

A SYNOPSIS OF AUSTRALIAN ACARINA.

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(Figs. 33—37).

Mr. Nathan Banks, the well-known American Arachnologist, has recently published a valuable, if brief, "Treatise on Acarina, or Mites."¹ The work is rendered the more acceptable to the student of Acarology, from the fact that it gives not only a key to the numerous families and genera, but also a sketch of the life-histories of many species, some of which are of world-wide distribution.

Notwithstanding the fact that the Acarina "have always attracted," as Banks points out in his preface, "considerable interest, both from their minute size and because of the remarkable habits of many species," comparatively little is known about them systematically. Many species have been described from time to time, by a number of authors, but, to again quote Banks "few have really studied them." The literature dealing with the subject is very scattered, and much of it unsatisfactory.

The most reliable workers have been Michael in England, whose masterly monographs of "British Oribatidæ"² and "British Tyroglyphidæ"³ have appeared at different times; and among continental students, Neumann, whose "Revision de la Famille des Ixodidés"⁴ is a valuable production, and must take its place as a standard work. Other European acarologists of repute are Trouessart, Kramer, Canestrini, Nalepa and Berlese. The writings of these workers are spread over many publications. It is interesting to note that more species have been described of late years—principally by Trouessart and Canestrini—from New Guinea, than from Australia.

Nearly all parasitic Acarids follow the distribution of their hosts, and so frequently become widely diffused, but a few non-parasitic forms are common in widely separated regions. Most of the latter, as well as some phytophagous species, distribute themselves naturally. There are a number of non-parasitic mites

¹ Banks—Proc. U. States Nat. Mus., xxviii., 1904, pp. 1-114.

² Michael—British Oribatidæ, Ray Soc., 1884 and 1888.

³ Michael—British Tyroglyphidæ, *loc. cit.*, 1901.

⁴ Neumann—Mém. Soc. Zool. France, ix., 1906, pp. 1-44; *ibid.*, x., 1897, pp. 324-420; *ibid.*, xii., 1898, pp. 107-294; *ibid.*, xiv., 1901, pp. 249-372.