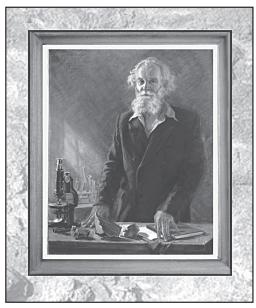
CHRONICLE

Professor Viktoras Ruokis – founder of Lithuanian pedology

ŽEMDIRBYSTĖ=AGRICULTURE

Conscientiously fulfilled duties give man a certain joy, frees one from gruelling troubles, elevates the mood, though arduous work has been done. /Viktoras Ruokis/



Picture – a portrait of prof. Viktoras Ruokis painted by the artist P. Tarabilda (oil, 1952)

On March 11, 2010 it was 125 years since professor Viktoras Ruokis had been born. He was an agronomist, soil scientist and agro-chemist, initiator of the national soil science, founder and longevous head of the Lithuanian Soil Scientists' Association, corresponding member of the Lithuanian Academy of Sciences who had nurtured a host of scientists and thousands of agricultural specialists.

Viktoras Ruokis was born into a peasant family on March 11, 1885 in Daubariškės village (Švenčionys county, Daugėliškis parish). For two years he had studied in Vilnius Seminary (1904-1905). In 1907, in Petrograd (Saint Petersburg) he passed the equivalency examination and received a gymnasium-leaving certificate. During 1908–1912, he studied at the University in Odessa and was awarded the diploma of a chemist. During 1912– 1914, he continued his studies at Moscow Agricultural Academy (Russian State Agrarian University of K. A. Timiriazev) and was granted a diploma of an agronomist.

Upon return to Lithuania, for a few years he had been working in Vilnius, in the Land Management Committee. During 1916–1917, he served in the Russian Army. After demobilisation, in January 1919, he re-established the Dotnuva School of Agriculture and was employed there as head and teacher. During 1922-1926, he taught at the Dotnuva Agricultural College, established on the basis of that school. From 1924 V. Ruokis had been working at the Academy of Agriculture in Dotnuva (later - Lithuanian Academy of Agriculture). He had been working there from that year (with a break from 1941 to 1944), later at the Lithuanian Academy of Agriculture, to 1968. He taught basics of geology, soil science, agronomic chemistry, headed the Departments of Geognosy (1924-1941 and 1944-1947), Soil Science (1947-1951 and 1963-1968) and Soil Science and Agro-chemistry (1951–1963). He had been conferred scientific titles of privatdocent (1924), docent (1928), extraordinary professor (1931) and professor (1945).

Until the Second World War, professor V. Ruokis investigated Lithuania's soils and parental rocks, created Lithuanian soil science terminology, in 1930 published Classification of Lithuania's Soils according to relief, texture and moisture regime, in 1936 prepared, in 1937 and 1939 published "South Lithuania's Soil Map", wrote textbooks "Chemistry" (1920), "Analytical Chemistry" (1922), "Organic Chemistry" (1923), "Soil Science" (1930), "Fertilizer and Fertilizing Science", "General and Historic Geology" (1935), cognitive books "Palanga Land" (co-authored by I. Končius, 1925) and "Across Europe and Africa" (1933) (all in Lithuanian).

After the Second World War, encouraged by V. Ruokis, much attention was paid to the issues of Lithuania's soils research and productivity enhancement. His personal research interests represented petrographic and mineralogic research into boulder and skeletal part of Lithuania's soils.

Professor supervised a great number of PhD students from the Lithuanian Academy of Agriculture and Institutes of the Lithuanian Academy of Sciences and acted as an opponent of their thesis. The subjects proposed and supervised by the professor encompassed research into the cover and prevailing physical, hydrophysical and chemical properties of the soils of some regions of Lithuania, Lithuania's parental rock, soil fertilization with peat, fertilization of cultivated crops with ammonia water, soil water erosion, forest sandy soils. He prepared 32 candidates of agricultural sciences (doctors of agronomy science); many of his students are renowned Lithuania's soil scientists and agro-chemists. In co-operation with them professor developed the first genetic classification of Lithuania's soils and in 1951 prepared the first soil map (M 1:400 000), co-authored by V. Vazalinskas, B. Baginskas. In cooperation with them, he prepared and published the monograph "The Soils of the Lithuanian SSR" (1965), which played a significant role for further development of the national soil science.

