



Three new species of eriophyoid mites (Acari: Eriophyoidea) infesting fruit yielding plants from India

SAMIRAN CHAKRABARTI & SANJAY SARKAR

Biosystematics research Unit, Department of Zoology, University of Kalyani, Kalyani741235, West Bengal, India.

E-mail: chakrabarti32b@gmail.com

Abstract

Three new species of eriophyoid mites namely *Aculops spondiasis* **n. sp.** infesting *Spondias pinnata* Kurz. (Anacardiaceae), *Phyllocoptruta citricola* **n. sp.** infesting *Citrus maxima* (J. Burm.) (Rutaceae) and *Tegonotus fisus* **n. sp.** infesting *Mangifera indica* (L.) (Anacardiaceae) are described from India. Relationships of new species with other eriophyoid species are also provided.

Key words: eriophyoid mites, new species, fruit plants, taxonomy, India

Introduction

During the general surveys for eriophyoid mites in two districts namely Malda and Dakshindinajpur of West Bengal, India three new species were collected and are described here. *Spondias pinnata* Kurz. (Anacardiaceae) (hogplum) is a medium sized deciduous tree found in tropical region. Fruits of this plant are used as vegetables and in preparing jelly. *Aculops spondiasis* **n. sp.** was collected from the leaf of this plant. *Citrus maxima* (J. Burm.) (Rutaceae) is a small to medium sized tree native to Southeast Asia and yields juicy fruits commonly known as shaddock or pomelo. Pomelo juice has also preventive effects against jaundice. The peel of the pomelo is sometimes used to make marmalade, or is candied and sometimes dipped in chocolate and is also used in Chinese cooking. In general, citrus peel is often used in southern Chinese cuisine for flavouring, especially in sweet soup desserts. *Phyllocoptruta citricola* **n. sp.** was collected from the leaf of this plant. *Mangifera indica* (L.) (Anacardiaceae) yields delicious fruit 'mango' in tropical regions which are considered to be a royal delicacy in all purposes. Green mangoes are in demand for preparing pickles, jam, jelly to name a few. *Tegonotus fisus* **n. sp.** was collected from the leaf of this plant. The above three new species are described here.

The genus *Aculops* was erected by Keifer (1966). So far, 158 species of *Aculops* are known including nine species namely *A. abutiloni* Mandal & Chakrabarti, 1981 (ex: *Abutilon indicum*), *A. anacardiae* (Mohanasundaram, 1982) (ex: *Anacardium occidentale*), *A. boerhaeviae* Mohanasundaram, 1982 (ex: *Boerhavia diffusa*), *A. dilleniae* Ghosh & Chakrabarti, 1989 (ex: *Dillenia indica*), *A. extensae* Mohanasundaram, 1980a (ex: *Pergularia extensa*), *A. jalpaiguriensis* Pandit & Chakrabarti, 2001 (ex: *Beilschmiedia* sp.), *A. morindae* Ghosh & Chakrabarti, 1989 (ex: *Morinda persicaefolia*), *A. privae* Mohanasundaram, 1980a (ex: *Priva leptostachya*), *A. webpenetrans* Mohanasundaram, 1985 (ex: unidentified tree), *A. xanthocarp* Mondal & Chakrabarti 1982 (ex: *Solanum xanthocarp*) from India (Amrine *et al.* 2003; Amrine & Stasny 1994; Pandit & Chakrabarti 2001; Ghosh & Chakrabarti 1989). Ghosh & Chakrabarti (1989), while describing three new species from West Bengal, India provided a key to the 15 species of *Aculops* known from India at that time. Amrine & Stasny (1994) have considered the following species of *Aculops* described from India, namely *A. acanthae* Mohanasundaram, 1982a, *A. excoecaria* Mondal & Chakrabarti, 1982, *A. ichnocarpae* Ghosh & Chakrabarti, 1989, *A. leguminae* Mohanasundaram, 1982a, *A. niphocladae* Keifer, 1966, *A. pittosporae* Mohanasundaram, 1982a, under the genus *Aculus* Keifer, 1959 and *A. betonicae* Mohanasundaram, 1981 under the genus *Tegolophus* Keifer, 1961. The genus *Phyllocoptruta* was erected by Keifer (1938) and literature reveals that of the 23 known species, three species namely *P. daturae* Mohanasundaram & Ranganath, 1985 (ex: *Datura* sp.), *P. himalayana* (Chakrabarti & Roy,