

AYZHENSHTEAT, L.M.

Find the Paleocene foraminiferal complex with *Cibicidoides lectus*
Vassilenko in the northeastern and eastern parts of the Turgay
Gates. Inform. sbor. VSEGEI no.6:31-35 '59. (MIRA 13:12)
(Turgay Gates--Foraminifera, Fossil)

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000102710016-3

AYZENSHTAT, I.M.

Paleogene Foraminifera complexes of the Turgay trough. Trudy
VSEGEI 102:152-161 '64.

(MIRA 18:2)

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000102710016-3"

AYZENSHTAUT, K. S.

Ayzenshtadt, K. S. "Changes in the lungs during hemoptysis of tuberculous etiology,"
[Qualifying bachelor's dissertation], Byalleten! In-ta tuberkuleza Akad. med. nauk
SSSR, 1948, No. 4, p. 47-48

So: U-3566, 15 March 53, (Letopis 'Khurnal 'nykh Statey, No. 13, 1949)

AYZENSHADT, L. A. (Engr)

"1951 Inventions in Machine Building," Vest. Mash., No.7, pp 3-9, 1952

Translation W-24417, 5 Nov 52

AIZENSHTADT, L.A.

ARISTOV, N.P.; AIZENSHTADT, L.A.; BOGUSLAVSKIY, B.L.; PROKOPOVICH, A.Ye,
redaktor; POPOVA, S.M., tekhnicheskiy redaktor

[Achievements of Soviet machine tool construction] Dostizheniya
sovetskogo stankostroeniia. Moscow, Gos. nauchn.-tekhn. izd-vo
mashinostroit. i sudostroit. lit-ry, 1954. 17^{1/4} p. (MIRA 7:9)
(Machine tool industry)

AYZENSHTADT, L. A.

PHASE I BOOK EXPLOITATION

456

Ayzenshtadt, L. A., and Chikhachev, S. A.

Ocherki po istorii stankostroyeniya SSSR (Studies in the History of
Tool Making in the USSR) Moscow, Mashgiz, 1957. 527 p. 5,500 copies printed.

Reviewer: Zhed', M. S.; Ed.: Stankevich, V. G.; Tech. Ed.: Sokolova, G. F.;
Managing Ed. for literature on metalworking and tool making:
Beysel'man, R. D.

PURPOSE: This book was written for students, scientists, engineers and workers
of the machine-building industry.

COVERAGE: In this collection of articles, consisting of three parts, the authors
review the history of machine building in Russia and stress the role of
machine tools in the development of the country as a whole. Part One covers
the period from the Middle Ages to the October Revolution. The achieve-
ments of Peter the Great are lauded, but the authors dwell mostly on the
economic and ideological aspects of that period. In Part Two the authors
deal with the period after the Revolution to the German invasion. They

Card 1/7

Studies in the History (Cont.)

456

mention that only in the early thirties was the Soviet machine tool industry beginning to gain in importance. The author admits that the machines built in the USSR were copies of Western types. It is also stated that around 1934 new technological methods began to find wider application in the Soviet machine tool industry. These were primarily: higher cutting speeds, the use of wear-resistant alloys, and the introduction of semiautomatic operations. The German invasion caused a relocation of industry to the Ural area where new industrial centers were established. Part Three covers the postwar era. It is stated that after a period of restoration there was a very sharp increase in the production of machine tools with special emphasis on semi-and fully automatic machinery and the introduction of automation. The most important modern Soviet machine tools are described, illustrated, and their general characteristics and basic dimensions are given. Some space is devoted to high-speed machining using carbide tools. Some examples of speeds and rates of machining are given. Author Ayzenshtadt describes automated lines for the production of automotive engine blocks, pistons, valves and other components. There is also a description of a fully automated ball bearing and roller bearing plant in Moscow which produces 1,500,000 units per annum. This plant is claimed to be the most advanced in the world. There are some tables with statistical data pertaining to machine tool production. The above articles indicate the general trend in the Soviet machine-building industry, namely, the boosting of machine tool production and the introduction of automation on a wide scale. There are 92 Soviet references.

Card 2/7

Studies in the History (Cont.)

456

TABLE OF
CONTENTS:

Ayzenshtadt, L. A. Introduction

3

PART I

Ayzenshtadt, L. A. Early History of the Development of Metalworking
Lathes

9

Chikhachev, S. A. Development of Metalworking in Russia Before Peter
the Great

18

Ayzenshtadt, L. A. Building Metalworking Lathes During the Reign
of Peter I

29

A. Nartov's lathes

30

Lathes for manufacturing arms

60

Card 3/7

Studies in the History (Cont.)	456
Ayzenshtadt, L. A. Manufacture of Machine Tools from 1725-1861	69
Chikhachev, S. A. Development of Metalworking Methods in the 19th Century	80
Ayzenshtadt, L. A. Machine Tool Manufacture During the Period of Russian Industrial Capitalism	117
Chikhachev, S. A. Technology of Machining at the Begining of the 20th Century	123
Ayzenshtadt, I. A. Machine Tool Production in Russia During the Period of Imperialism	137
PART II	
Ayzenshtadt, L. A. Machine Tool Production During the first Years of the Soviet Regime 1917-1925	158
Ayzenshtadt, L. A. Organization of Soviet Machine Tool Building (1927-1932)	161

Card 4/7

Studies in the History (Cont.)	456
Chikhachev, S. A. Development of the Soviet Technology of Machine Building	197
Ayzenshtadt, L. A. Machine Tool Building During the Second and Third Five Year Plans (1933-1941)	204
Growth of the number of machine tools in the USSR	207
Growth of machine tool production	214
Expansion of production facilities for machine tools	216
Standardization of machine tools and specialization in plants	220
Production of basic types of machine tools	226
Machine tool building in capitalist countries	298
Ayzenshtadt, L. A. Machine Tool Building During World War II	319
Card 5/7	

Studies in the History (Cont.)	456
Mastery of new machine tools	327
Machine tool units and production lines	335
Preparation for the postwar period	348

PART III

Ayzenshtat, L. A. Machine Tool Construction after World War II (1946-1950)	351
Growth of machine tool production	352
Production of universal machine tools	355
Production of special machine tools	408
Production of heavy-duty machine tools	426
Production of precision machine tools	431
Construction of unit-head machine tools	436

Card 6/7

Studies in the History (Cont.)	456
Automatic production lines	439
Development of carbide cutting tools	458
Introduction of high-speed machine methods	461
Ayzenshtadt, L. A. Present-day State-of-art of Machine Tool Development in the USSR	461
Ayzenshtadt, L. A. Prospects for the Development of Soviet Machine Tool Building	504
Ayzenshtadt, L. A. Statistical Data on Machine Tool Production in the USSR	515
Bibliography and Sources	523
AVAILABLE: Library of Congress	

Card 7/7

GO/gap
July 29, 1958

SOV/122-58-12-32/32

AUTHORS: Ayzenshtadt, L.A., and Chikhachev, S.A.

