



Eriophyoid mites (Acari: Eriophyoidea) of Taiwan: thirty-seven species from Yangmingshan, including one new genus and twenty-two new species

KUN-WEI HUANG^{1,4} & CHIN-FAH WANG^{2,3}

¹Department of Zoology, National Museum of Natural Science, Taichung 404, Taiwan, R.O.C. E-mail: eri@mail.nmns.edu.tw

²General Education Center, National Chiayi University, Chiayi 600, Taiwan, R.O.C. E-mail: chin-fah@yahoo.com.tw

³Council of Indigenous Peoples, Executive Yuan, Taipei 103, Taiwan, R.O.C. E-mail: watan_kiso@apc.gov.tw

⁴Corresponding author

Table of contents

Abstract	2
Introduction	3
Materials and methods	3
Results	4
Nothopodinae Keifer, 1956	4
Key to species of Nothopodinae Keifer, 1956 from Yangmingshan	4
<i>Taicolopodacus</i> n. gen.	4
<i>Taicolopodacus primus</i> sp. nov. (Fig. 1; Pl. 1 A, B)	5
<i>Colopodacus rubrus</i> sp. nov. (Fig. 2; Pl. 1 C, D)	5
<i>Colopodacus parallelus</i> sp. nov. (Fig. 3)	8
<i>Nothopoda taiwanensis</i> sp. nov. (Fig. 4)	10
<i>Pangacarus formosanus</i> sp. nov. (Fig. 5)	10
<i>Cosella kadsuriae</i> sp. nov. (Fig. 6)	13
<i>Cosella fleshneri</i> (Keifer, 1959) (Pl. 2 A, B)	13
<i>Cosella viburniae</i> Huang & Wang, 2003	15
<i>Cosella parvifloriae</i> sp. nov. (Fig. 7)	16
<i>Cosella chinensis</i> sp. nov. (Fig. 8)	16
Cecidophyinae Keifer, 1966.....	20
<i>Gammaphytoptus commune</i> sp. nov. (Fig. 9; Pl. 2 C, D)	20
Phyllocoptinae Nalepa, 1892	20
Key to tribes of Phyllocoptinae Nalepa, 1892 from Yangmingshan (modified from Amrine <i>et al.</i> , 2003)	20
Acaricalini Amrine & Stasny, 1994	21
Key to Species of Acaricalini Amrine & Stasny, 1994 from Yangmingshan	21
<i>Acaphyllisa communiae</i> sp. nov. (Fig. 10; Pl. 3 A, B)	21
<i>Acaphyllisa duplicella</i> sp. nov. (Fig. 11; Pl. 3 C, D)	23
Calacarini Amrine & Stasny, 1994	24
<i>Neopentamerus octcellus</i> Huang, 2001	24
Tegonotini Bagdasarian, 1978	24
<i>Tumoris sansasii</i> Huang, 2001 (Pl. 4 A, B)	24
Phyllocoptini Nalepa, 1892	26
<i>Neometaculus beecheyaus</i> sp. nov. (Fig. 12; Pl. 4 C, D).....	27
<i>Phyllocoptes calirubi</i> Keifer, 1938	27
<i>Calepitrimerus proprius</i> sp. nov. (Fig. 13; Pl. 5 A, B)	27
<i>Calepitrimerus scutulatus</i> sp. nov. (Fig. 14; Pl. 5 C, D)	31
Anthocoptini Amrine & Stasny, 1994	32
Key to species of Anthocoptini Amrine & Stasny, 1994 from Yangmingshan	33
<i>Aculops monices</i> Huang, 2001	33
<i>Abacarus bambusae</i> (Channabasavanna, 1966)	33

