



Article

Taxonomic revision of the leafhopper tribe Agalliini (Hemiptera: Cicadellidae: Megophthalminae) from China, with description of new taxa

C.A.VIRAKTAMATH^{1,2}, WU DAI^{1,3} & YALIN ZHANG¹

¹Key Laboratory of Plant Protection Resources and Pest Management, Ministry of Education, Entomological Museum, Northwest A&F University, Yangling, Shaanxi 712100, China

²Permanent address: Department of Entomology, University of Agricultural Sciences, GKVK, Bangalore 560065, India

³Corresponding author. E-mail: daiwu@nwsuaf.edu.cn

Table of contents

Abstract	2
Introduction	2
Check-list of Chinese Agalliini	3
Key to genera of Chinese Agalliini	4
Genus <i>Agallia</i> Curtis	5
<i>Agallia sinica</i> Jacobi	5
Genus <i>Anaceratagallia</i> Zachvatkin	5
Key to Chinese species of <i>Anaceratagallia</i>	6
<i>Anaceratagallia ribauti</i> (Ossiannilsson)	6
<i>Anaceratagallia venosa</i> (de Fourcroy)	6
Genus <i>Austroagallia</i> Evans	6
<i>Austroagallia nitobei</i> (Matsumura)	7
Genus <i>Dryodurgades</i> Zachvatkin	7
Key to species of <i>Dryodurgades</i> from China	7
<i>Dryodurgades dentistylus</i> Zhang & Li	8
<i>Dryodurgades formosanus</i> (Matsumura)	8
<i>Dryodurgades lamellaris</i> Vilbaste	8
Genus <i>Durgades</i> Distant	9
<i>Durgades breviceps</i> (Matsumura)	9
<i>Durgades mirabilis</i> Pruthi	9
<i>Durgades nigropicta</i> Distant	9
Genus <i>Formallia</i> Viraktamath	10
Key to species of <i>Formallia</i> Viraktamath	10
Genus <i>Ianagallia</i> Viraktamath	10
<i>Ianagallia bifurcata</i> (Sawai Singh & Gill)	10
Genus <i>Igerna</i> Kirkaldy	11
<i>Igerna channa</i> sp. nov.	11
Genus <i>Japanagallia</i> Ishihara	12
Key to species of <i>Japanagallia</i> of China	12
<i>Japanagallia asymmetrica</i> Viraktamath, 2011	13
<i>Japanagallia curvata</i> Viraktamath, 2011	13
<i>Japanagallia curvipennis</i> sp. nov.	13
<i>Japanagallia decliva</i> sp. nov.	14
<i>Japanagallia dentata</i> Cai and He, 2001	14
<i>Japanagallia hamata</i> Zhang and Li	14
<i>Japanagallia longa</i> Cai and He, 2001	15
<i>Japanagallia longipennis</i> Viraktamath	15
<i>Japanagallia multispina</i> sp. nov.	15
<i>Japanagallia lamellata</i> Zhang	16
<i>Japanagallia neotappana</i> Viraktamath	16
<i>Japanagallia palmata</i> sp. nov.	16
<i>Japanagallia pteridis</i> (Matsumura)	16
<i>Japanagallia sclerotica</i> sp. nov.	17

<i>Japanagallia spinosa</i> Zhang	17
<i>Japanagallia tappana</i> (Matsumura)	17
<i>Japanagallia yoshimotoi</i> Viraktamath	18
Genus <i>Onukigallia</i> Ishihara	18
Key to species of <i>Onukigallia</i> from China	18
<i>Onukigallia arisana</i> (Matsumura)	18
<i>Onukigallia fanjingensis</i> Zhang & Li	18
<i>Onukigallia matsumurai</i> Zhang	19
<i>Onukigallia onukii</i> (Matsumura)	19
<i>Onukigallia tenuis</i> (Matsumura)	20
Genus <i>Purvigallia</i> nov.	20
<i>Purvigallia maculata</i> sp. nov.	20
Genus <i>Sinoagallia</i> gen. nov.	21
<i>Sinoagallia serrata</i> sp. nov.	21
<i>Skandagallia</i> gen. nov.	22
<i>Skandagallia dietrichi</i> sp. nov.	23
<i>Sungallia</i> gen. nov.	23
<i>Sungallia truncata</i> sp. nov.	24
Acknowledgements	24
References	24