TITLE: Notes on the History of Machine Tool Manufacture in the
USSR (Ocherki po istorii stankostroyeniya SSSR)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, Nr 12, pp 82-83 (USSR)

ABSTRACT: Favourable review by Rybkin, A.P., Professor, of the
book published by Mashgiz in 1957.

Card 1/1

AYZENSHTADT, L.A.; PEN'KOV, P.M.; GLADKOV, B.A.; LIKHT, L.O.;
KRIMMER, T.Ye.; KASHEPAV, N.Ya., kand. tekhn. nauk;
MERTPERT, M.P., kand. tekhn. nauk; KOPERBAKH, B.I.;
CHERNIKOV, S.S., kand. tekhn.nauk; BELOV, V.S.; ZHURIN,
B.F.; MONAKHOV, G.A., kand.tekhn.nauk; MOROZOV, I.I.;
MUSHSTAYEV, A.F.; OGNEV, N.N.; PALIY, M.B., kand. tekhn.
nauk; FURMAN, D.B.; LIVSHITS, A.L., kand.tekhn.nauk; MECHETNER,
B.Kh.; SOSENKO,A.B; AVDULOV, A.N.; KEVIN, A.A., kand.tekhn.
nauk; YAKOBSON, M.O., doktor tekhn.nauk; MAYOROVA, E.A.,
kand.tekhn.nauk; MOROZOVA, Ye.M.; ZUSMAN, V.G., kand.tekhn.
nauk; NAYDIS, V.A., kand.tekhn.nauk; VLADZIYEVSKIY, A.P., prof.,
doktor tekhn. nauk, red.; BELOGUR-YASNOVSKAYA, R.I., red.;
CHIGAREVA, E.I., red.; ASVAL'DOV, M.Ya., red.; KOGAN, F.L.,
tekhn. red.

[Machine-tool industry in capitalist countries] Stanko-
stroenie v kapitalisticheskikh stranakh. Pod red. i s pre-
disl. A.P.Vladzievskogo. Moskva, 1962. 822 p. (MIRA 15:7)

1. Moscow. Tsentral'nyy institut nauchno-tekhnicheskoy in-
formatsii mashinostroyeniya. 2. Eksperimental'nyy nauchno-
issledovatel'skiy institut metallorezhushchikh stankov
(for Vladziyevskiy, Belogur-Yasnovskaya, Chigareva, Asval'dov,
Kogan).

(Machine-tool industry)

AYDENSHVIL, M. and SKILITUV, K.

O novykh printsev proektov vodnoi i zemel'noi (The principles of planning of railroad junctions and stations). (Sots. transport, 1940, no. 4, p. 54-58.)

DLC: HE7.S6

S O: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1942, Unclassified.

AYZENSHADT, M. G.

AYZENSHADT, M. G. I LEBEDOV, N. V.
36194 Perekovyye setochniki kamskogo kombinata. Burazh. prom-st', 1949, No. 5. S. 29-34.

SC: Letopsi' Zhrunal'nykh Statey, No. 49, 1949

1. AZERBAIJAN, A. G.

2. USSR (600)

4. Paper industry

7. Applying progressive technology in production. Sum. prom. 2%, no. 8, 1952

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

AYZENSHTAUT, M.G., glavnnyy inzhener; MORSEICHININ, I.P., glavnnyy mekhanik.

Calendering parchment. Bum.prom. 22 no.9:30-31. S '53.

(MLRA 6:8)

1. Sibirskaia iumashnaya fabrika (for Ayzenshtadt).

(Parchment)

AYZENSTAFT, N.G., glavnnyy inzhener.

Work practice at a parchment-making machine. Bum.prom. 28 no.7:30 J1 '53.
(MLRA 6:7)

1. Sibirskaa bumashnaya fabrika.

(Paper-making machinery)

AYZENSHADT, M.G.

Reconstructing the flow of wood pulp in the preparatory phase.
(MIRA 7:8)
Bum.prom. 29 no.6:22 Je '54.

1. Glavnyy inshener Sibirs'koy bumashnoy fabriki.
(Wood pulp)

AYZENSHADT, M.G.; LAVRENT'YEV, A.I.

Oxidation and digester shop work practices. Bum.prom.30 no.6:
16-19 Je '55. (NIR 8:9)

1. Glavnnyy inzhener Sukhonskogo tsellyulozno-bumazhnogo kombinata
(for Ayzenshtadt) 2. Nachal'nik proizvodstva kombinata (for Lav-
rent'yev)
(Paper industry)

SMOLYANITSKIY, Boris Zinov'yevich; AYZENSHTADT, Mikhail Grigor'yevich

[Vologda Economic Region in the seven-year plan] Vologodskii
ekonomicheskii raion v semiletke. Vologda, Vologodskoe
knizhnoe izd-vo, 1960. 57 p. (MIRA 14:2)
(Vologda Economic Region--Industries)

AYZENSHTAUT, M. Z.

Ayzenshtadt, M. Z.

"New principles in the planning of regional stations." Min Railways USSR. Moscow Order of Lenin and Order of Labor Red Banner Inst of Railroad Transport Engineers iment I. V. Stalin. Moscow, 1956.
(Dissertation for the degree of Candidate in Technical Sciences)

Knizhnaya letopis'
No. 35, 1956. Moscow

AYZENSTADT, M.Z., inzhener.

