flocculi into separate grains without dispersion, which only takes place

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in the event of ultrasonic treatment. Vibration treatment contributes toward an increased strength of cement stone, especially when changing frequency from 46.5 to 116 cps. Ultra-sound gives greater strength, but the rate of increase in strength depends upon the method of processing the cement paste. There are 3 figures, 6 tables, 2 photographs and 5 references: 1 English, 1 French, 1 German and 3 Soviet.

Card 5/5

AKHVERDOV, Iosif Nikolayevich, doktor tekhn. nauk; SVECHIN, T.N.,  
nauchnyy red.; FEDOROVA, T.N., red. izd-va; GOL'BERG, T.M.,  
tekhn. red.

[Highly durable concrete; experimental and theoretical studies  
in the technology of concrete] Vysokoprochnyi beton; eksperi-  
mental'nye i teoreticheskie issledovaniia po tekhnologii betona.  
Moskva, Gos. izd-vo lit-ry po stroit., arkh. i stroit. ma-  
terialam, 1961. 161 p. (MIRA 15:3)

(Concrete)

AKHVERDOV, I.N., doktor tekhn.nauk; ITSKOVICH, S.M., inzh.

Method for tensile testing concrete by splitting samples. Bet. i  
zhel.-bet. no.1:19-23 Ja '61. (MIRA 14:2)  
(Concrete--Testing)

AKHVERDOV, I.N., doktor tekhn.nauk

New developments in the technology of reinforced-concrete centrifuged bell mouth pipes. Bet. i zhel.-bet no.5:195-200 My '61.  
(MIRA 14:6)

1. Chlen-korrespondent AN BSSR.  
(Pipe, Concrete)

AKHVERDOV, I.N., prof., doktor tekhn.nauk; SHAPIRO, Ya.V., inzh.

Technical and structural characteristics of concreting machines  
with a sliding vibratory press. Bet.1 zhel.-bet. 8 no.4:181-184  
Ap '62. (MIRA 15:5)

1. Chlen-korrespondent AN BSSR (for Akhverdov).  
(Vibrators)

S/058/63/000/002/069/070  
A160/A101

AUTHOR: Akhverdov, I. N.

TITLE: The present state and the prospective use of ultrasound in the technology of concrete

PERIODICAL: Referativnyy zhurnal, Fizika, no. 2, 1963, 62, abstract Zh390  
(In collection: "Ul'trazvuk v stroit. tekhn.", M., Gosstroyizdat, 1962, 9 - 17)

TEXT: Considered is the mechanism of the action of ultrasound and of the vibrations on the cement paste, leading to a strengthening of the cement. It is shown that the strengthening of the cement during the vibration treatment is attained due to a displacement of particles and an increase in the number of contacts between them. During a vibration treatment, the strength may increase up to 50% in a few minutes. The strengthening of the cement under the action of the ultrasound is explained by the effect of the latter on the physicochemical processes taking place in the cement during the hardening. Ultrasonic oscillations cause a dispersion of the solid phase resulting from the cavitation which

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depends on the presence of water in the cement paste, accelerate the dissolving process of the dispersed particles of the cement, and activate the coagulation as a result of a partial desolvation of the solid phase. It was established that a separation of particles takes place in the cement paste in the ultrasonic field, whereby larger particles accumulate at the displacement loop at the surface of the vibrator. In this zone, the strength of the cement rock attains 2,000 kg/cm<sup>2</sup>. At the displacement node where finer particles accumulate, the strength is 10 - 20 kg/cm<sup>2</sup>, and the strength of non-irradiated samples - 570 kg/cm<sup>2</sup>. Thus, it is shown that the fine-dispersion fraction of the cement does not possess binding properties and is an inert part of the cement rock, which decreases its strength. A description is given of the formation process of the crystallization structure of the cement rock, explaining the shrinkage and the change in the specific weight of the cement during the hardening. It is noted that ultrasonic oscillations do not exclude the common vibration technique used during the laying of the cement mixture.

I. Kanevskiy

[Abstracter's note: Complete translation]

Card 2/2

AKHVERDOV, I.N.; YAGOVDIK, N.K.

Effect of high temperatures on the physicomachanical properties of  
cement. Inzh.-fiz. zhur. 7 no.8:108-113 Ag '64. (MIRA 17:10)

1. Belorusskiy politekhnicheskii institut, Minsk.



AKHVERDOV, I.N.; ITSKOVICH, S.M.

