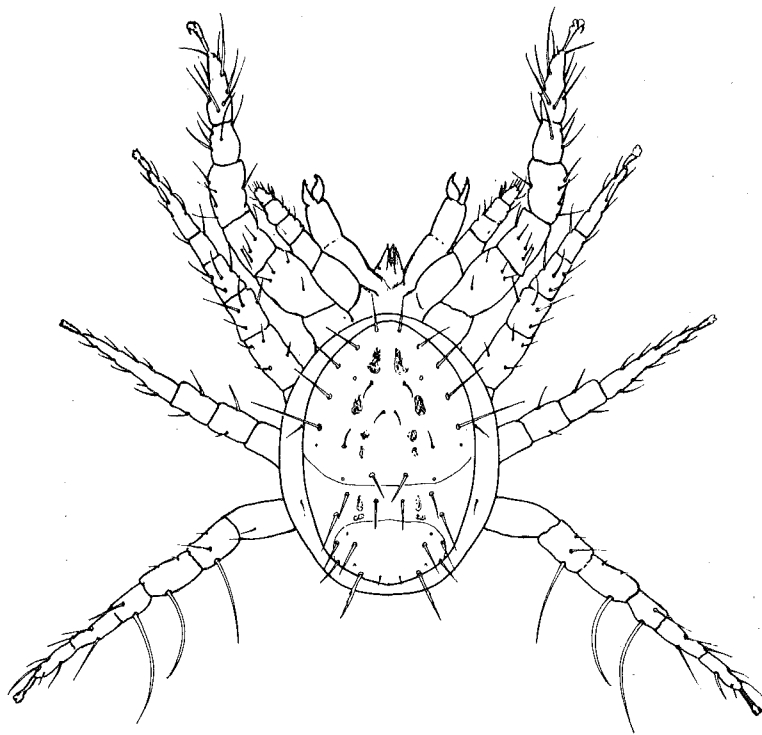


# ISRAEL JOURNAL OF ENTOMOLOGY

VOLUME VIII 1973



THE ENTOMOLOGICAL SOCIETY  
OF ISRAEL

The drawing on the front page depicts the protonymph of *Amblyseius rubini* Swirski and Amitai, discussed in the present volume by E. Swirski et al. Drawing especially prepared for this volume by S. Amitai.

## ISRAEL JOURNAL OF ENTOMOLOGY

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B O O K   R E V I E W

MAIZE ROUGH DWARF, A Planthopper Virus Disease Affecting Maize, Rice, Small Grains and Grasses. Isaac Harpaz - Israel Universities Press, Jerusalem, 251 pp. 1972, \$ 20.00.

It is very seldom that a book is written about a single virus disease of plants. Professor Harpaz has chosen a little-known disease, first noticed in 1949 in Italy and proved by him in Israel as late as 1959 to be virus instigated. After reading this book, it is understandable why the disease lends itself to such a treatment and is deserving of it. For one thing, maize rough dwarf virus (MRDV) occasionally reaches panphytotic proportions on corn in a number of countries in southern and central Europe and in Israel, and can be ignored only at heavy risk to this crop. Furthermore, the disease is caused, as the author has shown, by a virus that only accidentally attacks corn, through its principal vector, the planthopper, *Laodelphax striatella*; the natural host plants of this vector are such plants as wheat, barley and various wild grasses which seldom suffer from the disease, but serve as reservoirs for the virus, helping it through various seasons of the year. Corn itself is shown to be a "dead-end", - suffering, it is true, but being incapable of allowing transmission of the virus to the vector. Most intriguing was Harpaz's contention, backed by ample experimental evidence, that MRDV is primarily a disease of the vector itself, leading to its own demise.

