

Professor V.I. Kovalevskyi — an outstanding scientist and organizer of domestic agricultural research business

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The purpose. To describe periods of creativity of an outstanding scientist and organizer of branch science Vladimir Ivanovich Kovalevskyi, his contribution to creation and development of domestic agricultural research business. **Methods.** For decision of research tasks general scientific methods are used: analysis, synthesis, typology, and also methods of scientific knowledge — problem-chronological and comparative-historical.

Results. V.I. Kovalevskyi biobibliography is reconstructed with its context filling with results of basic scientific works and disclosure of unknown page of creativity on the post of chairman of a prototype of National academy of agrarian sciences of Ukraine — Agricultural scientific committee of Ukraine (ASCU) — since September 1923 till June, 1924. **Conclusions.** It is proved that V.I. Kovalevskyi was elected the chairman of ASCU after academician V.I. Vernadskyi, B.G. Ivanytskyi, academician P.A. Tutkovskyi, professors S.L. Frankfurt, and S.F. Veselovskyi. For the period of his stay on a post ASCU moved to Kharkiv and organized the first nation-wide presentation at the First All-Union agricultural and handicraft-industrial exhibition in Moscow (1923), as well as multilateral international scientific cooperation.

Key words: Volodymyr Ivanovich Kovalevskyi, Petrovsk farming agriculture and wood academy, Department of farming agriculture and agricultural industry, Ministry of state properties, Ministry of Finance, Scientific committee, Imperial Russian technical society, State institute of experimental agronomics, Agricultural scientific committee of Ukraine.

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Among the measures "On celebrations at the state level 100th anniversary of the National Academy of Agrarian Sciences of Ukraine", stipulated by paragraph 12 of the Resolution of the Presidium of the National Academy of Sciences on March 14, 2018 (Minutes No. 5), is the preparation of an author's monograph "The History of Agricultural research" in three parts. The first part of it is devoted to the hundred most outstanding scientists and organizers of branch science, which played a fundamental and generative role in the establishment and development of agricultural research in Ukraine. Historical intelligence managed to prove the proper place of Volodymyr Ivanovich Kovalevsky in this cohort, a native of Kharkov oblast, who worked for a long time on the highest positions of the Russian Empire, the RSFSR, the USSR, and also directly in the Ukrainian SSR.

Materials and methods of research. The method of historical and scientific analysis of available publications - encyclopedic and reference publications of various epochs [1 - 4], editions to jubilee dates [5-7] and those that cover certain periods of life [8 - 15].

Research results. Kovalevsky V.I. was born on November 9, in the Balaklia village [3, p. 224] according to the one data, and to the other - on November 10 (22), 1848, in the Novo-Serpukhov settlement of the Zmiiv district of the Kharkiv province [4, p. 373]. There is lifetime information that the year of his birth is 1844 [1, 2]. He was born in a noble family; he received primary education in the Poltava Cadet Corps (military gymnasium) in Petrovsk [8]. After graduating in August 1865 he was admitted to the privileged Second Konstantinov Military School. He served in the Caucasus until his resignation on May 14, 1868. That same year he was admitted to the St. Petersburg Institute of Technology first, and the next - to the agricultural department (opened in 1865 instead of the liquidated "... after the Polish uprising of the Gory-Goretsky "Institute" [7, p. 45]) of the Petrovsk Agricultural and Forestry Academy (now - Russian State Agrarian University - MSAA named after Timiryazev K.A). At the beginning of 1875, he began working with

the editorial office of the officially print media of the Ministry of State Property - "The Agricultural Newspaper" and "Agriculture and Forestry", edited by the well-known educator Batalin F.A.

He did analytical reviews of the successes of agriculture and translations for them. Became a member of the Imperial Liberal Economic Society (5 years later he headed its agricultural branch). In 1875 he graduated from the Academy on the First Degree and with Degree of candidate of agriculture for the prepared work "Historical review of the essence of alcoholic fermentation and nutrition of yeast". Kovalevsky's V.I. original article on cross-pollination and self-pollinated plants, published on the pages of the "Agricultural Newspaper" in 1877 brought the first recognition on the field of agrobiology [16]. In 2 issues of the magazine "Agriculture and Forestry" he detail discloses the positions of Darwin Ch. [17, 18], and this article is reprinted in 1939 [19] and in 1940 [20]. In the same year, he represents his own vision of specialized agronomic stations for the further development of domestic agriculture for the first time [21].

In 1879 to the regular All-Russian Dairy enterprise Exhibition, which was held by the Imperial Liberal Economic Society in St. Petersburg, together with Levitsky I.O. he issued - "Statistical sketch of dairy farming in the northern and middle lanes of European Russia" [22], which laid the foundations for statistical research of this branch of agriculture farms in the country. The following publications are devoted to topics of tea tree, cattle breeding and trade in cattle and meat, meteorology and agriculture [23-26]. He made a translation of the Haberlundt's F. book - professor of the Agricultural College in Vienna - "General Agricultural Crop Production" [27], as well as G. Zettagast's "The Doctrine of Animal Husbandry" [28]. In 1883 he published his work "Fundamentals of culture and technical processing" of sugar sorghum [29] and translations of Prosh's F. «Growing and caring for cattle» [30]. Analyzing the most progressive achievements of foreign scientists, Kovalevsky V.I. does his best to popularize the better for domestic agriculture [32, 33].