Resistance of concrete to biaxial stretching. Dokl. AN BSSR 8  
no. 1:44-46 Ja '64. (MIRA 17:5)

1. Nauchno-issledovatel'skiy institut stroitel'stva i arkhi-  
tektury Gosstroya BSSR.

AKHVERDOV, I.N.; KOVALEV, P.Ya.

Theoretical principles of the electric conductivity of concrete.  
Dokl. AN BSSR 8 no.7:447-451 '64. (MIRA 17:10)

1. Institut stroitel'stva i arkhitektury Gosstroya BSSR.

AKHVERDOV, I.N.; BONDAR<sup>1</sup>, V.N.

Effect of structural and technological factors on the permeability of  
concrete. Dokl. AN BSSR 8 no.9:584-586 S '64.

(MIRA 17:12)

AKHVERDOV, I.N.; LUKSHA, L.K.

On the theory of the strength of brittle bodies. Dokl. AN BSSR  
9 no.2:82-85 F '65. (MIRA 18:5)

1. Institut stroitel'stva i arkhitektury Gosstroya BSSR.

SHIFRIN, D.L.; AKHVERDOVA, G.A.

Forged and welded wedge plugs. Avtom. svar. 16 no.4:86 Ap '63.  
(MIRA 16'4)

(Machinery--Welding)

ALCHUDZHAN, A.A.; MANTIKYAN, M.A.; AKHVERDYAN, M.M.

Mixed adsorption hydrogenation catalysts. Part 6; Mixed  
Pd-Ni catalysts on silica gel. Izv. AN Arm. SSR. Khim.  
nauki 18 no.3:244-247 '65. (MIRA 18:11)

1. Yerevanskiy politekhnicheskiy institut imeni Karla Marksa,  
kafedra obshchey i analiticheskoy khimii. Submitted June 6,  
1964.

FILATOV, A.N., prof. (Leningrad, ul. Nekrasova, d. 60, kv. 131); LITMANOVICH,  
K. Yu., kand. med. nauk; AKHVERDYAN, R.A.

Methodology of intimo-thrombectomy in thromboses of arteries of  
the lower extremities. Vestn. khir. Grekov. 90 no. 4:27-34  
Ap'63 (MIRA 17:2)

1. Iz khirurgicheskoy kliniki (zav. - prof. A.N. Filatov) Len-  
ingradskogo ordena Trudovogo Krasnogo Znameni nauchno-issledo-  
vatel'skogo instituta perelivaniya krovi.

AKHVERDYAN, R. A.

Dilatation of an artery by surgical means. Zhur. eksp. i klin.  
med. 4 no.2:67-77 '54. (MIRA 17:8)

1. Khirurgicheskaya klinika Leningradskogo instituta pereli-  
vaniya krovi i Gospital'naya khirurgicheskaya klinika  
Yerevanskogo meditsinskogo instituta.



AKHVERDYAN, S.T.

Digestion and metabolism in piglets using different kinds of food.  
Izv. AN Arm. SSR. Biol. nauki 17 no.2:69-76 F '64.

(MIRA 17:8)

1. Kafedra kormleniya sel'skokhozyaystvennykh zhiivotnykh  
Yerevanskogo zooveterinarnogo instituta.

AKHVLEDIANI, D.G.

Find of *Globotruncana gansseri* Bolli in Georgia. *Izv. Geol. ob-va*  
Gruz. 3 no.1:63-65 '63. (MIRA 17:9)

AKHVLEDIANI, D.G.

Stratigraphy of Upper Cretaceous sediments in the Tedzani Basin  
based on the Foraminifera fauna. Socb. AN Gruz. SSR 34 no.3:  
591-597 Je '64 (MIRA 18:1)

1. Geologicheskii institut AN Gruzinskoy SSR, Tbilisi. Sub-  
mitted February 11, 1964.

14-57-6-12427  
Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 6,  
p 100 (USSR)

AUTHORS: Akhvlediani, G. D., Chkhikvishvili, V. I.

