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PROFESSOR ELIAHU SWIRSKI

This special edition of the *Israel Journal of Entomology* is dedicated to Prof. Eliahu Swirski on the occasion of his seventieth birthday.

Eliahu Swirski was born in 1921 in Vilna, Lithuania, and immigrated at the age of 13 to Israel. Already as a boy he was attracted to agriculture and therefore majored in agricultural studies at the Herzlia High School, from which he graduated in 1938. During the years 1938-1942, Swirski studied biology at the Hebrew University of Jerusalem. With the advent of the Second World War, he discontinued his studies and volunteered in the British Army, with which he served during the years 1942-1946. After the war he resumed his studies and in 1948 was awarded his M.Sc. degree in Zoology. During the same year he began working as a scientist in the Department of Entomology of the Agricultural Experiment Station, Rehovot, and again had to leave his job for a while when the War of Independence broke out. He served in the Israel Defence Forces (Givati Brigade) throughout the war (1948-1949), participating in the battles in the south of Israel. He resumed his job in the Department of Entomology soon after the war was over and received his Ph.D. degree in 1951 for his studies of aphids attacking fruit trees. In this field of research he was soon recognized as a world authority.

In 1951 Swirski was invited by Prof. F.S. Bodenheimer to join the Department of Entomology at the Hebrew University of Jerusalem where he continued his studies of aphids which resulted in a comprehensive book, "The Aphids of the Middle East," published together with Prof. Bodenheimer in 1957. Due to his love of agriculture and his strong desire to help find solutions for practical agricultural problems, he decided in 1955 to return to the Agricultural Experiment Station, where he began his intensive and voluminous work on fruit pests of deciduous trees,

citrus, date palms and avocado. His numerous studies and his day-to-day contacts with the farmers contributed to the solution of many agricultural problems. Among the pests that he studied were aphids: the pear phylloxera, *Aphanostigma pyri*, on pears, and the spirea aphid, *Aphis spiraeicola*, on citrus; mealybugs: the long-tailed mealybug, *Pseudococcus longispinus*, on avocado; the Mediterranean fruit fly, *Ceratitis capitata*, on peaches and mangoes; psyllids: the pear psylla, *Psylla pyricola*, on pears; scale insects: the date palm scale, *Parlatoria blanchardi*, and the date pit scale, *Asterolecanium phoenicis*, on date palms; the California red scale, *Aonidiella aurantii*, the Florida wax scale, *Ceroplastes floridensis*, and the Mediterranean black scale, *Saissetia oleae*, on citrus; mites: the citrus rust mite, *Phyllocoptruta oleivora*, on citrus and the carmine mite, *Tetranychus cinnabarinus*, on strawberries; and Lepidoptera: the honeydew moth, *Cryptoblabes gnidiella*, and the giant looper, *Boarmia selenaria*, on avocado.

In 1959 he was appointed Head of the Department of Entomology at the Agricultural Experiment Station (to be known later as The Volcani Center) and held this position, despite the many difficulties and hard work involved, until his retirement in 1986. Under his leadership as Head of the Department, emphasis was placed on projects dealing with the biological control of insect pests by their natural enemies. Biological and ecological studies of insect pests and their natural enemies were carried out in the Department of Entomology, and many parasites and predators from other countries were imported to Israel. A great believer in the biological control of pest insects, Swirski dedicated himself to these studies and thus should be considered as one of the founders of the Integrated Pest Management (IPM) method in Israel. His studies in this field contributed to the development of IPM systems in citrus, date palms and avocado.

In 1959 Swirski was awarded the Histadrut Prize for his studies of the biology of the citrus rust mite and in 1961 he received awards from the Municipality of Rehovot and the Citrus Marketing Board of Israel. In 1960 he was invited to Japan and Hong Kong to carry out a survey of Phytoseiid mites, a mission which resulted in the description of several new species. During the years 1964–1967 he was appointed to serve also as the Director of the Institute of Plant Protection and, despite the enormous administrative work, he continued with even greater energy his scientific activity.