New principles for planning section stations and railroad sections.
Trudy MIIT no.87/88:105-121 '56. (MLRA 10:6)
(Railroads--Stations)

AYZENSHADT, M.Z., kandtekhn.nauk

Organization of local operations in connection with the new types
of traction. Zhel.dor.transp. 44 no.3:63-65 Mr '62. (MIRA 15:3)
(Railroads--Management)

On Haemopoiesis in the Yolk Sac of the Embryo of the Karakul Sheep

20-2-49/50

bryo) parts of the yolk sac of the embryo which is 16-17 days old and form in a relatively short time of 1-2 days an enormous quantity of free cells- the first blood cells which immediately begin an erythroblastic development. A rather long time, i.e. up to the 24th-26th day of development mainly an intravascular erythropoiesis takes place in the wall of the yolk sac. It could be assumed that the endothel of the early embryonic vessels is also capable of haemopoiesis which is, however, to be assumed carefully. The observations made say that the first blood cells of the sheep in the yolk sac have a mesodermal origin. The embryo of the Karakul sheep has in the period of "actual fetal development" the three following phases of yolk haemopoiesis: 1) formation of an enormous quantity of free blood cells of blood islands of the wall of the yolk sac. 2) quick transformation of the genuine blood cells, the haemoblastocytes, into erythroblasts (megakaryocytes) of the first generation. However, already in this stage of the intravascular haemopoiesis there are also elements of an extravascular haemopoiesis. 3) towards the end of the actual embryonic time in the yolk sac of the 25-26 days old embryo numerous blood islands are formed within the entodermal epithel and in the connective tissue layer of the yolk sac. Thus within this time mainly an extravascular haemopoiesis occurs which takes place in the liver

Card 2/3

AYZENSHADT, G.B.

Cytological study of coogenesis. Report No.1: Morphology of the gonad of the small leech (*Glossiphonia complanata* L.) examined under a light and electron microscope. TSitologija 6 no.1:19-24
Jan-F '64. (MIRA 17:9)

1. Laboratoriya tsitologii Instituta morfologii zhivotnykh AN SSSR,
Moskva.

AUZENSHADT, T.B., Chini Bio Sci--(disc). "Developments of the embryo
of reparation and blood formation in early development of ~~the~~ circul-
A
ation." Ier, 1939. 10 pp (Acad Sci USSR Inst of Morphology of Animals
in A.N.Sovietov), 150 copies (L1,40-50,122)

AUTHOR: Ayzenshtadt, T. B. 20-119-1-52/52

TITLE: Observations on the Early Development Stages of Allantochorion in the Sheep Embryo (Nablyudeniya nad rannimi stadiyami razvitiya allantokhoriona u embriona ovtsy)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 1, pp. 189-192 (USSR)

ABSTRACT: The formation of a large pouchlike allantois during embryogenesis is characteristic of all Ungulatae. By the growing together of the allantois with the chorion a new organ - allantochorion forms. On the surface of the latter the villi (cotyledons) - the embryonal part of the placenta (references 4-6, 8-11) form. In spite of a large number of relevant works the placenta-forming organs in the stages in which the small villi of the cotyledons are not yet developed and in which the pattern of distribution of individual embryonic arrangement is clearer, are very insufficiently investigated. The author made it his task to fill this gap. Embryos of the Karakul'-sheep, 18-25 days old, served as material. In the early stages of development the trophoblastic epithelium of the amniotic sac enters into a close contact with the mucous

Card 1/4

Observations on the Early Development Stages of Allantochorion 20-119-1-52/52
in the Sheep Embryo

flat cells which are spread on the external surface is visible. This is the mesothelium of splanchnopleural origin. From what has been said above it can be assumed that essential differences exist between the differentiation processes of the external and internal leaf of the coelomic mesoderms in early stages. While the somatopleura very early takes the course of development into a typically serous cover (the lining of the secondary coelom, consisting of 2 components: a) mesothelium and b) the connective tissue underneath), the splanchnopleura which forms the mesodermal layer of the allantois and of the vitelline sac is rapidly transformed into a multi-layer of an embryonic connective tissue which is traversed by numerous, blood-filled vessels. Thus the process of an early differentiation of the embryonic tissues was shown by the example of the development of provisional embryonic organs. The occurrence of the above-mentioned mesothelium apparently guarantees a free displacement of the growing allantois in the cavity of the amniotic sac until the 24th-26th day of pregnancy. It can be assumed that before the growing together mentioned in the title a degeneration and

Card 3/4

AYZENSHTADT, T.B.; BRODSKIY, V.Ya.

Fine structure of egg membranes in leeches. Dokl. AN SSSR
148 no. 3:728-730 Ja '63. (MIRA 16:2)

1. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR.
Predstavleno akademikom Yu.A. Orlovym.
(Worms—Eggs) (Leeches)

AYZENSHTADT, T.B.; ERODSKIY, V.Ya.; IVANOVA, S.N.

Cytological studies of oogenesis. Report No.2: Cytochemical examination
of the oocyte growth in the snail leech (*Glossiphonia complanata* L.)
by ultraviolet cytophotometry and interference microscopy. TSitologija
6 no.1:77-81 Ja-F '64. (MIRA 17:9)

1. Laboratoriya tsitologii Instituta morfologii zhivotnykh AN
SSSR, Moskva.

S/081/63/000/002/071/088
B144/B186

AUTHORS: Ayzenshtadt, V. A., Yachmennik, M. G.

TITLE: Rectification of ethylene using a low-pressure heat pump

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 2, 1963, 462, abstract
2P134 (Novosti nefti i gaz. tekhn. Neftepererabotka i nefte-
khimiya, no. 6, 1962, 32 - 35)

TEXT: A flowsheet is given for the preheating of an ethylene fractionating column (separation of ethylene from pyrolysis gas) with the heat of the propane-propylene fraction released on compression of the vapors from the fractions used as refrigerant in the fractionation. The application of this system to an industrial plant reduces power consumption and operating costs. [Abstracter's note: Complete translation.]

Card 1/1

AFANASEVICH, F.A.; AYZENSHTADT, V.S.; YEL'YASHEVICH, M.A., akademik,
red.; MARIK'S, L., red. Izd-vo; SVIRIDOV, V., tekhn. red.

[Tables of the distribution of energy and photons in an
equilibrium radiation spectrum] Tablitsy raspredeleniya
energii i fotonov v spektre ravnovesnogo izlucheniia. Minsk,
Izd-vo Akad. nauk BSSR, 1961. 250 p. (MIRA 15:2)

1. Akademiya nauk Belorusskoy SSR (for Yel'yashevich).
(Heat---Radiation and absorption)

AY ZENSHTAT, V.S.; KRYLOV, V.I.; METEL'SKII, A.S.; BARARANOVA, Ye.,
red. Izd-va; ATLAS, A., tekhn. red.

[Tables of numerical Laplace transformations and for the
calculation of integrals of the forms $\int_0^{\infty} x^n e^{-sx} f(x) dx$]

Tablitsy dlia chislennogo preobrazovaniia laplasa i vychisleniia
integralov vida $\int_0^{\infty} x^n e^{-sx} f(x) dx$. Minsk, Izd-vo Akad. nauk BSSR,
1962. 375 p. (MIRA 15:4)
(Laplace transformation) (Integrals)

AYZENSHTAT, V.S.; KRYLOV, V.I.; METEL'SKIV, A.S.; TKACHEVA, T.,
red.izd-va; SIDERKO, N., tekhn. red.