TITLE: Soils in the Pankisskoye Ushchel'ye (Valley) (Pochvy Pankisskogo ushchel'ya -- in Georgian)

PERIODICAL: Tr. In-ta pochvoved. AN GruzSSR, 1956, Vol 7, pp 157-182

ABSTRACT: The climate of the mountain-forest belt in the Pankisskoye Ushchel'ye (Valley) (Kakhetinskaya Tushe-tiya) belongs to the temperate-cold Western European type; it has an average annual temperature from 6° to 10° and a total annual precipitation from 800 m to 1200 m. Brown, lightly eroded soils were developed in the broad-leaf forests consisting principally of beech. In the western part of the valley, where the trees had been considerably thinned out, the soil

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Soils in the Pankisskoye (Cont.)

was soon eroded down to the bedrock. In some places the brown forest soils approximate very closely to the podzols. There is a more marked tendency of the soils to assume the chemical composition and the morphology of podzols in this region than in comparable soils of the midmountain belt in other parts of Georgia. Typical brown forest soils have better water retaining characteristics than average podzol varieties. The cinnamon-colored, humus and carbonate-bearing soils, which are formed on the eroded surfaces of carbonaceous shales, sandstones and conglomerates are less widely distributed. Mountain-meadow soils of the subalpine belt type, differing quite sharply from one another by the stage of their soil-forming process, are widely distributed in the northern, highest section of the valley, which corresponds to the lowest part of the high mountain belt. In some areas soil has been eroded and bedrock is exposed. This was caused by the sharp differentiation of the relief and also by the improper pasturing and haying methods which were practised there in former times. Unsatisfactory humus-forming conditions explain the high (20 percent or more) organic matter content in mountain-meadow turf soils. Under these con-

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14-57-6-12427

Soils in the Pankisskoye (Cont.)

ditions organic matter was accumulated in the ground in the form of humus. Alluvial meadow and mountain-valley soils predominate in the intermontane valleys of the Alazan River and the Ilto Reka (River); these soils are used for agriculture in the upper course basin of the Alazan River. A bibliography of 18 titles is included.

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G. K.

1. AKHVLEDYANI, G. K.
2. USSR (600)
4. Soils - Sida- Nabakevi
7. Soils of the tea plantations of Achigvari and Sida-Nabakevi in connection with irrigation. Soob. AN Gruz. SSR 11, No. 7, 1950.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

AKHVEDIANI, G. K.

Chemical Abst.  
Vol. 48 No. 9  
May 10, 1954  
Soils and Fertilizers

Effect of perennial grasses on the improvement of physico-chemical qualities of the poor, humus-sulfate (Gazhevaya pochva) soils in Samogori. A. D. Shit'makh and G. K. Akhvediani (Inst. Soils, Agrochem. Melioration, Acad. Sci. Georgian S.S.R., Tbilisi). *Sovetskaya Akad. Nauk Grazn. S.S.R.* 13, No. 4, 231-8(1952). — In an attempt to improve phys. properties by accumulation of org. material and creation of structure, 4 grass mixts. were tested against control soil with and without fertilizer: (1) alfalfa + esparto; (2) alfalfa + quack grass; (3) esparto + rye grass; (4) esparto + quack grass. Esparto gave higher yields than alfalfa and left more living and root residues in the upper 20-cm. layer, owing to a better-developed filamentous root system. Mixt. (1) slightly increased porosity in the 15 cm. and 30 cm. depths. No change in soil properties were noted below 30 cm. with any of the mixts. In general these soils were strongly effervescent and contained large aints. of  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$  (below 30 cm.). Tables are given showing morphological features, moisture capacity, porosity, and also, by 10 cm. layers, particle size, humus and N content, and bicarbonate, chloride, and sulfate ion content. Mixts. (2) and (4) were best for improving these soils. A. W. D.



*AKHVLEDIANI, G. K.*

USSR / Cultivated Plants. Cereals.

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Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34594

Authors : Akhvlediani, G. K.; Ovcharenko, A. D.

Inst : AS GeorgSSR

Title : Duration of the Effects of Perennial Grass  
Grown on Humus-Sulfate Mulch at Samgori.

Orig Pub : Tr. In-ta pochvoved. AN GruzSSR, 1957, 8, 89-95.

Abstract : Report on experiments conducted over a period of three years on the after-effects of perennial Grass on the yield of cereals in irrigated soils at Samgori. In these three years, perennial Grass were shown to have accumulated considerable reserves of organic matter, thus improving the physical and chemical properties of the soil. After the plowing under of perennial grass,

Card 1/2

AKHVLEDIANI, G. K., Doc Agr Sci -- (diss) "Agricultural <sup>production</sup> ~~engineering~~  
properties of <sup>low capacity</sup> ~~acid~~ humus-sulfate-carbonate soils of Eastern Georgia  
in connection with <sup>their cultivation</sup> ~~making them available~~ for vineyards and fruit  
plantings." Tbilisi, Pub House Acad Sci Georgian SSR, 1958. 26 pp  
(Min of Agriculture USSR, Georgian Order of Labor Red Banner Agr  
Inst), 100 copies (KL, 15-58, 116)

-55-

AKHVLEDIANI, G.K.