Kovalevsky V.I. participated in large-scale research on mapping the soils of the European part of the Russian Empire, including Ukrainian lands, conducted under the direction of Dokuchaev V.V. For the first time in the history of the Department since 1881, organizes the publication of statistical collections in the generalized title "Agricultural Years", which, first of all, provided information about crops in the country until 1917. The first issue on behalf of the Department of Agriculture and Rural Industry came out under the title "1884 in agricultural terms according to the answers received from the owners" [36]. Having systematized work done from Kherson to the Arkhangelsk provinces, in February 22, 1884 he makes a report "On the duration of the vegetation period of cultivated plants, depending on the latitude and longitude of the place" at the meeting of the Botanical Department of the St. Petersburg Society of Naturalists, which first proves the dependence of the reduction vegetation period in cereals from their advancement to North, or better known as the "Law of Kovalevsky" [39]. Its peculiarities in the context of individual regions of the European part of Russia are supported by corresponding geographic maps, the practical significance of which in relation to Ukraine has not lost importance in monitoring studies to this day. No less interest, especially for historians of agrarian science, is also presented in Part II of Issue III, 1884 in agricultural terms, prepared under the general title "Activities of Government and Public Institutions in the Agricultural Part" [40].

In it, not for the first time, generalization materials are published about the activities of a few branch research institutes, primarily 7 agricultural farms, 10 seed stations and laboratories, 16 specialized farms, beekeepers, and others of the Ministry of State Property. Among them were the laboratories of Kharkiv, laboratory under the Uman gardening school, the technical laboratory at the Kyiv branch of the Imperial Russian Technical Society, the control seed Station in Kyiv under the Bureau of the Kiev Agricultural Society, the agricultural Bureau under the Kharkiv Agricultural Society.

Kovalevsky V.I. prepares the volume on agriculture for the fundamental edition of "The historical and statistical survey of industrial Russia" (1882). He is elected a member of the Imperial Russian Geographical Society and in 1882 appointed a member of the Academic Committee of the Ministry of State Property, and in 1884, he appointed a vice-director of the Department of the Tax collection of this Committee. Despite the real successes in work, at the request of Interior Minister Tolstoy D.A., Kovalevsky V.I., as politically unreliable, was dismissed from work in 1886. At the end of the same year, at the invitation of the new Minister of Finance Vyshnegradsky I.O., he occupies the position of a specialist officer and a representative of the agency in the Ministry of Transport. In March 1889 he was appointed a member of the Tariff Committee and the Council on Tariff Affairs of the newly created Department of Railways of the Ministry of

Finance, where he began to cooperate with Witte S.Y. Deals with tariffs for agricultural cargoes. At the VIII All-Russian Congress of Naturalists and Doctors in 1889, for the first time in their history, organizes a section of agronomy, which presents a programmatic report "Inquiries of modern agriculture to science" [41], which reveals the possibility of using the achievements of the natural sciences for agrarian needs, first of all, physics for studying the climate and weather and their impact on the formation of the crop.

In addition, he gives the results of his own research on meteorological, hydrological and temperature observations. At his initiative, weather stations open in different regions of the country. Not without reason, along with Voeinkov A.I. and Brownov P.I. he is considered the founder of the national science - agrometeorology. By the way, the same applies to another, namely: agricultural ecology. He defined it as "... the aggregate of the harvest influence on the quality of the seeds, the composition of the soil, methods of cultivation, meteorological conditions, plant protection, etc.".

Under his editorship at the All-Russian Industrial and Art Exhibition and the All-Russian Trade and Industrial Congress in Nizhny Novgorod, the collection "Production Forces of Russia" [42] with a brief description of various branches of labor in accordance with the classification of the exhibition is published in Russian and German. After publication, Kovalevsky V.I. was placed alongside Bunge M.H., Turner F.G. and Witte S.Y. - public figures who played an important role in the development of the factory industry in the country. Participates in the drafting of the Law "On State and Industrial Tax" (1898). During 1899 - 1901 he headed a special meeting on the preparation of a bill on the opening of industrial enterprises; also he is a member of the Commission on the study of the Chernozem Center. In April 1899 he received another rank - the secret counselor. That same year, together with Witte S.Y., Mendeleev D.I. and others organizes the St. Petersburg Polytechnic Institute. He also contributed to the opening of the Warsaw and Kiev Polytechnic Institutes (1898). No less outstanding and constructive was the Kovalevsky's V.I. activity for the needs of other universities in the country. By Council of Imperial Dorpat (Yuryevsky) University in 1902 Kovalevsky V.I., along with Mendeleev D.I., Bekhterev V.M., Mechnikov I.I. and others, was elected an honorary member of the institution. Since 1900 he became a fellow (deputy) Minister of Finance and head of Trade and Industry affairs of the Department. Under the editorship of Kovalevsky V.I., on the behalf of the Commission on the management of the Russian department at the World Exhibition in 1900 in Paris, a collection "Russia at the end of the nineteenth century" [43] is published, also in French.