[Tables of Laguerre polynomials and functions] Tablitsy
mnogochlenov i funktsii Liagerra. Minsk, Izd-vo Akad. nauk
BSSR, 1963. 157 p.
(MIRA 16:6)
(Polynomials)

S/201/63/000/001/004/007
D234/D308

AUTHOR:

Ayzenshtat, V.S.

TITLE:

Search for optimum operating conditions of some automatic devices with programmed control

PERIODICAL:

Akademiya navuk Byelorusskay SSR. Vyestsi, Syeryya fizika-tehnichnykh navuk, no. 1, 1963, 33-41

TEXT:

The author establishes the following theorems: 1) Let the device be controlled by one automatic operator. The optimal production process is $\bar{\Phi} = \langle \bar{\Phi}, (0, v_2, \dots, v_k) \rangle$ where $v_1 = 0$, v_2, \dots, v_k is the longest sequence of numbers such that

$|v_j - v_i| \in H$, $1 \leq i, j \leq k$. The number of primitive processes combined in $\bar{\Phi}$ does not exceed q. 2) For the process

$$\bar{\Phi} = \langle \bar{\Phi}, (0, v_2, \dots, v_p) \rangle \quad (3)$$

to be carried out by two automatic operators, it is necessary and Card 1/2

Search for optimum ...

S/201/63/000/001/004/007
D254/D308

sufficient that the set M does not contain three mutually incomparable elements. (The algorithm of constructing a cyclical process combining the largest number of processes

$$\bar{\Phi} = \langle (\varphi_0, \varphi_1, \dots, \varphi_n), (t_0, t_1, \dots, t_n), (a_0, a_1, \dots, a_n) \rangle \quad (1)$$

is indicated for the case of two operators). 3) Let the times t_0, t_1, \dots, t_n be fixed. There is an optimal production process

$$\bar{\Phi} = \langle (\varphi_0, \varphi_1, \dots, \varphi_n), (r_0, r_1, \dots, r_n) \rangle \quad (10)$$

The period of such process is $1/q$. 4) Let t_0, t_1, \dots, t_n satisfy

$$k_i \leq t_i \leq l_i, \quad i = 0, 1, \dots, n \quad (9)$$

The period of the optimal production process is k if b is not less than $(p + 1)k$, and a/p if b is less than $(p + 1)k$. 5) If t_0 is arbitrary and t_1, \dots, t_n are fixed the period of the optimal process is equal to the largest number among t_1, \dots, t_n . Examples are given.

Card 2/2

AYZENSHTAT, V.S.

Matching of primitive cyclic processes. Dokl. AN BSSR 7 no.3:
148-151 Mr '63. (MIRA 16:6)

1. Institut matematiki i vychislitel'noy tekhniki AN BSSR.
Predstavлено академиком AN BSSR V.I.Krylovym.
(Cybernetics)

L 16608-63

EWT(d)/FCC(w)/BDS AFFTC/IJP(C)

S/250/63/007/004/001/005

53

AUTHOR: Ayzenshtat, V. S.

TITLE: Multi-operator cyclic processes

PERIODICAL: Akademiya Nauk BSSR. Doklady. v. 7, no. 4, 1963, 224-227

TEXT: The process of the production of standard parts is considered from the mathematical point of view. Mathematical notation is extended to the production line, the number of operators, the working stations, the machine tools, the operating time, and so on, in order to compute the optimal cyclic process by feeding the calculations to a computer. There are 14 equations.

ASSOCIATION: Institut matematiki i vychislitel'noy tekhniki AN BSSR
(Institute of Mathematics and Computer Engineering,
Academy of Sciences, Belorusskaya SSR)

SUBMITTED: November 28, 1962

Card 1/1

AYZENSHTAT, Ya. S.

155T8

USSR/Biology - Heredity
Plant Studies

Jan 50

"Change in Domination Under the Influence of a
Shortened Day," Ya. S. Ayzenshtat, All-Union
Inst of Plant Culture, 4 pp

"Dok Ak Nauk SSSR" Vol LXX, No 1

Studies conducted in accordance with Michurin's
claims that hereditary factors can be altered
by environmental features. Suggested that
change in assimilation routine of a plant
brought about by a shortened day would result
in lessened dominance in characteristics

155T8

USSR/Biology - Heredity (Contd)

Jan 50

to the tissue. Experiments conducted at Maykop
Experimental Sta, All-Union Inst of Plant Stud-
ies, in 1947 showed a shortened day lowered re-
sistance of plants and that this feature re-
sulted in emphasis of transmission of dominant
characteristics. Submitted by Acad N. A. Mek-
simov 9 Nov 49.

155T8

AYZENSHTAT, Ya. S.

USSR/Biology - Hybridization of Seeds

May/Jun 51

"Increasing the Vitality of Hybrid Seeds," N. D.
Brezhnev, Ya. S. Ayzenshtat, All-Union Plant-Breed-
ing Inst, Leningrad State U imeni Chdanov

"Iz Ak Nauk SSSR, Ser Biol" No 3, pp 40-51

Investigated vitality of hybrid offspring, as dependent
on condition of parents and their reproductive
elements at moment of crossing by studying inherited
characteristics of hybrid tomatoes. Selection of
time of crossing can considerably increase harvest
of hybrid seeds. Preliminary grafting and supple-
mentary pollination by plants of another species
also affect vitality of offspring favorably.

186T5

1. AYSENENAT^Y, Ya. S.
2. USSR (600)
4. Fertilization of Plants
7. Role of additional pollination with foreign strains during hybridization.
Vest. Len. un. 7 no. 1, 1952.

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

1. AYZENSHAT, YA. S.
^A
2. USSR (600)
4. Pollen
7. Role played by the amount of pollen in the inheritance of characteristics,
Usp. sovr. biol., 35, no. 2, 1953.
9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

AYZENSHTAT, A.I. (Riga, ul. Petra Stuchki, d.20, kv.33)

Some clinical and roentgenological characteristics of plasmacytoma.
Ortop., travm. i protez. 24 no.11:32-36 N '63.

(MIRA 17:10)

l. Iz Rizhskogo instituta travmatologii i ortopedii (dir. - kand.
med. nauk V.K. Kalnberz [Kalnberzs, V.]).

