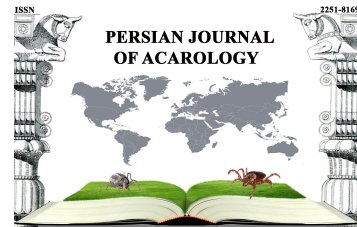




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Journal homepage: <http://www.biotaxa.org/pja>

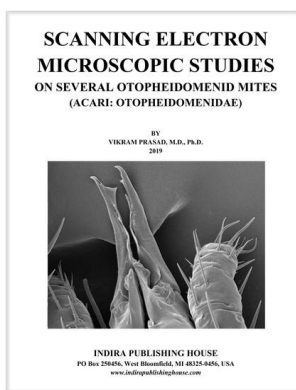


Book Review

Review of the “Scanning electron microscopic studies on several otopheidomenid mites (Acari: Otopheidomenidae)”

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Vikram Prasad
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48325-0456, USA
2019, 772 pp.
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Publisher contacts: vikramprasad551@gmail.com

There is a few book on a family of mites which be comprehensive like this book. Mites of this family are associated with main orders of Insects, i.e. Hemiptera, Lepidoptera, Orthoptera and Isoptera which are important in the agriculture. Most members of the family are ectoparasites. This book includes detailed morphology and systematics of Otopheidomenidae as well as comments of the author. Experience is very important in systematics and the author, Dr. Vikram Prasad is published this book after his many year works on otopheidomenids. Morphology is discussed in detail including all parts of the body which I have never seen before in any reference and in systematic part, diagnosis and redescription for many species, some key morphological characters, and chaetotaxy of gnanua and tibiae I-IV (See Figs. 1–3, gnathosoma), and remarks or note for each species as well as some keys are presented. A key is included to identify the 12 species of Otopheidomenidae belonging to two subfamilies (Otopheidomeninae and Prasadoseiinae **subfam. nov.**). Another key is provided for identification of seven families of Phytoseioidea (Blattisociidae, Hemipteroseiidae **fam. nov.**, Katydiseiidae, Otopheidomenidae, Phytoseiidae, Podocinidae and Treatiidae) as accepted in this work. *Eickwortius termes* Zhang and *Orthopteroseius sinicus* Mo are transferred to Blattisociidae. Genera *Nabiseius* with four species and *Treatia* (Syn.: *Entomoseius*) with four species are included in the family Treatiidae.

One forte of this book is the scanning electron microscopic photos and high quality line drawings. About 521 photos and 213 line drawings of the species and 12 tables are presented. In my opinion, scanning electron microscopic photos are very important in taxonomy of mites because

they show everything as it is and no mistake is possible and for this reason, you don't need to loan type specimens.

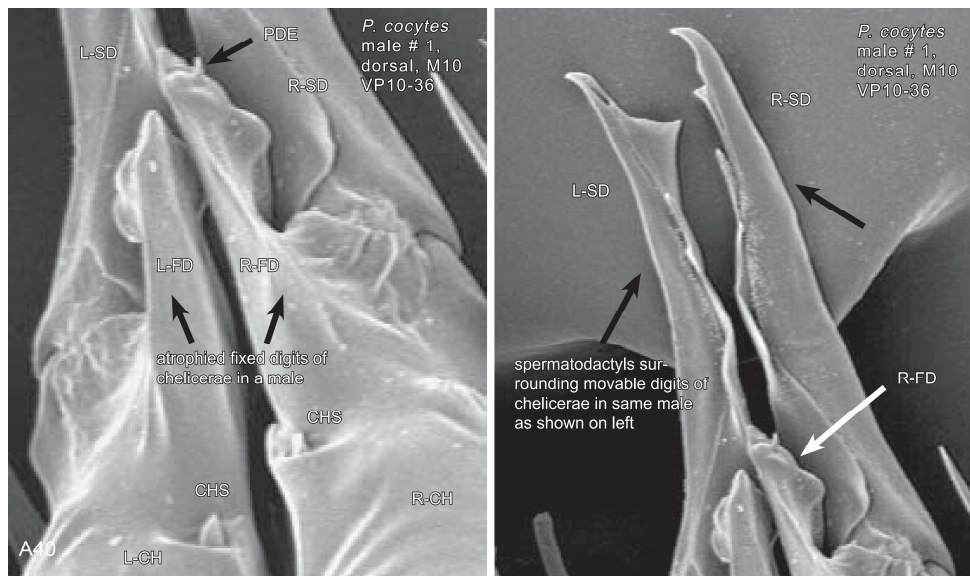


Figure 1. *Prasadiseius cocytes* (Prasad, 1970a) [VP10-36, male # 1] – Atrophied fixed digits of left and right chelicerae in dorsal view of a male. Left - Fixed digits, Right - Spermatodactyls. Note that movable digits, having a denticle on each, are not seen as covered entirely by the spermatodactyl (see present in Fig. A38). Note presence of a tiny hair-like pilus dentilis (PDE). Compare this fixed digit of male being different than fixed digit of female and spermatodactyl surrounding the movable digit [CH = Chelicera, CHS = Cheliceral seta, FD = Fixed digit, MD = Movable digit, PDE = pilus dentilis, SD = spermatodactyl] (from Prasad 2019 with permission).