Since 1913, Kovalevsky V.I. is chairing the Ural-Caspian Oil Company, and next year - in the company of the mechanical factories "Brothers Bromley". With the beginning of the First World War, he became a member of the Bureau of the Central Military-Industrial Committee and the Freelancer of the Peat Committee of the General Directorate of Land Management and Agriculture. He perceived both the February and October Revolutions in Russia in 1917.

After the XII Congress of the Russian Communist Party (Bolsheviks) in April 1923 reviewed the national question, proclaimed a policy of indigenization or in Ukrainian realities - Ukrainianization, he received an invitation to move to the Motherland in Kharkiv. At the Plenum of the Agricultural Scientific Committee of Ukraine on July 13, 1923, he is elected an active member [10]. After Professor Veselovsky's S.F. resignation at the session of the Presidium of ASCU, he was elected the new head of the Department from September 15, 1923 [11]. He considers the Committee as an institution that "... not only obtains scientific truths, but also makes it's the property of agricultural practice for raising the productivity of folk labor." At the same time, in his opinion, "... on the one hand, the Academy of Agricultural Knowledge, and on the other - the Institute of Experimental Agronomy" provide from the side of science, technology and economy, the development of agricultural industry "... in the production of the largest number, of the highest quality, at the lowest cost, useful organic matter of plant and animal origin" [44].

At this time, according to the materials of his report in the plenary session of the First All-Union Conference on the Study of Natural Production Forces, his program article "Fundamentals of Agrarian Policy" in Volume 2 of the "Chronicle of the State Institute of Experimental Agronomy" is published, in which the author conceptually stops at the tasks "... that we must use it for the fastest revival and development of our agriculture" [45]. Shortly afterwards he was elected chairman of the Main Committee of Expertise (Scientific and Technical Council), as well as the head of the agronomic section and a member of the Presidium of the Main Exhibition Committee of the First All-Union Agricultural and Trade Show (Exhibition) in Moscow. In addition, he joined to the development of a project for the creation of the Exhibition of Economic

Achievements of USSR and the All-Russian Institute of Plant Production, and, according to the decision of August 1924 by the Presidium of the Central Committee of the USSR, to the establishment of the All-Union Academy of Agricultural Sciences named after Lenin V.I. in 1929. This was supposed to be quite frequent transfers between the capital and Kiev. As a result, he was seriously ill. Despite the fact that on December 29, 1923, the ASCU Plenum once again confirmed his powers as head of the post, after the Committee's move to Kharkiv, he remained the nominal chief until June 21, 1924 [46]. Officiating, he publishes on the pages of the official press secretariat of ASCU - in the journal "Bulletin of Agricultural Science" for 1923 - 1924, a series of articles in Ukrainian [47 - 50].

The plan for the publication of the popular ASCU's Library on Drought Control in Ukraine in 1925 indicates that Kovalevsky V.I. planned to continue his creative work in the Motherland. He was going to publish on the 2 printed sheets an edition of 10 thousand copies of the brochure «Drought control in Different Areas» [51]. But, like they say, it did not happen. Nevertheless, he remained a member of the editorial board of the journal "Bulletin of Agricultural Science" until the end of 1924.

With the beginning of the All-Union Institute of Applied Botany and New Cultures' work in August 1924, he becomes and remains the honorable member of Academic Council until the end of his life. He continues to write meaningful abstracts on the publications of leading foreign scientists, published in industry magazines, paying particular attention to those, which are related, in one or another way, to the results of research by domestic scientists of agrobiologists.

An example is a brief overview of foreign agronomic magazines, namely "Land wirtschaftliche jahrbucrel, zeitschr. F. wissench Landwirtsehcoft », « The journal of the Ministry of Agriculture », « The journal estranger » and « Annales de la Science Agronomique francaiseet e`trangere » to No. 5 - 6. T. IV. « Bulletin of the State Institute of Experimental Agronomy » for 1926 [52].

He wrote a library-research paper prepared on the basis of the published materials of Meeting of the Second Commission on the Chemical Soil Analysis of the International Society of Soil Scientists, held in April 1926 in Groningen (Netherlands), and Kovalevsky V.I. was the first, who reported about the international recognition of the results of the research on the physical and chemical properties of soils carried out by Gedroits K.K. on the Nosovska Research Station [53]. It is impossible to ignore the Kovalevsky's V.I. analytical publications on the principles of the creation of the All-Union Academy of Agricultural Sciences named after Lenin V.I. [54].

For many years, he was the editor-in-chief of the Great Agricultural Encyclopedia, which still has no analogues.

Volodymyr Ivanovich Kovalevsky died on November 2, 1934, buried at the Smolensk Cemetery in St. Petersburg (Russian Federation).

Conclusions

Kovalevsky's V.I. word and deed contributed to the formation and development of a system of scientific support of the historically leading sector of the economy - agriculture. Volodymyr Ivanovich has a direct bearing on the appearance of the most of institutions, including the organization of conducting sectoral research through the regional construction and academic coordination beginning.

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