AYZENSHTAT, Ya. S.

AYZENSHTAT, Ya.S.; KUKINA, V.I.

Effect of the age of reproductive elements on the formation of
hybrid seeds of the pea. Uch. zap. Len.un. no.165:13-25 '53. (MLRA 7:7)

1. Laboratoriya genetiki rasteniy kafedry genetiki i selektsii
(zaveduyushchiy kafedroy professor N.V.Turbin)
(Peas) (Hybridization, Vegetable)

AYZENSHTAT, Ya. S.

AYZENSHTAT, Ya.S.; SHCHEKOCHIKHINA, R.I.

Some results of the application of foreign pollen in limited
pollination of tomatoes. Uch.zap.Len. un. no.165-45-52 '53.

(MLRA 7:7)

1. Laboratoriya genetiki rasteniy kafedry genetiki i selektsii
(zaveduyushchiy kafedroy professor N.W.Turbin)
(Tomatoes) (Fertilization of plants)

AYZENSHTAT, Ya.S.

AYZENSHTAT, Ya.S.; SMOLINA, L.N.

Effect of periods of storage of pollen on the development of
characteristics in pea hybrids. Uch. zap. Len.un. no. 165:53-71 '53.
(MLRA 7:7)

1. Laboratoriya genetiki rasteniy kafedry genetiki i selektsii
(zavedtyushchiy kafedru professor N.V.Turbin)
(Peas) (Pollen)

AYZENSHTAT, YA. S.

N/5
631.31
.B8

Novoye v selektsii rasteniy (Innovations in the selection.
of plants, by) D. D. Brezhnev i Ya. S. Ayzenshtat. Moskva,
Sel'khozgiz, 1954.

144 p. illus., tables.

Bibliography: p. 141-144.

USSR/Biology HYDROBIOLOGY, U.S.S.R.

FD-1352

Card 1/1 : Pub. 42-5/8

Author : Ayzenshtat, Ya. S.

Title : Effects of length of time that pollen is stored on heredity characteristics of the progeny

Periodical : Izv. AN SSSR, Ser. biol., 4, 42-58, 1954

Abstract : Age of pollen is a factor of great importance in transformation of dominant paternal characteristics in the succeeding generations of a plant organism. Since changes arising in the first hybrid generation usually develop in the succeeding generations, pollen of various ages may be successfully used in the work of selection. Weakening of paternal influence by "aging" the pollen may be of particular significance in interbreeding with wild forms of plant life when it is desirable to retain in the progeny the characteristics of maternal plants. Tables. Seventeen Soviet references and one non-Soviet reference.

Institution : Leningrad State University

Submitted : January 15, 1954

AYZENSHTEAT, Ya.S.

Effect of variability caused by age in annuals upon the forma-
tion of hereditary characteristics in progeny. Zhur.ob.biol.15
no.1:65-78 Ja-F '54. (MLRA 7:2)
(Botany--Variation) (Annuals (Plants))

AYZENSHTAT, Ya. S.

USSR/Biology - Genetics

Card 1/1 : Pub. 22 - 43/46

Authors : Ayzenshtat, Ya. S.

Title : Effect of repeated pollination on the inheritance of symptoms

Periodical : Dok. AN SSSR 97/4, 737-740, Aug 1, 1954

Abstract : Scientific data on repeated pollination and its effect on symptom inheritance of plants (tomatoe, peas, beans). Three USSR references (1948-1953). Tables.

Institution : The A. A. Zhdanov State University, Leningrad

Presented by : Academician V. N. Sukachev, April 26, 1954

AYZENSHTAT, Ya. S.

USSR, Biology - Genetics

Card 1/1 : Pub. 22 - 39/48

Authors : Ayzenshtat, Ya. S.

Title : Effect of foreign pollination on the vitality of old pollen

Periodical : Dok. AN SSSR 97/5, 907-910, August 11, 1954

Abstract : Scientific data on the vitality of old pollen affected by foreign pollination. One USSR reference (1954). Tables.

Institution : The A. A. Zhdanov State University, Leningrad

Presented by : Academician V. N. Sukachev, April 26, 1954

AYZENSHTAT, Ya. S.

Effect of extraneous pollen on the setting of legumes in
intravarietal crossing of peas. Vest. Len.un. 10 no.4:
25-29 Ap '55. (MLRA 8:8)
(Peas) (Fertilization of plants)

AYZENSHTAT, Ya.S.; ZHUKOVA, Z.A.

Problem of the nature of relations within individual families
in plant hybrids. Bot. zhur. 47 no. 8(1126-1140 Ag '62.

(MIRA 15:10)

(Hybridisation, Vegetable)

OKEANOV, B.N., inzh.; AYZENSHTADT, Ye.B., inzh.; TROFIMOV, B.A., inzh.

Using magnetic amplifiers in automatic control systems of electric
propeller drives. Sudostroenie 29 no.8:46-49 Ag '63.
(MIRA 16:10)

(Ship propulsion, Electric)

L 05828-67

ACC NR: AP6028099

O

Load nonuniformity decreases with a reduction in the slope of the speed characteristics for the driving unit with respect to the driven unit. When the frequency of the entire power plant is changed, the steady-state load nonuniformity is inversely proportional to the amplification factor of the device for automatic distribution of the active load. The stationary load nonuniformity is independent of the time constant of the drive units and the distribution unit. The results show that parallel operation of two generators on a single screw is feasible even under the most severe reversal conditions. Orig. art. has: 3 figures, 2 formulas.

SUB CODE: 13/ SUBM DATE: None

10/

Card 2/2

eqb

YARYSHEVA, P.D.; ANZENSHARK, E.A.

Preparing medical reports with the tape recorder. Zdrav. Ros.
Feder. 5 no.7:33-34 Jl '61. (MIRA 14:7)

1. Iz Rostovskogo-na-Donu gorodskogo onkologicheskogo dispansera
(glavnnyy vrach P.D.Yarysheva).
(MEDICAL RECORDS)

AYZENSHTAT, A.I.

Nonossifying fibroma of the bone. Ortop., travm.i protez.
no.10:24-26 '61. (MIRA 14:10)

1. Iz Rizhskogo nauchno-issledovatel'skogo instituta travmatologii
i ortopedii (dir. - kand.med.nauk V.K. Kalnberz).
(BONES---TUMORS)

AYZENSHTAT, A.I.