Among his many other activities, Swirski was also involved in the taxonomy of aphids and predatory mites and described many new species. Ten newly described insect species carry his name, an honor awarded to him by taxonomists from all over the world. These are: *Amblyseius swirskii* Athias-Henriot; *Phytoseius swirskii* Gupta; *Seiulus eliahuswirskii* Ragusa di Chiara; *Typhlodromus swirskii* Denmark; *Platyseiella eliahui* Ueckermann; *Phytocoris swirskii* Linnavuori; *Metaphycus swirskii* Annecke and Mynhardt; *Paraseirola swirskiana* Argaman; *Lachnus swirskii* Hille Ris Lambers; and *Swirskiaphis* Hille Ris Lambers, new genus. In 1972 he travelled to Kenya and South Africa searching for natural enemies of soft scales and succeeded in introducing into Israel many natural enemies, among them the parasitoid *Metaphycus bartletti*, an efficient natural enemy of *S. oleae*. In addition he discovered another parasitoid, a new species described later as *M. swirskii*, that was successfully established in Israel as an important natural enemy of the pyriform scale, *Protopulvinaria pyriformis*, on avocado. Eliahu Swirski developed, throughout the years, close relationships with many scientists from overseas and is often asked, as a world authority in the taxonomy of predatory mites, to re-examine species sent to him from all over the world. He is also well known as an excellent lecturer and was chosen in 1974 as Lecturer of the Year at the Agricultural Research Organization (Volcani Center). In 1978 he was invited to teach at the Hebrew University of Jerusalem, Faculty of Agriculture, Rehovot, and continued to do so until 1988. Several times he was voted by his many students as the Best Lecturer at the Faculty of Agriculture. As an excellent scientist and teacher, he also supervised the work of many students towards their M.Sc. and Ph.D. theses, and some of these students continued working with him later in the Department of Entomology at the Volcani Center.

In 1986 he was awarded, together with his colleagues Dr. M. Wysoki and Mr. Y. Izhar, the

prestigious Kaplan Prize for developing an IPM system for avocado groves in Israel which resulted in limited insecticidal applications and a better environmental ecology. In the same year he was also appointed an Honorary Fellow by the Pesticide Research and Development Fund. In 1987 his name was entered by the Fruit Marketing Board, in the Golden Book of the Jewish National Fund (Keren Kayemet le'Israel), in recognition of his work on fruit tree pests. In 1988 he was given an Honorary Fellowship of the Agricultural Research Organization.

Professor Swirski officially retired in 1986. Nevertheless, he is still active and participating in most of the projects in which he was involved prior to his retirement. Upon his retirement he established The Rachel and Eliahu Swirski Foundation which helps to support students specializing in Entomology and in Insect Pest Management. He maintains all his contacts with scientists abroad and with individual farmers and establishments in Israel and continues his regular visits to fruit tree plantations all over Israel, advising farmers and carrying out field trials. Recently, after achieving successful control of the Japanese bayberry whitefly, *Parabemisia myricae*, in Israel, he was asked to assist in solving this problem also in Italy and Greece. He is now collecting natural enemies in Israel and shipping them to these countries.

The enclosed list of his publications clearly demonstrates Prof. Swirski's wide interests in many fields of Entomology, the enormous amount of his work during the years, and his significant contributions to agriculture.

All his friends and colleagues, in Israel and abroad, wish him good health, success and many years of continued fruitful activity.

M. Wysoki and M. Kehat

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Filippia olea (Costa, 1832)
(Fig. 1)

Coccus oleae Costa, 1882:21.

Lecanium oleae. Smith, 1892:15 (list); Brown, 1899:20 (redescription).

Filippia oleae. Fernald, 1903:13 (catalog); Hall, 1943:50 (hosts list).

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