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FOREWORD

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JPRS: 18,753

ABSTRACTS FROM EAST EUROPEAN

SCIENTIFIC AND TECHNICAL JOURNALS

No. 137

- Biology and Medicine Series -

This report consists of abstracts of articles from the East European scientific and technical journals listed in the table of contents below.

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Natura. Seria Biologie, Bucharest, Vol 15, No 1, Jan-Feb 63 1 Revista de Zootehnie si Medicina Veterinara, Bucharest, Vol 13, No 1, Jan 63 9 FURANIA

RADU, I.F.. Dr., Bucharest [affiliation not given]

"Water in the Various Organs of Fruit-Trees."

Bucharest, <u>Natura. Seria Biologie</u>, Vol 15, No 1, Jan-Feb 1965, pp 15-18.

Abstract: Describes various methods for the quantitative determination of water, with emphasis on the method employed by the author which consisted in sectioning the material into 1 mm pieces and drying it in aluminum foil at room temperature. The author finds that the younger the organism, the greater the quantity of total water; in descending order of water content, the organs were flower, leaf, bark and wood.

Includes 8 tables and 21 references, of which 5 are Western.

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RUMANIA

OPRIS. Tudor. Bucharest, [affiliation not given]

"Endemic Plants of Rumania and Some Problems of Darwinism."

Bucharest, <u>Natura. Seria Biologie</u>, Vol 15, No 1, Jan-Feb 1963, pp 19-29.

Abstract: Discusses a number of phytogeographic, ecological, genetic and morphological problems related to the over 150 endemic plants that represent about 4 % of the over 3,600 sponteneous species found in Rumanian flora.

Includes 5 figures and 5 German, 1 French and 16 Rumanian references.

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RUMANTA

ZARMA, M., Dr., Bucharest [affiliation not given]

"The Microbiology of Inland Waters."

Bucharest, Natura. Seria Biologie, Vol 15, No 1, Jan-Feb 1963, pp 29-36.

Abstract: A review article on the importance of the microbiology of inland waters for economic purposes, and a quantitative description of the microorganisms in the waters, the functions of bacteria and microorganisms, pisciculture, etc. Also discusses the importance of knowing the exact microbiology of waters in determining the type and amount of nutritional additives to be used.

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RUMANIA

IONESCU, D., Fundules [affiliation not given]

"On the Achievements in the Wield of Leguminous Plant Improvementy"

Bucharest, <u>Nature, Seria Biologie</u>, Vol 15, No 1, Jan-Feb 1963, pp 37-46.

Abstract: Describes the experiments and results of the Research Institute on Cereals and Industrial Plants of Fundules with regard to the testing of the various types of domestic and imported peas, beens, lentils and soya beans on various types of soils. Includes 7 tables.

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BADEA, I. I., Lecturer, Bucharest [affiliation not given]

"Crop Rotation as a Means of Enhancing Agricultural Production."

Bucharest, Natura. Seria Biologie, Vol 15, No 1, Jan-Feb 1963, pp 46-52.

Abstract: A review article on various systems of crop rotation and their effectiveness as based on the results obtained in the USSR and Rumania. Discusses the effects of monoculture and the characteristics of various types of grass, cereals, leguminous plants and fodder crops. Includes 1 figure, 1 table and 5 Rumanian and 3 Russian references.

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RUMANIA

MURESAN, Augustin, Professor, Reteag Commune, Dej Raion, Cluj Regiune [affiliation not given]

"From the Experience of Teaching the Course on "Agriculture."

Bucharest, Natura, Seria Biologie, Vol 15, No 1, Jan-Feb 1963, pp 52-54.

Abstract: Describes expariences during the teaching of "Agriculture" in grades 5 to 8 of the 8-year school of general education, with emphasis on the correlation of the theoretical and practical aspects of the subject.

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RUSASIA

BLIADE, Eugenia, Caudidate in Biological Sciences (Candidat . in Stjinte Biologice), Bucharest [affiliation not given]

"Understanding the Frincipal Diseases of Cultivated Plants."

Bucharest, <u>Matura.</u> Seria Biologie, Vol 15, No 1, Jan-Feb 1963, pp 54-60.

Abstract: A popular description of the various diseases afflicting wheat, corn, potatoes, sugar bests and sunflowers.

Includes 7 figures and 3 Rumanian references.

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RUMANIA

BURLOI, Niculina, Researcher (Cercetor), Bucharest [affiliation not given]

"Maintenance of Fruit-Bearing Orchards."

Bucharest, Natura. Seria Biologie, Vol 15, No 1, Jan-Feb 1963, pp 60-62.

<u>Abstract</u>: A popular article on the importance of various gardening activities in maintaining the productivity of orchards, emphasizing the importance and techniques of pruning, fertilizing, working of the soil, irrigation and tree hygiene.

