OBITUARIES

Evgeniya Nikolaevna Sinskaya

THE death occurred on March 4, 1965, in Leningrad of Professor Evgeniya Nikolaevna Sinskaya, the distinguished Soviet biologist, well known for her studies in taxonomy, plant breeding, ecology, genetics and physiology.

E. N. Sinskaya was born into the family of a teacher in the city of Pskov on November 25, 1889. After she had obtained her school-leaving certificate, she studied from 1911 until 1917 as an external student at the former Petrov Academy of Agricultural Sciences in Moscow. In the summers she used to carry out practical agricultural work and also participate in scientific expeditions. Graduating as an external student from the Academy in 1917, she obtained a diploma with the title of scientific agronomist. In 1918 she joined an expedition to Central Asia to study the plants of the solonchaks (saline soils), and in 1919 started her work as a specialist on meadow culture at the Saratov Province Land Department. In Saratov she happened to meet Professor N. I. Vavilov, who then held the chair of plant production at the Saratov University, and was invited by him to join his department. In 1921, together with other colleagues of N. I. Vavilov, Sinskaya moved from Saratov to Petrograd. Here, N. I. Vavilov became head of the institution then named the Bureau of Applied Botany which in 1925 became the All-Union Institute of Plant Industry (VIR). E. N. Sinskaya worked at this Institute up to the last days of her life. She took an active part in the organization and direction of various divisions of the Institute—the Technical Crops Division, the Forage Crops Division, and the Ecology and Taxonomy Division.

A woman of great erudition, tireless activity and energy, Sinskaya soon became a leading scientist of the Institute. Her scientific activity led to the publication of more than 140 works. Among the most important are: *Oleiferous and Root Crops of the family Cruciferae* (1928), *Breeding of Forage Crops* (1936), *Meadows of the Mountain Foothills in the North-western Caucasus* (1939), *Dynamics of Species* (1948), *Alfalfa* (1950), *Annual Forage Crops of the USSR* (1957), *On Categories and the Laws of Variability within Populations of Higher Plants* (1963). A large work of forty printed sheets on *Historical Geography of Cultivated Plants* was left in manuscript. In 1936 the degree of Doctor of Biological and Agricultural Sciences was conferred on her for her studies on oleiferous Cruciferae and on forage crops.

Each year, Sinskaya actively participated in expeditions collecting plant resources. She organized collections of local cultivated and wild plants in the Far East, in the Altai Territory, and her most detailed investigations were carried out in the Caucasus and Transcaucasus regions. She brought back from her Far East expeditions many samples both of cultivated and of useful wild plants from Japan.

Prof. Sinskaya was a person of ready sympathy. She was always greatly interested in the work of other research workers, and gladly shared her knowledge and experience with those who asked her help. She maintained wide relations with many scientists both in the Soviet Union and elsewhere.

E. N. Sinskaya was decorated in 1957 with the Order of Lenin.

V. BORKOVSKAYA

Dr. Erna Bonnott adds:

Professor Sinskaya's death at the age of seventy-five is a grievous loss to biology. Her work extended over more than four decades which saw deep and fundamental changes in the concepts of evolutionary genetics. Her own contribution to these changes has been very considerable.

Although her biological interests were diverse to an unusual degree, and enriched not only ecology, geography and taxonomy but also plant breeding and population genetics with a wealth of new data and ideas, throughout her whole work there can be found a strikingly single-minded concern with the nature and causes of genetic variability. From her first published paper in 1922—"On the Study of the Laws of Variability in the Family Cruciferae"[1]—to one which appeared in the last year of her life—"On the General Regularities of Ecological–Geographical Variability within Populations of Wild and Cultivated Plants"[2]—Sinskaya's preoccupation with this problem is very clear. It is a problem to which she brought a fluent and erudite knowledge of plant taxa and the skilled application of the phyto-geographical techniques of Vavilov.

Working with oil and forage crops and their related wild species for most of her life, Sinskaya drew heavily on the evidence they evinced of speciation processes in order to build into the growing structure of genecology her own specific contribution of the ecoelement concept. Sinskaya's ecoelements—character complexes, maintained by linkage groups of adaptive origin—carried the ecotypic analysis of plant populations a stage further than did most concepts by other genecologists of her day. Ecoelements resemble the genetic inertias formulated by Darlington and Mather which rested on the polygenic theory of inheritance, and the cohesion theory of Anderson. They also supplied the link between ecology and genetics from the direction of ecology that the work of Dobzhansky and others provided from genetics. Recognizing the importance of Sinskaya's work, J. W. Gregor invited her to prepare one of her very rare contributions in English[3].

[1] *Trudy Priklad. Bot. Genet. Seleks.*, **18** (2), 15 (1922).
[2] *Trudy Priklad. Bot. Genet. Seleks.*, **36** (2), 3 (1964).
[3] *Report Scott. Pl. Breed. Sta.*, 31–40 (1958).

J. K. Dixon

DR. J. K. DIXON, a prominent research scientist and director of the Department of Scientific and Industrial Research Soil Bureau, Taita, died on July 30, 1966, at his home in Karori, Wellington, New Zealand.

Dr. Dixon was educated at Christchurch Boys' High School and Canterbury University from which he graduated in 1929. For the next two years he worked on causes of bush sickness in the Te Kuiti area; then in 1931 he received a National Research Scholarship to spend two years at the Imperial College of Science and Technology, London. In 1933 he gained a Ph.D., was awarded the Diploma of Membership of Imperial College of Science and Technology (London) and was elected a Fellow of the Royal Institute of Chemistry.

After his return to New Zealand Dr. Dixon worked for three years at the Cawthron Institute, Nelson, and established that "Morton Mains disease" in animals in Southland was a disorder resulting from cobalt deficiency. He joined the D.S.I.R. Soil Bureau in 1936 and became its chief soil chemist in 1940, assistant director in 1952, and director in 1962.

Dr. Dixon served as president of the Royal Society of New Zealand, the New Zealand Institute of Chemistry, the New Zealand Soil Science Society and the New Zealand Institute of Agricultural Science. He was the senior New Zealand Government representative at the eighth International Congress of Soil Science in Bucharest in 1964.

Dr. Dixon was well known for his research on problems associated with cobalt deficiency in animals and for his work on the use of organic waste matter in composting. I knew Dixon personally for the past thirty-six years and, together with all those with whom he was associated, shall sadly miss a former colleague who not only left his mark in the field of soil science but has at the same time been outstanding in his dedication to the service of his fellow men. He is survived by his wife and two sons.

L. W. TILLER