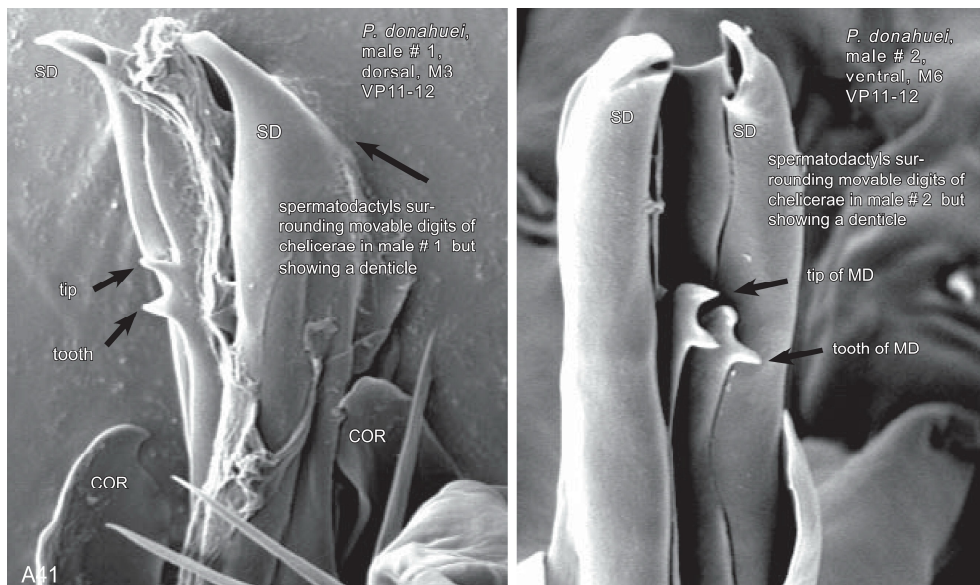


Figure 2. *Prasadiseius donahuei* (Prasad, 1970a) [VP10-36, males # 1 and 2] – Comparison of left and right spermatodactyls in dorsal (left) and ventral (right) views of 2 males of same species surrounding the movable digits that have a single pointed denticle (tooth) proximal to the pointed tip. Note spermatodactyls extending distally much beyond the tip of the movable digit [CH = Chelicera, CHS = Cheliceral seta, COR = Corniculus, FD = Fixed digit, MD = Movable digit, SD = spermatodactyl] (from Prasad 2019 with permission).

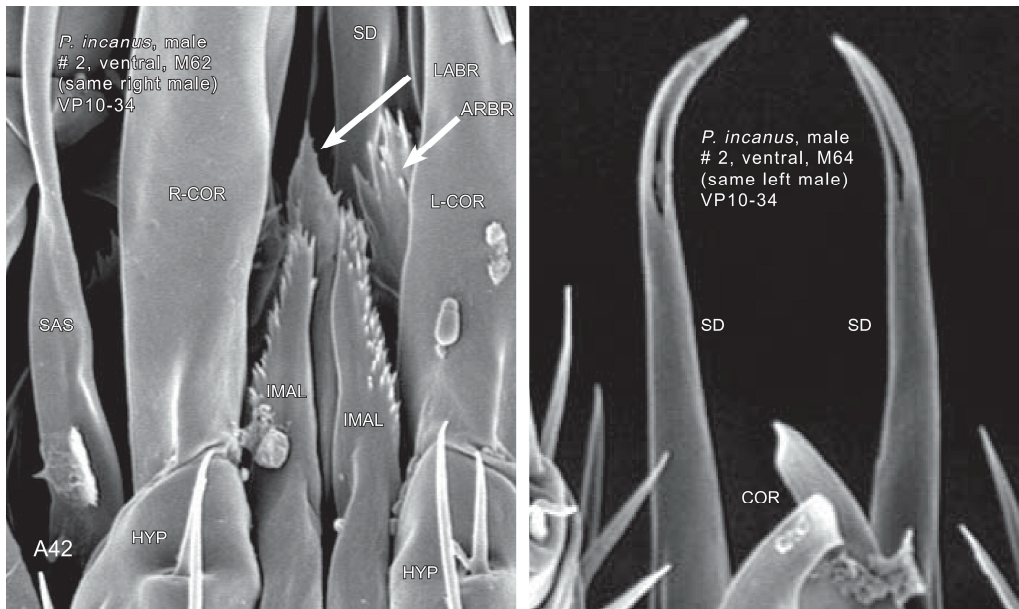


Figure 3. *Prasadiseius incanus* Prasad and Guanilo, 2011 [VP10-34, male # 2] – Some important structures seen in ventral view of a male gnathosoma. Note pointed tip of the spermatodactyls showing an elongate canal-like region and compare with that of A37 and A38 given on last pages of the book. Note notched distal tips of corniculi [ARBR = arthrodial brush, COR = corniculi, HYP = hypostomal lobe with hypostomal setae, IMAL = fimbriate internal malae, LABR = single labrum, SD = spermatodactyl] (from Prasad 2019 with permission).

The publisher's advertised price of USD\$280.00 is very reasonable for a book of this size, importance and the scanning electron photos with high quality of the glossy paper. It will be the fundamental reference book for the taxonomy of the family Otopheidomenidae for many years. Its comprehensive review of the systematics and morphology of these mites would inspire not only the established researchers in acarology but also to new generation of young acarologists to take up such study of the family.

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