Abstract

The leafhopper tribe Agalliini from China is reviewed. The Chinese fauna includes 44 species of 15 genera including four new genera: *Purvigallia* **gen. nov.** (type species: *Purvigallia maculata* **sp. nov.**, from Yunnan), *Skandagallia* **gen. nov.** (type species: *Skandagallia dietrichi* **sp. nov.**, from Yunnan), *Sinoagallia* **gen. nov.** (type species: *Sinoagallia serrata* **sp. nov.**, from Yunnan) and *Sungallia* **gen. nov.** (type species: *Sungallia truncata* **sp. nov.**, from Yunnan). *Japanagallia* is the most species rich and includes 17 species from China, of which five are new: *Japanagallia curvipennis* **sp. nov.** (China: Xizang), *Japanagallia decliva* **sp. nov.** (China: Shaanxi), *Japanagallia multispina* **sp. nov.** (China: Guangxi, Guizhou, Shaanxi, Yunnan), *Japanagallia palmata* **sp. nov.** (China: Yunnan) and *Japanagallia sclerotica* **sp. nov.** (China: Shaanxi). The genus *Igerna* Kirkaldy (with *Igerna channa* sp. nov. from Guangxi and Tibet) and the European species, *Anaceratagallia ribauti* (Ossianinilsson) have been recorded for the first time from China. All the new taxa are described and illustrated. A check-list with taxonomic notes as well as a generic key to Chinese Agalliini are also provided.

Key words: Auchenorrhyncha, Membracoidea, taxonomy, morphology, distribution

Introduction

The tribe Agalliini of the subfamily Megophthalminae is one of the larger tribes of leafhoppers comprising 37 genera and 650 species in the world (Gonçalves & Dietrich 2009, Viraktamath 2011). Leafhoppers of the tribe are common in grassland meadows mixed with broad leaved herbs in the Old World. Some species also breed on leguminous crops (Viraktamath 2011) and 13 species are vectors of plant diseases (Wilson & Turner 2010). They can be readily recognized by the following combination of characters: head short and broad, usually wider than pronotum; ocelli on face, close to dorsal margin; forewings with appendix very narrow or absent; hind wings with four apical cells closed; hind tibial macrosetae on AV starting from midlength of tibia, metabasitarsomere with 1 or 2 platellae on distal transverse row of setae; male subgenital plates short, often fused at base and male style usually forked caudally (the Neotropical genera *Euragallia* Oman, *Omanagallia* Dietrich, some species of *Chromagallia* Linnavuori and the new genus *Sinoagallia* proposed here have unforked styles).

Prior to the work of Viraktamath (2011) on the Oriental Agalliini, information on Chinese Agalliini was scattered among Chinese and Japanese literature. Matsumura (1912) described six species of Agalliini in *Agallia* Curtis from Taiwan that were subsequently transferred to *Austroagallia* Evans, *Durgades* Distant, *Dryodurgades* Zachvatkin, *Japanagallia* Ishihara and *Onukigallia* Ishihara by Viraktamath (1973). Pruthi (1930) described *Durgades mirabilis* from Tibet. Jacobi (1944) described one species of *Agallia* from Fukien (present Fujian), China. Subsequently the Japanese species, *Japanagallia pteridis* (Matsumura) and *Onukigallia onukii* (Matsumura) were recorded by Cai & He (1998) and Cai *et al.* (2001) from Zhejiang Province. Cai & Shen (1998) recorded *Dryodurgades lamellaris* Vilbaste from Henan Province. Zhang & Li (1998) and Cai & Shen (2000)