Systemization of gypsum-bearing soils of Transcaucasia. Pochvovedenie  
no.5:102-105 My '62. (MIRA 15:6)

1. Institut pochvovedeniya, agrokhimii i melioratsii Akademii  
sel'skokhozyaystvennykh nauk Gruzinskoy SSR.  
(Transcaucasia—Soils—Classification) (Gypsum)

AKHVLEDIANI, G.K.

Genesis of humus- and sulfate-rich soils in Georgia.  
Pochvovedenie no.6:64-72 Je '65. (MIRA 18:11)

1. Nauchno-issledovatel'skiy institut pochvovedeniya, agrokhemii i melioratsii Gruzinskoy SSR. Submitted Sept. 14, 1963.

SAKASHVILI, Mikhail Georgiyevich; GELASHVILI, Avtandil Petrovich;  
SAKVARELIDZE, D.S., otv.red.; AKHVLEDIANI, G.S., red.; TSULU-  
KIDZE, A.P., red.; MELIKISHVILI, G.A., red.; ERISTAVI, K.D., red.;  
MENTESHASHVILI, I.T., red.; TATISHVILI, I.Ya., red.; BERIDZE,  
V.V., red.; APAKIDZE, A.M., red.; YAKIMOVA, A., tekhn.red.

[Illustrations to the history of medicine in Georgia; from ancient  
times to the 19th century] Illiustratsii k istorii meditsiny  
Gruzii; s drevneishikh vremen do XIX veka. Tbilisi, Gos.izd-vo  
"Sabchota Sakartvelo," 1959. 127 p. (MIRA 13:9)  
(GEORGIA--MEDICINE)

AKHVLEDIANI, K.S.

Secretion of toxic substances from the wood of lemon trees infected with mal secco. Soob. AN Gruz. SSR 21 no.1:89-90 J1 '58.

(MIRA 11:10)

1. AN GruzSSR, Inatitut zashchity rasteniy. Predstavleno akademikom L.A. Kanchaveli.

(Lemon--Diseases and pests) (Fungi, Phytopathogenic)

AKHVLEDIANI, K. S., (USSR)

"Isolation of the Phytotoxins of the Fungus *Phoma tracheiphila* (Petri)  
Kantschaweli et Gikaschwili of the Lemon Disease--Malsecco."

Report presented at the 5th Int'l. Biochemistry Congress, Moscow, 10-16 Aug 1961.

MEYLETSKIY, I.V., prof.; ARHVEDIANI, H.G.

Phytoimmunochemistry and the protection of crops against diseases.  
Vest. AN SSSR 34 nos.8:57-61. Ag 164. (MIRA 10:12)



AKHVLEDIANI, M.P.

Study of the family Aphidiidae (Hymenoptera) in eastern Georgia.  
Soob. AN Gruz. SSR 33 no. 2:437-440 F '64. (MIRA 17:9)

1. Institut zoologii AN GruzSSR. Predstavleno chlenom-  
korrespondentom AN GruzSSR L.P.Kalandadze.

AKHVLEDIANI, N. V.

Akhvlediani, N. V. "An investigation of the effect of the length of planted material on the acclimatization, growth, and fruit yield of grape vines", Trudy In-ta vinogradarstva i vinodeliya (Akad. Gruz. SSR), Vol. V., 1949, p. 1-17, (In Georgian, resume in Russian), Bibliog: 25 items.

SO: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

AKHVLEDIANI, N. V.

Akhvlediani, N. V. "An investigation of the effect of methods of planting on the acclimatizat'on and growth of grape vines", Trudy In-ta vinogradarstva i vinodeliya (Akad. Gruz.SSR), Vol. V, 1949, p. 39-56, (In Georgian, resume in Russian), Bibliog: 25 items

S O: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

1. AKHVLEDYANI, N. V.
2. USSR (600)
4. Viticulture
7. Material for establishing methods for placement and density in planting grapevines /in Georgian with Russian summary/. Trudy Inst. vin. AN Gruz. SSR 7, 1951.