Defferential X-ray diagnosis of hinal hernia. Vest. rent. i rad.
39 no.5:ll-15 S-0 '64. (MIRA 18:3)

1. Rentgenovskoye otdeleniye (zav. A.I. Ayzenshtat) 3-y Ob"yedinennyy
bol'nitsy Ministerstva zdravookhraneniya Latviyskoy SSR, Riga.

AYZENSHTAT, A.I.; TSERLYUK, B.M.

Benign osteoblastoma. Vest.khir. no.8:101-104 '61.

(MIRA 15:3)

l. Iz Rizhskogo nauchno-issledovatel'skogo instituta travmatologii
i ortopedii (dir. - kand.med.nauk V.K. Kalnberz).
(SPINE--TUMORS)

AYZENSHTAT A. YA.

AYZENSHTAT, A. Y., Cand. Phys-Math Sci -- (diss) "Determining
correlations of certain half-group substitutions." Len, 1958.
7 pp. (Min. Ed RSFSR, Lenin State Ped Inst im A. I. Gertsen),
100 ^{copies} (IL, 9-58, 112)

- 1 -

AUTHOR: Ayzenshtat, A.Ya. (Vyborg) 39-45-2-7/7

TITLE: Defining Relations of Finite Symmetricai Semigroups (Opredelyayushchiye sootnosheniya konechnykh simmetricheskikh polugrupp)

PERIODICAL: Matematicheskiy sbornik, 1958, Vol 45, Nr 2, pp 261-280 (USSR)

ABSTRACT: Let \mathcal{V} be a semigroup with two generating sets $M = \{a_i, a_j, \dots\}$ and $\bar{M} = \{b_i, b_j, \dots\}$. Let the words of \mathcal{V} be denoted by $f(M)$, $f(\bar{M})$ with respect to M and \bar{M} , respectively. Let (Q) be a system of defining relations (compare Evans [Ref 9]) with respect to M . Let a system (\bar{Q}) with respect to \bar{M} be defined as follows: 1) if the relation $f(M) = \varphi(M)$ belongs to (Q) , then $f[h(\bar{M})] = \varphi[h(\bar{M})]$ belongs to (\bar{Q}) , where $h(\bar{M})$ is the representation of the word of M by \bar{M} . 2) To (\bar{Q}) there belong all relations $b_i = \psi_i[h(\bar{M})]$, $b_i \in \bar{M}$.

Theorem: (\bar{Q}) is a system of defining relations of \mathcal{V} with respect to the generators \bar{M} . Furthermore the author considers in detail the semigroup Σ_n of the substitutions of the natural numbers $(1, 2, \dots, n)$, where also substitutions $\begin{pmatrix} \alpha_1 \alpha_2 \dots \alpha_n \\ \beta_1 \beta_2 \dots \beta_n \end{pmatrix}$ are admitted,

Card 1/2

Defining Relations of Finite Symmetrical Semigroups

39-45-2-7/7

where in the lower row k elements of the series 1,2,...,n are missing (substitution with the defect number k). As the system (Q) the author takes now: I. all relations between elements with k = 0, II. $(1,2)A = (3,4)A(3,4) = (3,4,\dots,n)A \times (n,\dots,4,3) = [A(1,n)]^2 = A$, where $A = \begin{pmatrix} 2 & \\ & 1 \end{pmatrix}$, III. $[(2,3)A]^2 = A(2,3)A = [A(2,3)]^2$ and IV. $[A(1,n)(2,3)]^2 = [(1,n)(2,3)A]^2$. Here $n \geq 4$. It is proved that (Q) is a system of defining relations of Σ_n with respect to the generating set.

There are 15 references, 6 of which are Soviet, 1 American, 1 Japanese, 2 English, 1 Swedish and 2 German.

SUBMITTED: January 8, 1957

1. Operators (Mathematics) 2. Relativity theory

Card 2/2

USC01147 - 007/4

AYZENSHTAT, A. Ya.

One class of periodic semigroups. Uch. zap. Ped. inst. Gerts. 183:
241-249 '58. (MIRA 13:8)
(Groups, Theory)

AYZENSHTAT, A.Ya.

Homomorphisms of semigroups of endomorphisms of ordered sets,
Uch.sap.Ped.inst.Gerts. 238:38-48 '62. (MIRA 16:4)
(Groups, Theory of) (Aggregates)

AYZENSHTAT, A.Ya.

Defining correlations of a semigroup of endomorphisms of a
finite linearly ordered set. Sib.mat.zhur. 3 no.2:161-169
Mr-Apr '62. (MIRA 15:4)
(Aggregation)

AYZENSHTAT, A.Ya. (Leningrad)

Ideals of semigroups of endomorphisms. Izv.vys.ucheb.zav., mat.
no.1:3-11 '65. (MIRA 18:3)

AYZENSHTAT, B.

Chemical combine and a school. Pröf.-tekh.oibr. 20 no.11:3-4 N '63.
(MIRA 17:1)

^D
AYZENSH^ATAT, B. A.

Ayzenshtat, B. A. "Certain features of the wind structure in Tashkent," Trudy Tashk. geofiz. observatorii, Issue 1, 1949, p. 3-16.

So: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, №. 17, 1949.)

^D
AYZENSHAT, B. A.
_A

Ayzenshtat, B. A. "On the direct measurement of the characteristics of the intensity of vertical turbulent motion in the lower layer of the atmosphere," Trudy Tashk. geofiz. observatorii, Issue 1, 1949, p. 17-26, - Bibliog: 6 items.

So: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 17, 1949).

AIZENSHTAT, B. A.

176T49

USSR/Geophysics - Fundamental Rocks Jan/Feb 51

"Thermal Equilibrium of Basement Rock in Tashkent,"
B. A. Aizenshtat, Tashkent Geophys Obs

"Iz Ak Nauk SSSR, Ser Geog i Geofiz" Vol XV, No 1,
pp 82-86

Discusses results of detn of subject components. Represents av diurnal variations of components of thermal equil during thermal half year in tables and graphs. Gives relations between sep components and their extreme values.

176T49

AYZENSHTAT, B.A.; ZUYEV, M.V.; BUGAYEV, V.A., red.; RULEVA, N.S., tekhn. red.

[Heat balance patterns over sandy deserts] Nekotorye cherty teplovogo
balansia peshchanoi pustyni. Leningrad, Gidrometeoizd-vo, 1952. 79 p.
(Tashkent, Geofizicheskaya observatoriia, Trudy, no.6). (MIRA 11:3)
(Kara Kum--Atmospheric temperature)

AYZENSHTAT, B.A., kandidat fiziko-matematicheskikh nauk

Method for determining the radiation balance of slopes. Meteor.
i gidrol. no.2:24-28 F '52. (MIRA 8:9)

1. Tashkentskaya nauchno-issledovatel'skaya geofizicheskaya ob-
servatoriya, Tashkent.
(Solar radiation)

AYZENSHTAT, B.A.