BEJENARU, Mihai, Professor, Cimpulung-Succave [affiliation not given]

"Organization and Development of Review Lessons in the Natural Sciences."

Bucharest, Natura, Seria Biologie, Vol 15, No 1, Jan-Feb 1963, pp 63-70.

<u>Abstract</u>: Designed for teachers of the natural sciences, the article includes a detailed syllabus for the review lesson in zoology for grade 9, anatomy and human physiology for grade 10, and foundations of Darwinism for grade 11.

Includes 2 Rumanian references.

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RUMANIA

MACARTE, Maria, Professor, Eucharest [affiliation not given]

"On the Activities of the 'Young Bee-Breeders' Circle."

Bucharest, Natura. Seria Biologie, Vol 15, No 1, Jan-Feb 1963, pp 70-74.

Abstrart: Describes the activities of the "Young Bee-Breeders' Circles" organized under the auspices of the Station of Young Naturalists of the Fioneers' Palace of Bucharest in September 1951. The Circles include Pioneers and pupils in grades 3 to 7 of the schools of general education of Eucharest.

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Includes 3 figures.

REMANIA

BERATLIEF, C., Bucharest [affiliation not given]

"A Little Known Pest Harmful to Ornamental Shrubs, Otiorrhynchus rotundatus Siebold."

Bucharest, Natura. Seria Biologia. Vol 15, No 1, Jan-Peb 1963. pp 75-77.

Abstract [Author's English summary modified]: Describes the pest, which often attacks ornamental shrubs such as syringa, ligustrum, viburnum, etc., as well as some herbaceous plants of the Ribes and Fragaria genus. The past is only active during the night and hibernates in the soil at depths ranging down to 50 cm. Its eggs are deposited in the soil near the thin roots of lilac plants which constitute the food of the larvae. It particularly attacks the leaves on the lower branches of shrubs.

Includes 3 figures and 1 Polish and 5 German references.

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HUMANIA

FUHN, I. E., Bucherest [affiliation not given]

"Carpathian Triton (<u>Triturus montandoni Boulencer</u>) in the Fagaras Mountains."

Bucharest, Natura, Seria Biologie, Vol 15, No 1, Jan-Feb 1963, pp 78-79.

Abstract [Author's English summary modified]: The author reports finding specimens of Triturus montandoni, T. Elpestris and Bombins v. variasata beyond the Bucegi range in July 1962. This helps explain the enomaly reported by herpetologists of an absence of T. montandoni to the West of the Bucegi range.

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Includes 4 figures.

RUMANTA

MARINESCU, Marioara Gh., Bucharest [affiliation not given]

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"One Hundred Years Since the Birth of the Rumanian Scientist, Professor Dr. Gh. Marinescu."

Eucharest, Natura. Seria Eiclogie, Vol 15, No 1, Jan-Feb 1963, pp 80-81.

Abstract: A commemorative review of the life and achievements of Gheorghe Marinescu, who is stated to be the founder of Rumanian neurology. Includes a photograph of Marinescu.

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HUMANIA

MATEESCU, Nicolae, Bucharest [affiliation not given]

"A Dangerous Disease in the Cultivations of Edible Mushrooms in the Rumanian People's Republic."

Bucharest, Natura. Seria Biologie, Vol 15, No 1, Jan-Feb 1963, pp 82-54.

Abstract: Discusses the effects of <u>Monilia fimicola</u>, which affects the nutritive substrate of edible mushrooms. Also discusses the etiology, characteristics and methods for the combatting and prevention of the discase. Includes 2 figures and 9 references, of which 6 are Western.

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MORAE, C., Bucharest [affiliation not gives]

" Speleology in the Bulgarian People's Republic."

Bucharest, Nature. Seria Biologie, Vol 15, No 1, Jan-Feb 1963, pp 84-85.

<u>Abstract</u>: a brief review article on the achievements of Julgarian speleology and on some of the problems still confronting speleologists of that country.

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RUMANIA

GOTTLINB, E., Biologist and CIOACA, M., Eng [affiliation not given]

"A New Vegetable Hormone: Giberelline. Prospective Applications in Horticulture."

Bucharest, Natura. Seria Biologie, Vol 15, No 1, Jan-Feb 1963. pp 86-88.

Abstract: Reviews the results obtained by the Chemical-Pharmaceutical Research Institute of Bucharest with regard to the effectiveness of Rumanian giberelline obtained from the following experimental variaties: Felergonium zonale (4 variaties); F. peltatum and P. Grandifforum; Hydrangea hortenesis (European variaty); Calceolaria; Saint Faulia; and Cyclamon. The results given by earlier researchers and reported in the literature are confirmed.