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

AKHVLEDIANI, N.V.; SHAISHMELASHVILI, V.N.; ZAVRIEV, K.S., deystvitel'nyy chlen.

Estimating the supporting power of shells. Soob.AN Gruz.SSR 13 no.10:595-  
601 '52. (MLRA 6:5)

1. Akademiya Nauk Gruzinskoy SSR. Institut stroitel'nogo dela, Tbilisi  
(for Akhvlediani, Shashmelashvili). 2. Akademiya Nauk Gruzinskoy SSR (for  
Zavriev). (Strains and stresses)

AKHVLEDIANI, N.V.

Using the strength of concrete in bent reinforced concrete  
elements [in Georgian with summary in Russian]. Trudy Inst.  
stroit. dela AN Gruz. SSR 4:251-255 '53. (MLRA 9:10)

(Reinforced concrete)

SOV/124-57-4-4711

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 120 (USSR)

AUTHORS: Akhvlediani, N. V., Shaishmelashvili, V. N.

TITLE: On the Design of Doubly-curved Shells in Accordance With Various Stages of Failure (K raschetu obolochek dvoyakoy krivizny po stadii razrusheniya)

PERIODICAL: Tr. In-ta stroit. dela AN GruzSSR, 1955, Vol 5, pp 61-71

ABSTRACT: The authors examine the loss of carrying capacity occurring in doubly-curved rectangular (in plan view) shells under the action of vertical symmetrical loading. The system of the formation of plastic hinges was adopted on the basis of experimental data presented in the article. The solution is obtained with the aid of a kinematic method of computing the carrying capacity, which involves the setting up of equations for the work performed by the external and internal forces during displacements occurring as the system is converted into a set of kinematic linkages. The authors point out the error introduced by N. F. Frolov (Experimental Investigation of Lancet Arch Made of Brick. Materials and Design in Modern Architecture. Izd-vo Akad. Arkh. SSSR, 1948, Nr 2) in the process of setting up the equations of work.

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SOV/124-57-4-4711

On the Design of Doubly-curved Shells in Accordance With Various Stages of Failure

A brief summary of the article discussed above is given in the reports of the Academy of Sciences, Georgian SSR, 1952, Vol 13, Nr 10.

D. D. Ivlev

Card 2/2



SOV/124-57-8-9420

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 8, p 122 (USSR)

AUTHOR: Akhvlediani, N. V.

TITLE: Concerning One of the Properties of a Critical Load (Ob odnom svoystve predel'noy nagruzki)

PERIODICAL: Soobshch. AN GruzSSR, 1955, Vol 16, Nr 10, pp 793-798

ABSTRACT: Pointing out that a critical load is the only load that is both statically and kinematically possible, the author asserts that this property can be useful in limiting-state analysis. On the basis of this property it is very simply shown that the customary ultimate-load "elasticity" method for calculating (even if only approximately) statically indeterminate systems can safely be considered an accurate calculation of the limiting-state strength. The author states in the paper that the method of limiting-state analysis based upon this property of the limiting load is both independent of and different from the widely used "extremal" methods (i. e., the static method and kinematic method), which statement is based on a misunderstanding. This erroneous conclusion in particular stems from the implicit assumption that the precise failure pattern is known in advance. An example is adduced wherein the

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Concerning One of the Properties of a Critical Load

critical load is calculated for a symmetrical fixed arch, it being assumed that the arch will fail in a certain specified manner.

V. D. Klyushnikov

Card 2/2

AKHVLEDIANI, N. V., Doc Agric Sci--(USSR) "The Agrotechnical Aspect of Viticulture  
in Georgian SSR." Tbilisi, Publish. House of the Georgian Acad Sci, 1957,  
70 pp. (Georgian Agric Inst. Sci-Res Inst of horticulture, viticulture and  
wine production of the Min of Agric Georgian SSR), 100 copies.  
(KL, No 40, 1957, p.93)

SOV/124-58-5-6028

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 148 (USSR)

AUTHOR: ~~Akhvlediani, N.V.~~

TITLE: Design Calculation Problems of the Carrying Capacity of Reinforced-concrete Structures With Eccentrically Compressed Components (Voprosy rascheta nesushchey sposobnosti zhelezo-betonnykh konstruktsiy s vnetsentrenno szhatymi elementami)

PERIODICAL: Tr. In-ta stroit. dela. AN GruzSSR, 1957, Vol 6, pp 51-58

ABSTRACT: Bibliographic entry

1. Structures--Design      2. Reinforced concrete--  
Mechanical properties      3. Mathematics

Card 1/1

AKHVEDIANS, N.V.