Some data on the temperature of cotton leaves. Trudy Tashk. geofiz.
observ. no. 7:69-70 '52. (MIRA 11:3)
(Cotton) (Leaves)

AYZINSHTAT, B.A.

Soil thermograph, an instrument for recording soil, surface temperatures. Trudy Tashk. geofiz. observ. no.7:133-135 52. (MIRA 11:3)
(Soil temperature) (Thermometers)

AYZENSHTADT, B. A.

"Comparison of Compensation Method and Gradient Method for Determining the Turbulent Heat Stream and the General Characteristic of the Heat Balance of the Semidesert".
Tr. Gl. Geofiz. Observ., 29, pp 275-283, 1953

Equipment is described which allows determination of the heat transfer from ground to air. It consists of a disk, painted white on its upper side and provided with a heat insulation on its lower side. The disk is put on the ground and electrically heated to equal the ground temperature. Knowing the used power and the heat coming from the sun, the turbulent heat stream into the air may be determined. (RZhFiz, No 9, 1955)

SO: Sum No 812, 6 Feb 1956

AYZENSHTAT, B. A.; KIRILLOVA, T. V.; LAYKHTMAN, D. L.; OGNEVA, T. A.; TIMOFEEV, M.P.;
TSEYTIN, G. KH.

"Measurement of the Heat Balance of the Active Surface for the Case of
Irrigation"
Tr. Gl. Geofiz. Observatorii, No 39, 37-60, 1953

The authors present data on the components of the heat and radiative balance of the active surface in a semidesert and in an irrigated field. The data was obtained by an expedition of the Main Geophysical Observatory in July 1952 in the sovkhoz "Pakhta-Aral," a collective farm in Central Asia. It was found that heat exchange in soil practically does not change under the influence of irrigation. (RZhGeol, No 3, 1954)

SO: W-31187, 8 Mar 55

AYZENSHTAT, B. A.; OGNEVA, T.A.; BORUSHKO, I.S.

"Influence of Irrigation Upon the Distribution of Meteorological Elements
in the Layer Near the Ground"
Tr. Gl. Geofiz. Observatorii, No 39, 61-90, 1953

The authors give the comparative characteristics of the regime of meteorological elements in the layer of air up to 500 meters and in the soil down to 50 cm according to given aerological and ground observations in a semidesert and in an irrigated cotton field. It is found that the speed of wind is reduced 40-50 percent under the influence of irrigation and forest belts. (RZhGeol, No 3, 1954)

SO: W-31187, 8 Mar 55

AYZENSHTAT, B. A. and ZUYEV, M. V.

"Certain Peculiarities of the Meteorological Regime in Cotton Fields and
in a Semidesert During Autumn"
Tr. Gl. Geofiz. Observatorii, No 39, 191-200, 1953

The authors present data of meteorological observations and data on the components of heat balance in the course of the days 21-22 September 1952 in the same areas where in July the complex Palkita-Aral expedition conducted its operations. In contrast with July, the September temperature differences of the air were small and were of the order of 1° at an altitude of 1 meter. Autumn saw no other notable differences in the values of the heat balance of cotton fields. (RZhGeol, No 3, 1954)

SO; W-31187, 8 Mar 55

AYZENSHTAT, B. A.

"Comparing the Compensation Method and the Gradient Methods for Determining Turbulent Heat Flow, and the General Characteristics of the Heat Balance of a Semidesert"

Tr. Gl Geofiz. Observatorii, No 39, 275-283, 1953

The author analyzes the data from observations on the components of the heat balance in a semidesert which were obtained during the operations of a complex expedition. He presents the results of comparing the various methods for determining the turbulent heat flow. The results are found to be in good agreement with the computed values. The daily course of turbulent heat exchange for a semidesert is characterized by high daytime values of this quantity, reaching around midday 0.6 cal/cm² min, which is about 80 percent of the radiation balance. (RZhGeol, No 3, 1954)

SO: W-31187, 8 Mar 55

AYZENSHTAT, B. A.

"Temperature Regime of the Surface of the Soil".
Trudy Tashkentsk. geofiz. observ., No 8, pp 84-89, 1954.

An analysis of 4 years' data from recording of temperature by a thermoelectric method in a microclimate area of the Tashkent Geophysical Observatory enables the author to establish the characteristic picture of the daily course of the temperature of the surface of soil in winter and in the beginning of spring, when cases of freezing of the surface soil are observed. He compiles for 25 cases a table of quantities that characterize the temperature regime of the upper layer of soil during freezing and thawing (temperature jump at moment of freezing, temperature drop before freezing and after, duration of period of constant temperature of surface after freezing, etc.) and considers the influence of freezing on lowering temperature of soil. (RZhGeol, No 8, 1955)

SO: Sum No 884, 9 Apr 1956

AYZENSHTAT, B. A.

USSR/Physics - Meteorology

Card 1/1 : Pub. 118 - 8/9

Authors : Ayzenshtat, B. A.; Bugaev, V. A.; and Dzhortzhio, V. A.

Title : Physics of the atmosphere

Periodical : Usp. fiz. nauk. 53/4, 583-587, Aug 1954

Abstract : "Physics of the Atmosphere", a book written by A. Kh. Khrigan is reviewed. The book consists of 22 divisions, covering such subjects as composition and structure of the atmosphere; dynamics and thermodynamics of clouds and precipitations; weather forecasting; general circulation of the atmosphere and many other related topics. The book is considered a good text book on meteorology for university students and meteorologists.

Institution : ...

Submitted : ...

AYZENSHTAT, B. A. and ZUYEV, M. V.

"Results of Investigations of the Sandy Desert and the Pamirs,"
report given at the Conference on the Meteorology of the Troposphere,
Main Geophysical Observatory (GGO) 7-10 May 1957.

Iz. Ak. Nauk, Seriya Geofizicheskaya, No. 10, Oct 1957.

Sum 1618

AYZENSHTAT, B.A.