<i>Abacarus aralioides</i> Huang, 2006	33
<i>Abacarus tomentosus</i> Huang & Wang, 2004	33
<i>Abacarus floridulus</i> Huang, 2001 (Pl. 7 C)	34
<i>Abacarus rotundus</i> sp. nov. (Fig. 15)	34
Diptilomiopidae Keifer, 1944	34
Key to species of Diptilomiopidae Keifer, 1944 from Yangmingshan	35
<i>Asetadiptacus phaeostictus</i> sp. nov. (Fig. 16; Pl. 6 A, B)	36
<i>Diptilomiopus decem</i> sp. nov. (Fig. 17)	37
<i>Diptilomiopus candidus</i> sp. nov. (Fig. 18; Pl. 6 C, D)	40
<i>Diptilomiopus cuminis</i> Chakrabarti et al., 1992	40
<i>Diptilomiopus aralioides</i> Huang, 2006 (Pl. 7 A, B)	40
<i>Apodiptacus coniunctus</i> sp. nov. (Fig. 19)	40
<i>Apodiptacus styracus</i> Huang, 2005	43
<i>Diptacus acuminatus</i> sp. nov. (Fig. 20)	43
<i>Diptacus glaber</i> sp. nov. (Fig. 21)	45
<i>Diptacus tristylus</i> Huang, 2001	45
<i>Asetacus obscurus</i> sp. nov. (Fig. 22)	45
<i>Catarhinus palmifolies</i> Huang, 2001 (Pl. 7 D)	49
Acknowledgements	49
References	49

Abstract

This work describes and illustrates two families, five subfamilies, 20 genera, and 37 species of Eriophyoidea, including one new genus and 22 new species, from Yangmingshan (Northern Taiwan): *Taicolopodacus primus* gen. et **sp. nov.** (infesting *Helicia formosana*), *Colopodacus rubrus* **sp. nov.** (infesting *Glochidion rubrum*), *Col. parallelus* **sp. nov.** (infesting *Hydrangea angustipetala*), *Nothopoda taiwanensis* **sp. nov.** (infesting *Melastoma candidum*), *Pangacarus formosanus* **sp. nov.** (infesting *Callicarpa formosana*), *Cosella fleshneri* (Keifer) (infesting *Helicia formosana*), *Cos. viburniae* Huang et Wang (infesting *Viburnum luzonicum*), *Cos. parvifloriae* **sp. nov.** (infesting *Itea parviflora*), *Cos. kadsuriae* **sp. nov.** (infesting *Piper kadsura*), *Cos. chinensis* **sp. nov.** (infesting *Symplocos chinensis*), *Gammaphytoptus commune* **sp. nov.** (infesting *Lindera communis*), *Acaphyllisa communiae* **sp. nov.** (infesting *Lindera communis*), *Aca. duplicella* **sp. nov.** (infesting *Symplocos chinensis*), *Neopentamerus octcellus* Huang (infesting *Lindera communis*, *Smilax lanceifolia* and *Smilax china*), *Tumoris sanasaii* Huang (infesting *Symplocos chinensis*), *Phyllocoptes calirubi* Keifer (infesting *Rubus croceacanthus*), *Calepitrimerus proprius* **sp. nov.** (infesting *Lindera communis*), *Cal. scutulatus* **sp. nov.** (infesting *Symplocos chinensis*), *Neometaculus beecheyaus* **sp. nov.** (infesting *Ficus erecta beecheyana*), *Abacarus rotundus* **sp. nov.** (infesting *Smilax china*), *Aba. bambusae* (Channabasavanna) (infesting *Bambusa oldhamii*), *Aba. tomentosus* Huang & Wang (infesting *Bridelia monoica*), *Aba. aralioides* Huang (infesting *Trochodendron aralioides*), *Aba. floridulus* Huang (infesting *Miscanthus floridulus*), *Aculopus monices* Huang (infesting *Bridelia tomentosa*), *Apodiptacus coniunctus* **sp. nov.** (infesting *Machilus thunbergii*), *Apo. styracus* Huang (infesting *Styrax formosana*), *Asetadiptacus phaeostictus* **sp. nov.** (infesting *Prunus phaeosticta*), *Diptacus glaber* **sp. nov.** (infesting *Rubus* sp.), *Dip. acuminatus* **sp. nov.** (infesting *Litsea acuminata*), *Dip. tristylus* Huang (infesting *Saurauia tristyla*), *Diptilomiopus cuminis* Chakrabarti et al. (infesting *Eurya chinensis* and *E. japonica*), *Dip. aralioides* Huang (infesting *Trochodendron aralioides*), *Dip. candidus* **sp. nov.** (infesting *Melastoma candidum*), *Dip. decem* **sp. nov.** (infesting *Callicarpa formosana*), *Catarhinus palmifolies* Huang (infesting *Setaria palmifolia*), and *Asetacus obscurus* **sp. nov.** (infesting *Helicia formosana*). Keys to species of eriophyoid mites from Yangmingshan are provided.

Key words: Eriophyoid mites, new genus, new species, Yangmingshan, Taiwan