Limit equilibrium technique for designing reinforced concrete  
curved-surface shells. Soob. AN Gruz. SSR 18 no.2:205-210 F '57.

1. Akademiya nauk Gruzinskiy SSR, Institut stroitel'nogo dela,  
Tbilisi. Predstavleno akademikom K.S. Zavriyevym.  
(Reinforced concrete)

AKHVLEDIANI, N.V.

Designing reinforced concrete arches according to limiting  
equilibriums. Trudy Inst.stroi.dela AN Gruz.SSR 7:47-60  
'59. (MIRA 13:5)

(Arches)

AKHVLEDIANI, N.V.

Calculating the bearing capacity of reinforced concrete arches  
which collapse under the formation of plastic hinges. Trudy Inst.  
stroitel'stva AN Gruz.SSR 8:17-27 '60. (MIRA 14:10)  
(Arches) (Reinforced concrete construction)

AKHVLEDIANI; N.V. (Tbilisi)

Designing reinforced concrete arches using the method of limiting  
equilibrium. Stroi. mekh. i rasch. soor. 2 no. 2:22-26 '60.  
(MIRA 14:5)

(Arches)



AKHVLEDIANI, N.V., kand.tekhn.nauk (Tbilisi)

Designing reinforced concrete domes by the limiting equilibrium  
method. Issl. po teor. sooruzh. no.10:127-133 '61. (MIRA 14:8)  
(Roofs, Shell)

AKHVLEDIANI, N.V. (Tbilisi)

Calculating the bearing capacity of precast reinforced concrete  
cupolas. Stroi. mekh. i rasch. soor. 3 no.5:15-17 '61.  
(MIRA 14:10)

(Domes) (Precast concrete construction)

AKHVLEDIANI, N. V.

PHASE I BOOK EXPLOITATION

SOV/6 206

Konferentsiya po teorii plastin i obolochek. Kazan', 1960.

Trudy Konferentsii po teorii plastin i obolochek, 24-29 oktyabrya 1960. (Transactions of the Conference on the Theory of Plates and Shells Held in Kazan', 24 to 29 October 1960). Kazan', [Izd-vo Kazanskogo gosudarstvennogo universiteta] 1961. 426 p. 1000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Kazanskiy filial. Kazanskiy gosudarstvennyy universitet im. V. I. Ul'yanova-Lenina.

Editorial Board: Kh. M. Mushtari, Editor; F. S. Isanbayeva, Secretary; N. A. Alomyae, V. V. Bolotin, A. S. Vol'mir, N. S. Ganiyev, A. L. Gol'denveyzer, N. A. Kil'chevskiy, M. S. Kornishin, A. I. Lur'ye, G. N. Savin, A. V. Sachenkov, I. V. Svirskiy, R. G. Surkin, and A. P. Filippov. Ed.: V. I. Aleksagin; Tech. Ed.: Yu. P. Semenov.

PURPOSE: The collection of articles is intended for scientists and engineers who are interested in the analysis of strength and stability of shells.

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Transactions of the Conference (Cont.)

SOV/6206

COVERAGE: The book is a collection of articles delivered at the Conference on Plates and Shells held in Kazan' from 24 to 29 October 1960. The articles deal with the mathematical theory of plates and shells and its application to the solution, in both linear and nonlinear formulations, of problems of bending, static and dynamic stability, and vibration of regular and sandwich plates and shells of various shapes under various loadings in the elastic and plastic regions. Analysis is made of the behavior of plates and shells in fluids, and the effect of creep of the material is considered. A number of papers discuss problems associated with the development of effective mathematical methods for solving problems in the theory of shells. Some of the reports propose algorithms for the solution of problems with the aid of electronic computers. A total of one hundred reports and notes were presented and discussed during the conference. The reports are arranged alphabetically (Russian) by the author's name.

Card 2/3  
3

Transactions of the Conference (Cont.)