The results of years of excellent research carried out here by Harpaz and Dr. Meir Klein, as well as groups of Italian and other scientists, are presented in lucid form and makes fascinating reading. The reader is given a chronological sketch of how the pieces of the puzzle of the identity of this

virus fell into place, a fine bit of long-term sleuthing. Some chapters are devoted to symptomology, insect transmission, virus-vector and virus-host relationships, properties of the virus, comparison with other viruses. The chapter on "Morphology and biology of vector species" deals not only with *L. striatella* but three other planthopper vectors of MRDV. The chapter on "Epiphytology of the disease" is particularly interesting, a rational and convincing explanation being propounded out of a wealth of data, for the build-up and decline of the disease in different climates over a period of years; suggestions are given for its control. No claim is made that the whole story is unfolded in this book, as many vexing questions are shown to still remain.

The book is amply illustrated with photographs (a few in color); although the electron-microscope photographs are clear enough for most purposes, better quality paper would have been preferred. Graphs and tables are more than adequate.

Some readers might find the text repetitious in parts, but I believe it is all to the good, as there aren't redundancies, as they refer back to other pages where the same or similar statements are treated in a different light, and thus serve the reader as cross-references.

Typographical errors are rare indeed. There is a bibliography of 330 references and an author and a general index. If I have to carp, it is only over the high price of the book, which will put it out of reach of most interested scientists.

R. Kenneth



PROFESSOR EZEKIEL RIVNAY

First President of the Entomological Society of Israel

(19 April 1899 - 7 April 1972)

IN MEMORIAM

In our present age of ever-increasing specialization in the academic professions, there are not many persons left that really merit the unqualified designation "entomologist". We do in fact nowadays have numerous insect physiologists, insect taxonomists, toxicologists, pathologists, as well as a variety of other specialists with the adjective equivalent "insect" preceding the noun denoting their specialty. But extremely rare are the persons capable of mastering the science of entomology in its full, integrative scope. Ezekiel Rivnay was one of these few masters, belonging to a generation of scholars that is unfortunately rapidly disappearing. Although he was trained in the United States, where the predominant trend in university education has always been to specialize rather than to generalize, Rivnay never allowed his vistas to narrow, but always strived to widen them to the greatest possible extent.

He started his research work in entomology dealing with the fundamentals of the discipline, namely the morphology of the insect body, and the taxonomy of the various insect groups, which is primarily based thereupon. Hence, a detailed study of the external morphology of the Colorado beetle was his impressive debut in 1928\*, to be followed a year later by a systematic revision of the parasitic beetle family of Rhipiphoridae of north and central America.

At this early stage in his academic career Rivnay elected to become a medical entomologist, and thus chose as a subject for his doctoral thesis to investigate the tropisms, ethology and ecological requirements of the bed-bug. The published results of this study have since become one of the classics in parasitology. In order to be more adequately equipped for the profession of medical entomologist, he even went to Johns Hopkins Medical School in Baltimore to take a number of basic courses in medical science. This was obviously a very typical act of his fundamental and serious attitude towards his scientific work. However, the severe depression that beset the U.S. economy in the early thirties abruptly altered the course of the career of this newly fledged medical entomologist, as he had to seize any job that was yet available without much choice.

\* A complete list of his publications appears on pp. of this number, and a biographical note by Dr.S.Yathom was published in Volume 4, pp. 1-3 of this Journal.



Rivnay thus joined the service of the U.S. Department of Agriculture and was assigned to Florida to take part in the famous eradication campaign against the intruding Mediterranean fruit fly, which the Department had launched there.

It was during that time when an invitation was extended to him to return to his native country of Palestine and take up a position of agricultural entomologist in the newly established Agricultural Research Station at Rehovot, founded by the World Zionist Organization. Rivnay's idealistic sense of devotion to the Zionist cause of resettlement of his people in their ancient homeland duly motivated him to promptly accept that offer. It obviously meant giving up his post in that great country of America with its practically unlimited prospects and possibilities for promising young scientists and go to a primitive and penurious country like Palestine of the thirties. His friends and colleagues in America regarded this move as sheer lunacy, particularly so during the most critical phase of the depression when every permanent professional job was deemed priceless.