Professor V. Ruokis was an active participant, presenter and debater in scientific conferences. He made oral presentations in the USSR, republican and institutional conferences, was a frequent guest at V. Dokucajev Soil Institute's scientific events, Moscow Agricultural Academy (Russian State Agrarian University of K. A. Timiriazev), Fertilizer and Fertilizing Institute, congresses and expeditions of USSR Soil Researchers' Association. His presentations were focused on the issues of soil genesis, classification and cartography, soil fertility, erosion, economic evaluation of land and others. In 1965, he took part in the University of Odessa's scientific conference devoted to the 100 anniversary of this higher education establishment, whose disciple professor was.

In Lithuania, professor V. Ruokis attended not only the conferences arranged by agricultural research and studies institutions but also the events held by the Lithuanian Academy of Sciences, and its Institutes of Geology, Geography and other institutions. In them professor discussed quaternary sediments in the Baltic States and Belarus, the significance of parent rocks, relief and climate on soil formation, he also suggested making a map of the country's ground waters as soon as possible, encouraged a detailed study of carbonate distribution in the soils and parental rocks, and presented soil science history and its development stages.

As a renowned teacher and scientist, in 1947 professor V. Ruokis was elected corresponding member of the Lithuanian Academy of Sciences and in 1958, having established a Lithuanian branch of the USSR Soil Scientists' Association, he became its first chairperson and chaired it until 1970. His merits for agriculture and soil science were rewarded by conferring him the title of merited research persona (1947) and by the state the award of Lithuania (1967).

In practical conferences devoted to agricultural issues professor came up with ideas how to improve genetic classification of Lithuania's soils, systematics, evaluation, mapping not only on the USSR but also on the larger international level. He made presentations on sustainable use of humus, formation of water-resistant soil structure, importance of crop rotations for soil fertility.

At that time, professor wrote and published some of the most valuable books: "Crystallography.

Mineralogy. Petrography" (1950), "Soils" (1956), "Soil Science" (1959), "Crystallography and Optical Mineralogy of Rocks" (1966) (all in Lithuanian). It should be admitted that V. Ruokis written legacy is not very abundant – 82 publications, including 20 books and brochures and 62 articles (8 – scientific, 17 – science dissemination articles). A collection of V. Ruokis manuscripts is stored at the Lithuanian Academy of Science's Library.

Being the leader of Lithuania's soil scientists, prof. V. Ruokis established a tradition of organizing scientific expeditions to identify and explore Lithuania's and former Soviet Union's soils of the European part, collect their monoliths, field rocks and minerals. The soils of Vilnius and Klaipėda districts were explored during 1946–1949, those of Kaunas in 1950, and those of Šiauliai and Alytus districts in 1957. In 1953, the country's soil scientists took part in the geological and geographical expedition in the Baltic Republics, in 1960 professor led the soil scientists' expedition across the former Soviet Union's southeast natural and soil zones. The samples of soil monoliths and rocks brought by professor V. Ruokis constitute the golden fund of the exposition of the Lithuanian University of Agriculture's Department of Soil Science and Agro-chemistry.

The activities of V. Ruokis as an advisor of Lithuanian agricultural producers also deserve mentioning. Initially he provided advice to the then operating Soil Research Party on soil systematics and mapping issues. He placed a special focus on soil research methods, correctness of the obtained results and adequate interpretation. He explained to the agricultural producers that the main emphasis should be focused on measures intended to enhance and maintain soil fertility. He highly valued field manuring. Since there was a shortage of farmyard manure, he recommended using the abundant resources of peat from low-lying moors.

Professor V. Ruokis is also remembered as a torchbearer of the nation – advocate of music, sports, and healthy lifestyle.

Professor Viktoras Ruokis passed away on December 26, 1971 in Kaišiadorys and is buried in Kaunas Petrašiūnai cemetery. To perpetuate his memory, one of the streets in Akademija settlement, Kėdainiai district was named after him as well as one of the geology classrooms of the Lithuanian University of Agriculture and a tombstone was erected. His life and activities are described in the monographs "Professor Viktoras Ruokis" written by the author of this article (together with V. Danilevičius, 1982). The professor's life and activities have been remembered in various events of the Lithuanian Academy of Sciences.

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