

## REFERENCES

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A. A. Zemskaya: *Paraziticheskiye gamazovye kleshchi i ikh meditsinskoe znachenie. (Parasitic gamasid mites and their medical importance)* Moscow, Publishing House *Medicina*, 1973, pp. 1—167

A. A. Zemskaya, the scientific worker of the Gamaleya Institute of Epidemiology and Microbiology, Academy of Medical Sciences of the U.S.S.R., belongs to the outstanding Soviet acarologists. Her lifework is aimed above all at the research of gamasid mites and their importance as carriers and vectors of pathogenic germs in the natural foci of infection. In her publication we find the literary data as well as her own years-long results and experiences covering these problems.

In the first chapter the general characteristics of the superfamily Gamasoiden are described. A great care is paid to the morphology of all developmental stages and to elucidation of all details decisive for the species determination. The commentary includes many schematic figures. We find further a summary of the biology of gamasid mites, types of their parasitism, degrees of the haematophagy, seasonal distribution and brief characteristics of the habitats. A brief survey of the geographical distribution closes the chapter.

Next chapter deals with the medical importance of gamasid mites in general, as regards the direct infestation of man and effect of dermatitides, as well as their importance in the natural foci of infection. The main part of the chapter consists of the tables illustrating the relation between gamasid mites and other different pathogens including 37 species of mites and 18 causative agents of infection (viruses, rickettsiae, bacteria, spirochaetae). This relation of mites to the causative agent of infection is classed in 5 categories: 1) the causative agent of infection was isolated, 2) the ability of a mite to be infected was determined, 3) the ability to preserve the infection and to transfer

it by bite, 4) the ability to preserve the infection and to transfer it by contamination, 5) the trans-ovarian transfer of infection was determined.

The third chapter including a list of single species forms the chief part of the book. The superfamily Gamasoiden is here conceived and, with some modifications, divided into families according to Bregetova (*Gamazovye kleshchi, Opredeliteli po faune SSSR*, Pub. AN SSSR, Moscow—Leningrad, 1956), from which 5 families are mentioned (Dermanyssidae — including 4 species, Macronyssidae — 3 species, Hirstionysidae — 6 species, Haemogamasidae — 7 species, Laelaptidae — 14 species). For every species mentioned, the brief characteristics, list of hosts, geographical distribution, biology, development (including the description of particular developmental stages), medical importance, control and protection is given. The text is completed by 5 tables; to less significant species a list of hosts and geographical distribution is added. These lists include other 55 species of the family Hirstionysidae and Haemogamasidae and genera *Haemolaelaps*, *Laelaps* and *Myonyssus*.

The book forms in many points a supplement to the monography by N. G. Bregetova (1956) and brings a great number of concrete data enabling the solution of an always actual problem of the importance of gamasid mites in natural foci of infection. The book is clear and well arranged in an instructional way and it will be a valuable contribution to the literature on acarology. Unfortunately, the low number of copies edited (2,900) will not allow its larger distribution.

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