At its beginning, Rivnay's entomological research work in Palestine (which in 1948 became the independent State of Israel) concentrated mainly on citrus pests, but it soon ramified into other crops such as stonefruit trees, cereals, cucurbits, sugarbeets and cotton. Here again his entire approach was not restricted to short-term expediencies, but he rather endeavoured to comprehend the whole complex fabric of interrelationships obtaining between the pest species and their environment. This has naturally oriented him toward biological rather than chemical guidelines in the pursuit of practical solutions to the pest problems he was dealing with. Thus Rivnay played a major role in the story of the development of biological pest control in Israel, as vividly narrated by him in his unique style in a special number of the Israel Journal of Entomology in 1968.

Insect migration was another area of research which Rivnay pioneered in Israel. He started with the study of short-distance displacements of Mediterranean fruit fly populations and ended up with a countrywide long-term survey of the flight and migration of noctuid moths, operating a network of suction light traps located all over the country. He painstakingly analyzed the data of the 5-year catches and ably applied their results in interpreting the phenology and population dynamics of the noxious noctuid species of Israel.

In keeping with his aforementioned wide-angle view of the subject matter treated by him, Rivnay's comprehensive textbook on the field crop pests of the Near East (which since its publication in 1962 has become a standard treatise on the subject) is much more than merely an inventory of these arthropod species with notes on their morphology, biology and control recommendations. The book contains, inter alia, a very useful introductory chapter expounding the common agricultural and ecological background to the specific problems subsequently dealt with.

As a person he was held in deep affection by all his associates, and he will be sadly missed at all gatherings of entomologists. His death has robbed this country of a leading entomologist with international reputation. His loss has left a vacant corner in the lives and memories of many who knew Rivnay and admired the simplicity and integrity of all that he undertook.

I. Harpaz

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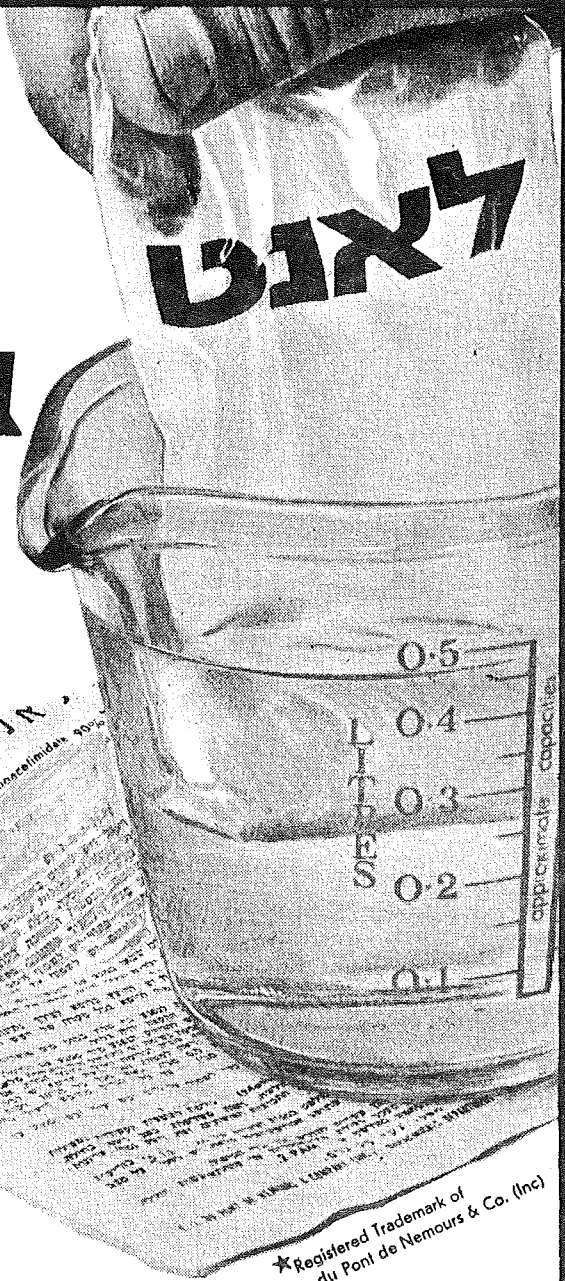
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