Radiation balance and soil surface temperature in Tashkent. Trudy
Tashk. geofiz. obser. no.13:3-74 '57.
(MLRA 10:8)
(Tashkent--Soil temperature)

~~AYZENSHTAT, R.A.~~

New method for measuring radiation balance. Trudy Tashk. geofis.
obser. no.13:122-152 '57. (MLRA 10r8)
(Solar radiation)

3(3)

PHASE I BOOK EXPLOITATION

sov/1653

Ayzenshtat, Boris Abramovich, Yelena Nikolayevna Balasheva, and
Ol'ga Moiseyevna Zhitomirskaya

Klimaticheskoye opisanie Golodnoy stepi. (Climatic Description of the
Golodnaya Steppe) Leningrad, Gidrometeoizdat, 1958. 73 p. 1,000
copies printed.

Sponsoring Agencies: USSR. Glavnoye upravleniye gidrometeorologicheskoy
sluzhby, and Tashkent. Nauchno-issledovatel'skaya geofizicheskaya
observatoriya

Ed. (Title page): L. N. Babushkin, Professor; Ed. (Inside book):
L. P. Zhdanova; Tech. Ed.: M. Ya. Flau

PURPOSE: This booklet is intended for planning and agricultural organizations
connected with development of the virgin lands of the Golodnaya Steppe. It
is also of interest to climatologists.

Card 1/3

Climatic Description of the Golodnaya Steppe

SOV/1653

COVERAGE: This monograph gives a detailed description of climatic characteristics of the Golodnaya Steppe as related to the physicogeographical conditions. With the aid of numerous charts and figures it describes the general conditions, wind regime, dust storms, radiation, cloud conditions, air and soil temperatures, air moisture and drought conditions. An attempt to regionalize the area on the basis of climatological features is also made. There are three Soviet references.

TABLE OF CONTENTS:

Introduction	3
Some Characteristics of Climate Formation	5
Wind Regime	7
Local Winds	20
Number of Dust Storm Days	24
Radiation Regime and Cloudiness	32
Card 2/3	

Climatic Description of the Golodnaya Steppe	SOV/1653
Air Temperature	34
Soil Temperature	50
Air Moisture	54
Precipitation	58
Dryness of the Air	64
Some Adverse Weather Effects	65
Variations in the Microclimate of the Virgin Lands of Golodnaya Steppe Due to Their Utilisation in Cotton Culture	67
The Characteristics of Separate Sections of the Golodnaya Steppe	71
Bibliography	75
AVAILABLE: Library of Congress (QC990.R9236) Card 3/3	MM/eag 5-9-59

AYZENSHTEAT, B.A.

Investigating the range of the Ureat'evskaya winds. Trudy Sred.-Az.
nauch.-issl.gidrometeor.inst. no.2:3-16 '59. (MIRA 13:6)
(Golodnaya Steppe--Winds)

AYZENSHTAT, B.A.; ZUYEV, M.V.

Radiation, heat balance, and microclimate in a mountain valley.
Trudy Sred.-Az.nauch.issl.gidrometeor.inst. no.6:3-40 '61.

(Shakhimardan Valley--Solar radiation)
(Shakhimardan Valley--Microclimatology)

(MIRA 15:4)

AYZENSHTAT, B.A.; PANIN, B.D.

Heat balance of the active surface according to observations in
Tashkent. Trudy Sred.-Az.nauch.issl.gidrometeor.inst. no.6:
48-58 '61. (MIRA 15:4)
(Tashkent--Solar radiation) (Tashkent--Atmospheric temperature)

AYZENSHTAT, B.A.; NEUSHKIN, A.I.

Determining the relative humidity of the air in fog. Meteor.i
gidrol. no.6:50-51 Je '61.
(Humidity) (Fog) (MIRA 14:5)

AYZENSHTAT, B.A.; ANTRPOVA, U.I.; GRACHEVA, V.P.; OINEVA, T.A.; SEROVA, N.V.

Thermal balance of the active surface. Trudy GGO no. 107:34-43 '61.
(Solar radiation)

(MIRA 14:10)

AYZENSHTAT, B.A.

Radiation method of measuring the temperature of the active surface.
Trudy GGO no.107:76-79 '61.
(Soil temperature--Measurement) (MIRA 14:10)

AYZENSHTAT, B.A.

Local turbulent heat exchange in case of a thermally inhomogeneous
active surface. Trudy GGO no.107:80-83 '61. (MIRA 14:10)
(Atmospheric temperature) (Atmospheric turbulence)

S/169/62/000/001/040/083
D228/D302

AUTHOR: Ayzenshtat, B. A.

TITLE: The inflow of scattered radiation on a slope and at the bottom of a mountain valley

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 1, 1962, 15, abstract 1B119 (Tr. Gl. geofiz. observ., no. 107, 1961, 84-104)

TEXT: A model of an idealized mountain valley is used for studying the entry patterns of scattered radiation flows for certain elements of a mountainous topography. A pyranometer was employed as the main instrument, the observations being made on the Golodnaya Steppe. Since the magnitude of scattered radiation entering upon a slope is connected, firstly, with the parameters characterizing the shape of the mountainous topography and, secondly, with the peculiarities in the distribution of the scattered radiation intensity in the sky, the observations were conducted according to several different schemes. The intensity of the scattered radiation

Card 1/3

The inflow of scattered ...

S/169/62/000/001/040/083
D228/D302

of perisolar annular zones ($10 - 30^\circ$ and $10 - 40^\circ$) was also measured by means of a pyranometer with standard and wider screens. The selection of original formulas for calculating the scattered radiation flow is substantiated (with the use of the brightness of the perisolar annular zone) and their accuracy appraised. It is established that the magnitude of scattered radiation of the perisolar zone is directly proportional to the intensity of radiation scattered from the whole sky (when the atmospheric transparency remains stable); with the transparency's weakening the intensity of perisolar radiation grows more rapidly than the intensity of the radiation scattered from the whole sky and may reach a quarter part of it. When considering the influence of a horizon's degree of closure, the sun's elevation, a subsidiary slope, the orientation and steepness of slopes, and the atmosphere's transparency, the author dwells in detail on the peculiarities of the incidence of scattered radiation on the bottom and slopes of a mountain valley under different irradiation conditions. A table is given for the totals of heat from scattered radiation on slopes of a differ-

Card 2/3

The inflow of scattered ...

S/169/62/000/001/040/083
D228/D302

ing steepness and orientation for the morning and afternoon periods
and for the day as a whole. 7 [Abstractor's note: Complete transla-

Card 3/3



AYZENSHTAAT, B.A.

Some features of radiation, heat balance, and microclimate of a mountain pass. Meteor. i gidrol. no.3:27-32 Mr '62.

(Meteorology) (Mountains) (MIRA 15:3)