Includes 3 figures and 4 Russian, 1 German and 2 Western references.

GLIGOR, V., Prof Dr, Vice-President of the Higher Council of Agriculture (Vicepresedinte al Consiliului Superior al Agriculturii).

"For the Continued Development of Animal Breeding in 1963."

Bucharest, <u>Revista de Zootehnie si Medecina Veterinaru</u>, Vol 13, No 1, Jan 1963, pp 5-16.

Abstract [Author's English summary modified]: The author states that there were considerably more animals in the collective farms at the end of 1962 than at the end of 1961. Good results were obtained with artificial insemination, selection and industrial breeding methods. The author also reviews the main technical-organisational measures planned for 1963.

Contains one table.

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RUMANIA

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DOBROVICI, M., Dr, of the Animal breeding Section of the Higher Council of Agriculture (Sectia Cresterii Animalelor din Consiliul Superior al Agriculturii).

"The Importance of Selection Centers in Improving the Animal Breeds."

Bucharest, <u>Revista de Zootehnie si Medecina Veterinara</u>, Vol 13, No 1, Jan 1963, pp 17-22.

Abstract: States that the selection centers of the Animal Breeding Section of the Higher Council of Agriculture, as technical units operating independently of the animal raising or beneficiary units, determine the productivity and provenience of the animals, attest their quality, keep the State Genealogical Register, follow up the results and supervise the application of measures for the improvement of breeds. Also discusses the responsibilities of the farms and their technical personnel for the successful implementation of these activities. 1/1

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AINAMUEL

COMSA, I., Eng, of the Animal Breeding Section of the Higher Council of Agriculture (Sectia Cresterii Animalelor din Consiliul Superior al Agriculturii).

"Current Problems Concerning Artificial Inseminations."

Buobarest, <u>Revista de Zootehnie si Medecina Veterinara</u>, Vol 13, No 1, Jan 1963, pp 23-26.

Abstract: Discusses the problems confronting the Central Station for Artificial Insemination with regard to the extension of artificial insemination to cover the largest possible number of farms. Reviews the extent of such insemination for cows and sheep in the collective farms of the various regiunes, emphasizing the importance of cooperation between engineers and veterinarians, the zootechnical value of high-quality donors, the testing of the sperms and follow-up.

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HUMANIA

BALCMIRI, B., Eng, Secretary General (Secretar General) and JIANU, B., Eng of the Central "Gostat" Trust (Trustul Central Gostat).

"The Development of Animal Breeding within the Framework of the State Farms."

Eucharest, <u>Revista de Zoctehnie si Medecina Veterinara</u>, Vol 13, No 1, can 1963, pp 29-36.

Abstract: Emphasizes that the State spent over 1.3 billion lei between 1956 and 1962 for the development of the zootechnical sector in the state farms, illustrating the economic efficiency of these investments with the fact that during the corresponding period the number of large cattle units increased by about 2.9 times and the value of overall production by over 3.6 times. Also shows the increases in the stock and density of animals, the annual average production per animal, and the evolution of deliveries of products. Includes 6 tables.

BURLACU, D., Eng. and CITU, D. of the Bucharest Regiune Agricultural Council (Consiliul Agricol Regional Bucharest).

"Animal Breeding in the Collective Farms of Bucharest Regiune, an Important Source of Incomes."

Bucharest, <u>Revista de Zootehnie si Medecina Veterinara</u>, Vol 13, No 1, Jan 1963, pp 37-46.

Abstract: Reviews the increase in the stock of production animals in the Regiume between 1959 and 1962 as a result of both purchases and breeding. Details the increases in the animal stocks per 100 hectares of agricultural area, changes in the structure of the stock of production animals, the increase in the production of animal products with emphasis on pork, and describes the impact of these changes on the money incomes of the collective farms. Contains 10 tables.

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RUMANIA

MAUCH, A., Dr, of the Zootechnical Research Institute (Institutul de Cercetari Zootehnice).

"The Use of Industrial Croos-Breedings in Aviculture for Reising of Egg and Meat Production."

Bucharest, <u>Revista de Zootehnie si Medecina Veterinara</u>, Vol. 13. No 1, Jan 1963, pp 47-49.

Abstract: Outlines a number of simple, alternating and cross-breeding methods used to increase egg and meat production. Experiments were performed with Leghorn roosters crossed with either whode Island or Sussex hens, the dominant species in the agricultural stock of Rumania. The author concludes that for industrial cross-breeding the higher productive value of the offspring depends on the varieties and the methods used in breeding as well as on the higher biological value of the family lines or even individuals used.