SOV/6206

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Amiro, I. Ya. Investigation of the Stability of Stiffened Closed Cylindrical Shells Under Axial Compression Combined with Internal Pressure	5
Akhvlediani, N. V. Some Limit-Equilibrium Problems of Ferroconcrete Roofing Shells	10
Balabanov, L. M. General Problems in the Statics of Thick Elastic Isotropic Shells	15
Bolotin, V. V. Asymptotic Method in the Vibration Theory of Elastic Plates and Shells	21
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Card 3/10

3

AKHVLEDIANI, N.V., kand.tekhn.nauk (Tbilisi)

Carrying capacity of shallow reinforced-concrete shells with  
dual curvature. Issl.po tecr.sooruzh. no.11:253-259 '62.  
(MIRA 15:8)

(Reinforced concrete construction)

AKHVLEDIANI, N.V.; SEKHNIASHVILI, M.L.

Calculating the carrying capacity of a hollow spherical reinforced  
concrete dome. Trudy Inst. stroi.mekh. i seism. AN Gruz. SSR 9:37-44  
'63. (MIRA 17:12)

AKHVLEDIANI, N.V.; DZHAPARIDZE, G.S.; KHIZANISHVILI, A.L.

Experimental investigation of the carrying capacity of arches which fail as a result of the plastic deformations of concrete. Trudy Inst. stroi.mekh. i seism. AN Gruz. SSR 9:103-113 '63.

(MIRA 17:12)



AKHVLEDIANI, N.V.

Selecting the possible transpositions in the derivation of equations  
of maximum equilibrium. Trudy Inst. stroi.mekh. i seism. AN Gruz. SSR,  
9:217-219 '63. (MIRA 17:12)

GOTSIRIDZE, A.M., prof., red.; BETANELI, A.M., doktor med. nauk, red.; KHECHINASHVILI, N.N., kand. med. nauk, dots., red.; NADIRASHVILI, S.A., kand. med. nauk, dots., red.; NIKOLASHVILI, D.A., kand. biol. nauk, dots., red.; AKHVLEDIANI, O.M., kand. biol. nauk, dots., red. (Batumi); PICHKHADZE, R.I., st. prepodavatel', red.; CHONAKHIDZE, D.D., red.; KIPIANI, E.Ya., red.

[Theses and abstracts of the reports presented at the Third Expanded Scientific Conference on Problems of Physiology Dedicated to the 110th Anniversary of N.E.Vvedenskii's Birth] Tezisy i referaty dokladov. Rasshirennoi nauchnoi konferentsii po problemam fiziologii, posviashchennaia 110-letiiu so dnia rozhdeniia N.E.Vvedenskogo. Kutaisi, Gos.kom-t vysshego i srednego spetsial'nogo obrazovaniia Soveta Ministrov Gruz.SSR, 1962. 166 p. (MIRA 17:3)

1. Rasshirennaya nauchnaya konferentsiya po problemam fiziologii, posvyashchennaya 110-letiyu so dnya rozhdeniya N.Ye.Vvedenskogo, 3d, Kutaisi-Batumi, 1962. (MIRA 17:3)

LAGIDZE, R.M.; AKHVLEDIANI, R.N.

Syntheses of some new thiols and their acetyl derivatives.  
Soob. AN Gruz. SSR 31 no. 3:577-580 S '63. (MIRA 17:7)

1. Institut khimii imeni P.G.Melikishvili AN GruzSSR,  
Tbilisi. Predstavleno akademikom G.V. TSitsishvili.

SHINKORENKO, S.F.; AKHVLEDIANI, Sh.V.

Using pistonless jiggling machines for dressing manganese ores.  
Gor. zhur. no.7:63-65 J1 '64. (MIRA 17:10)

1. Nauchno-issledovatel'skiy i proyektnyy institut po obogashcheniyu i aglomeratsii rud chernykh metallov, Krivoy Rog (for Shinkorenko);
2. Trest Ghiaturmarganets (for Akhvlediani).

S/169/62/000/012/045/095  
D228/D307

AUTHORS: Alshvlediani, Ya.R. and Yashina, A.V.

TITLE: Snow brightness indicatrix and solar radiation  
attenuation within the snow cover

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 12, 1962, 26,  
abstract 12B194 (Tr. El'brussk. vysokogorn. kompleksn.  
ekspeditsii, v. 1 (4), Nal'chik, 1959, 105-123)

TEXT: The brightness distribution along the snow surface was measured at different elevations of the sun. A photoelectric photometer with a monochromator was used for the measurements. The phenomenon of back light reflection from the snow cover was detected. The nature of the brightness distribution along the snow surface depends on the structure of the snow cover. Peak brightnesses on the wavelengths 500 and 700  $m\mu$  were found for all types of snow cover; a second maximum in the range 450-550  $m\mu$  was found for a snow cover consisting of lamellar crystals. Measurements of the brightness distribution of light, which had penetrated into the snow

Card 1/2

Snow brightness ...

