

R. Bovey, W. Gärtel, W. B. Hewit, G. P. Martelli, A. Vuittenez: Virus and virus-like diseases of grapevines. *Edition Payot, Lausanne, La Maison Rustique, Paris and Verlag Eugen Ullmer, Stuttgart 1980, 183 Figs. Price 58,— DM.*

This atlas of colour illustrations of symptoms of virus and virus-like diseases of the grapevines and also those of other causes that may be confused with viroses is a unique work in the world literature. It is so much more valuable that it presents well arranged and concise characteristics of these diseases in three world languages, French, German and English.

The short preface and introduction are followed by a characterization of the most important virus diseases of grapevine. Twenty-seven virus diseases are discussed and another four are mentioned. According to the mode of transmission they are divided in the following four groups: soil-borne viruses transmitted by nematodes (Nepoviruses), viruses transmitted by soil fungi, viruses transmitted by arthropods and viruses without known vector. The next brief chapters are devoted to the diseases caused by intracellular Procarvates (mycoplasma-like and rickettsia-like organisms) and to the possible confusion between virus diseases and other diseases, damages and abnormalities of grapevine.

There are 186 colour photographs of a very good quality covering 47 pages and combined with 47 pages of descriptions and explanations in three languages. The figures represent general views of infected grapevines, stems, fanleaf, leaves, internodia, details of sections and photo-

micrographs from a scanning electron microscope. This part includes also many photographs showing the grapevine leaves damaged by bacterial necroses, parasitic fungi, arthropods (leafhoppers, mites), deficit of trace elements, but also herbicides and fungicides. They are of a great value for the differential diagnosis of symptoms.

The book concludes with a three-language survey of some properties and characteristics of viruses and virus diseases of grapevines arranged in tables. They include the geographical distribution, pathogenicity, economic importance, type of particles, vectors, possibilities of a mechanical transmission and serological detection. At the end of the book there is an index, brief list of most important references and contents.

The Atlas prepared by R. Bovey and his colleagues is an excellent work which completely suits the authors' intention and represents an essential tool serving to a rapid orientation and detection of grapevine diseases. The clearness and good arrangement of the whole book contribute very much to this purpose. The credit is due also to its beautiful graphical arrangement and last but not least to the good work of the editors and publishers.

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G. I. Shcherbak: Kleshchi semeystva Rhodacaridae Palearktiki. (Mites of the family Rhodacaridae in the Palaearctic region.) *Izd. Naukova dumka, Kiev 1980, 215 pp., 130 Figs. Price 3.20 R.*

The research history of this mite group was opened at the beginning of this century by Oudemans who described the genus *Rhodacarus* in 1902 and erected the subfamily Rhodacarinae within the family Parasitidae. In the past eight decades many authors devoted their efforts to the studies of these mites, but despite this fact we may state — together with the author of the reviewed book — that this mite group has been scarcely studied so far. From the aspect of general acarology (these are the most primitive parasitiform mites) the importance of this group is not only theoretical, but primarily practical: the representatives of the family

Rhodacaridae play an important role in forming the soil on one hand, and on the other they are the usual component of the nest fauna of small mammals and birds building their nests in contact with the soil.

The European acarological literature has been recently enriched by two extensive studies dealing with the family Rhodacaridae: Karg (1971) published a survey of species and keys to the fauna of Central Europe; Hirschmann (1960, 1974) primarily studied the genus *Dendrolaelaps*. The reviewed book, however, is a first comprehensive treatment of the family Rhodacaridae within the entire Palaearctic

region. The author set himself a number of tasks: to determine the size of the family Rhodacaridae and to delimit its particular genera; to study in detail the morphology, paying attention to those structures which are decisive for the differentiation of genera and particular species as well; on the basis of conclusions to revise all Palaearctic species, to prepare new and complete descriptions of all taxa and present keys to subfamilies, genera, subgenera and species. Moreover, the author's objective was to trace ecology and zoogeography of these mites as well.

The arrangement of the book corresponds with the author's concept. The general part (30 pages of text together with introduction) contains a brief historical survey of the research of Rhodacaridae. It is followed by a survey of morphological terms and by a detailed description of external morphology, great attention being also paid to changes during ontogenesis of mites. The subsequent chapter in the general part of the book deals with some details of internal anatomy, particularly with the well sclerotized sections of sexual organs, the main purpose being their use for diagnostics. The general part is closed with a brief survey of ecology, zoogeographical distribution and collecting methods.

The main core of the book is the systematic part (pp. 30—200), in which a total of 107 species placed in 12 genera and 3 subfamilies are described in detail and included in the keys. Many of these taxa are mentioned as new for science: subfamily Rhodacarellinae, genera *Mini-*

rhodacarellus, *Oligodentatus*, *Insectolaelaps*, subgenus *Multidentorhodacarus* and 12 new species. This part is valuable primarily due to the fact that all descriptions have been carried out from one consistent aspect and on the basis of the author's studies of a large material. Available to the author were not only collections from all parts of the Soviet Union, but also the material deposited in collections abroad, as evidenced by the long list included in the preface.

At the end of the book (apart from the list of references used) there are two interesting tables. The first table includes a list of species belonging to the family Rhodacaridae described outside the framework of the Palaearctic region, showing thus the present state of knowledge on this family on the global scale. The second table includes a survey of species erroneously listed in the family Rhodacaridae. The volume is supplemented with a two-page English summary, including the key to subfamilies and genera.

The reviewed treatise is the result of studies of thirteen years. The high standard of the entire concept and the way in which the book has been prepared make it an important contribution to the advancement of acarology. The author is to be congratulated on the successful fulfilment of such a challenging task. It is only to be regretted that the number of copies printed is very low (700), because the book constitutes the main source of information about this mite group for the whole moderate Eurasia.

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