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POPESOU-BARAN, M., Dr, CIORTEA, Gr., Dr, IONICA, C., Dr, TUDORIU, C.D., Dr. VIOR, C., Veterinarian, EDU, Eug., Veterinarian, MARCHA, B., Veterinarian, JIVOIN, P., Dr, CAMBIR, S., Dr, NITOIU, L., Dr, and PREDOIU, I., Dr, of the "Fasteur" Veterinary and Biological Products Research Institute (Institutul de Cercetari Veterinare si Biopreparate "Pasteur", CREANGA, B., Dr. FAUR, Gh., Veterinarian, and DIACONU, M., Veterinarian, of the Scientific Control Laboratory for Biological Products and Drugs for Veterinary Use (Laboratorul de Control Stiintific al Produselor Biologice si Medicamentoase de Uz Veterinar), and VOINOV, E., Dr, of the Central Agricultural Research Institute (Institutul Central de Cercetari Agricole).

"Improvement of Animal Tuberculosis Allergical Diagnosis in Rumania by Single and Simultaneous Tests Using Purified Tuberculine (PPD).*

Bucharest, <u>Revista de Zootehnie si Medecina Veterinara</u>, Vol 13, No 1, Jan 1963, pp 50-63. 1/2

RUMANIA

Bucharest, <u>Revista de Zootebnie si Medecina Veterinara</u>, Vol 13, No I, Jan 1963, pp 50-63.

Abstract: [Author's English summary modified]: Two types of purified tuberculin (PPD) were prepared; that for mammals was standardized to a content of 100,000 T.U./ml, and that for birds to 25,000 T.U./ml. The results of large-scale tests on epizootically different animals permitted the practical application of the single tuberculin test with PPD to cattle, pigs and birds. The use of PPD allowed the introduction of the simultaneous testing of cattle for tuberculosis diagnosis, bringing about a clarification of the tuberculin reactions, a saving of time and the fact that only the animals suffering from tuberculosis. among those reacting to tuberculin, have to be sacrificed.

Includes 1 Russian, 7 Western and 11 Rumanian references.

1 2/2

PUMANIA

BERBINSCHI, C., Dr. of the "Pasteur" Veterinary and Biological Products Research Institute (Institutul de Cercetari Veterinare si Biopreparate "Pasteur").

"Investigations on the Tracing of the Aujeszky Disease Virus in the Organism of Animals Inoculated with the Aujeszky Disease Virus, Adsorbed on Aluminum Hydroxide and Saponinated."

Bucharest, <u>Revista de Zootehnie si Medecina Veterinara</u>, Vol 13, No 1, Jan 1963, pp 64-71.

Abstract [Author's English summary modified]: Reports on studies regarding the presence of the virus at the inoculation site, in the inguinal lymphatic ganglions, the iliac ganglions, the lungs and the brain of pigs sacrificed 3 to 8 days after subcutaneous and intracerebral introduction of Aujeszky disease virus. It was not possible to trace the virus by means of the rabbit biotest in the organs of pigs inoculated with the adsorbed saponinated

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RUMANIA

Bucharest, <u>Revista de Zootehnie si Medecina Veterinara</u>, Vol 13, No 1, Jan 1963, pp 64-71.

virus; when the virus was adsorbed and non-saponinated, the biotest was always positive. The adsorbed virus, saponinated or not, is inactive when introduced into the rabbit intramuscularly but kills the animal in 1 to 8 days when introduced intracerebrally. The brains of rabbits that died as a result of the inoculation are always nonvirulent when the virus was saponinated and always contain the active virus if the products without saponine were used.

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Includes 2 tables and 1 Fungarian, 2 Russian and 7 Rumanian references.

POPESCH, Mr., Dr. of the "Pasteur" Veterinary and Biological Producte je search Institute (Institutul de Cercetari Veterinare ei Bjo preparate "Pasteur").

"The Propyrlactical Value of the Anti-Aujeszky Globulines Applied is an Enzootical Focus."

Bucharest, Revista do Zootebnie si Medecina Veterinara, Vol 13, Nº 1, Jan 1963, pp 72-79.

Abstract [Author's English summary modified]: Reports on the use of anti-Aujeszky globulins prepared from anti-Aujessky serum and hyperimmune serum to prevent and control the diseast among pig sucklings in an active focus, the State Agridultural Farms of Dohangia. Intramuscular ino-culation of 3 ml doses provided protection against natural infection with the virus for 91. 27 percent of the piglets, while the inoculation under the same conditions of 25 ml doses proticted only 28.06 percent of the animals. 1/2

RUMANIA

Buchares: Revista de Zootehnie si Medecine Veterinara, Vol 13, 10 1, Jan 1963, pp 72-79.

Includes 3 figures and 3 Russian, 4 Western and 5 Rumanian references.

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