S/169/62/000/012/045/095  
D228/D307

cover, showed that it depended on the density and structure of snow. ✓  
[Abstracter's note: Complete translation]

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AKHVIEDIANI, Ye. G.

History of the genus *Stenodacna*. Soob. AN Gruz. SSR 29 no. 4:  
427-431 0 '62 (MIRA 19:1)

1. Institut paleobiologii AN GruzSSR, Tbilisi. Submitted  
December 31, 1961.

L0834-66

ACCESSION NR: AP5020035

UR/0348/65/000/008/0017/0018  
632.958.31

AUTHOR: Berishvili, I. (Senior research associate); Akhvlediani, Ye. (Aspirant) <sup>H</sup> <sub>B</sub>

TITLE: Bacterial rodenticides

SOURCE: Zashchita rasteniy ot vreditel'ey i bolezney, no. 8, 1965, 17-18

TOPIC TAGS: bacterial rodenticide, field mouse eradication

ABSTRACT: In 1964, the bacterial method was used in Eastern Georgia (SSSR) on a massive scale against field mice. The grain bacterial preparation was prepared from the Prokhorov (No. 5170) and Isachenko bacterial strains and wheat, oat, and barley grain. A description of the procedure and ingredients employed in the preparation of the rodenticides is given. The maximum titer of the bacterial preparations was 7100 million bacteria, the minimum was 2100 million. Laboratory virulence tests showed that as a rule, field, house, and white mice died after 6 to 8 days. In the field, the preparation was spread in the proportion of 1.8 kg per hectare. One month after the treatment, the number of field mice dropped an average of 99.1%. The preparation was also tested on stock and poultry farms; no adverse effects whatsoever were observed in the animals or poultry. The development and spread of the epizootic on a single farm was also investigated. It

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L00834-66

ACCESSION NR: AP5020035

is concluded that the bacterial preparation used in Georgia was highly effective: the number of mice was drastically reduced and continued to remain at low levels for 8 months.

ASSOCIATION: GruzIZR

SUBMITTED: 00

ENCL: 00 SUB CODE: LS, GO

NO REF SOV: 000

OTHER: 000

AKHVLEDIANI, Ye.G.

Phylogenetic relations between some gastropods of the Cimmerian and Kuyal'nik stages. Soob. AN Gruz. SSR 19 no.4:451-458 0 '57.

(MIRA 11:5)

1. Institut paleobiologii AN GruzSSR, Tbilisi. Predstavleno akademikom L.Sh. Davitashvili.

(Georgia--Gastropoda, Fossil)

AKHVLEDIANI, Ye.G.

Phylogenetic development of the group *Didacna multistriata*  
Rousseau. Soob. AN Gruz. SSR 33 no. 2:355-362 F '64.  
(MIRA 17:9)

1. Institut paleobiologii AN GruzSSR. Predstavleno akademikom  
L.Sh. Davitashvili.

BERISHVILI, I.M., kand.sel'skokhoz.nauk; AKHVLEDIANI, Ye.N., aspirantka;  
PODARYASHCHIY, A.S., agronom; POLITOV, A.K., entomolog (Groznyy);  
SELIN, I.V., starshiy nauchnyy sotrudnik; BUGROVA, T.I.; POPOVA,  
K.N.; KOVALEV, N.V., kand.sel skokhoz.nauk; NASIROV, A.

Brief information. Zashch. rast. ot vred. i bol. 8 no.11:56-58  
N '63. (MIRA 17:3)

1. Gruzinskiy institut zashchity rasteniy (for Berishvili, Akhvlediani).
2. Opytnoye khozyaystvo "Boyevik", g. Novozybkov, Bryanskoy obl. (for Podaryashchiy).
3. Smolenskaya oblastnaya sel skokhozyaystvennaya opytnaya stantsiya (for Selin).
4. Punkt sluzhby ucheta i prognozov, g.Kurgan-Tyube, Tadzhikskoy SSR (for Bugrova, Popova).
5. Maykopskaya opytnaya stantsiya Vsesoyuznogo nauchno-issledovatel'skogo instituta rasteniyevodstva (for Kovalev).
6. Uzbekskiy institut zashchity rasteniy, Tashkent (for Nasirov).