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Reinstatement of *Distantasca* Dworakowska (Hemiptera: Cicadellidae: Typhlocybinae: Empoascini) as a valid genus with new species and new combinations

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Abstract

Distantasca Dworakowska originally established as a genus but more recently has been treated as a subgenus of *Empoasca* Walsh. Here we reinstate *Distantasca* as a valid genus and provide a revised diagnosis. New combinations created are *Distantasca atika* (Dworakowska), n. comb., *Distantasca barawa* (Dworakowska), n. comb., *Distantasca bulbosa* (Dworakowska), n. comb., *Distantasca latava* (Dworakowska), n. comb., *Distantasca latibasis* (Zhang & Liu), n. comb., *Distantasca paraterminalis* (Qin & Zhang), n. comb., *Distantasca riora* (Dworakowska), n. comb., *Distantasca rokasa* (Dworakowska), n. comb., *Distantasca serratipenis* (Qin & Zhang), n. comb., *Distantasca tiaca* (Dworakowska), n. comb., *Distantasca tna* (Dworakowska), n. comb., *Distantasca tuberculata* (Zhang & Liu), n. comb., all from *Empoasca* (*Distantasca*). *Distantasca terminalis* (Distant) and *D. faciata* Dworakowska are reinstated from *Empoasca* (*Distantasca*). Two new species, *Distantasca longihatilis* Zhang & Liu and *Distantasca ricina* Zhang & Liu **spp. nov.** are described and illustrated. *Empoasca* (*Empoasca*) *smithi* Fletcher & Donaldson, 1992 is transferred into the genus as *Distantasca smithi* (Fletcher & Donaldson).

Key words: Homoptera, taxonomy, leafhopper, identification

Introduction

The leafhopper genus *Distantasca* was described by Dworakowska (1972), with *Empoasca terminalis* Distant (1918) as the type species. *Distantasca* was subsequently downgraded to a subgenus of *Empoasca* Walsh by Dworakowska and Viraktamath (1975) without explicit justification. Qin *et al.* (2007) and Zhang *et al.* (2010) have reviewed 14 species from the Oriental region and the latter provided a key to known species based on male genitalia. Here we reinstate *Distantasca* as a valid genus, provide a revised generic diagnosis, add two new species and extend the distribution of the genus to Australia by the transfer of *E. (E.) smithi* into *Distantasca*, making a total of 17 species.

Material and methods

Habitus photos were taken by using a digital micrography system equipped with an Auto-montage[®] imaging system and a highly sensitive QIMAGING Retiga 4000R digital camera (CCD). Multiple photographs were compressed into final images. Images were printed and used as a basis for traced and inked illustrations and illustrations were then digitized (600 dpi). Color photographs were saved at 300 dpi resolution. The body measurements are from apex of vertex to tip of forewing in closed position. The morphological terminology used in this description follows Zhang (1990) except for the nomenclature of the wing venation, for which we follow Dworakowska (1993), and chaetotaxy of the subgenital plate, for which we follow Southern (1982).

caudad, ornamented with 9–11 rigid setae on each side of pygofer lobe (Fig 16). Pygofer appendage well developed, sigmoid in lateral view, exceeding caudal margin of lobe, with short tubercle on ventral part (Fig 17). Anal tube process curved, tapering apically (Fig 23). Subgenital plate narrow, sinuate, with numerous macrosetae and somewhat irregular fine setae; group A with 4–5 long stout setae subbasally, group B with 13–14 short microsetae on apical half (Fig 19). Paramere with 5 teeth on dentifer, 2–4 setae subapically (Fig 22). Connective broad, with anterior margin deeply emarginated medially, stem only slightly constricted (Fig 18). Aedeagal shaft broad, as long as preatrium (Figs 20–21).

Etymology. The specific epithet is derived from that of the host plant genus *Ricinus* L.

Diagnosis. This new species is similar to *Empoasca (Distantasca) tiaca* Dworakowska, but differs from the latter in having the pygofer appendage more strongly sigmoid with a ventral subbasal tooth and the subgenital plate with group C setae extended to the apex.

Host. *Ricinus* sp.

Species checklist of *Distantasca* worldwide

Distantasca atika (Dworakowska, 1982), n. comb.—China (Hunan), Japan.

Distantasca barawa (Dworakowska, 1981), n. comb.—Nepal (Pokhara).

Distantasca bulbosa (Dworakowska, 1994), n. comb.—China (Hunan, Fujian), India (Sikkim).

Distantasca faciata Dworakowska, 1972, reinstated comb.—China (Guangdong, Fujian, Hainan, Guizhou), Vietnam.

Distantasca latava (Dworakowska, 1981), n. comb.—China (Yunnan, Hainan), India.

Distantasca latibasis (Zhang & Liu, 2010), n. comb.—China (Yunnan).

Distantasca longihamatilis Zhang and Liu, sp. nov.—China (Hainan).

Distantasca paraterminalis (Qin & Zhang, 2007), n. comb.—China (Yunnan).

Distantasca ricina Zhang & Liu, sp. nov.—China (Hainan, Yunnan).

Distantasca riora (Dworakowska, 1977), n. comb.—China (Yunnan), Vietnam.

Distantasca rokasa (Dworakowska, 1981), n. comb.—China (Hunan, Yunnan), Nepal.

Distantasca serratipenis (Qin & Zhang, 2007), n. comb.—China (Yunnan).

Distantasca smithi (Fletcher & Donaldson, 1992), n. comb.—Australia (Queensland).

Distantasca terminalis (Distant, 1918), reinstated comb.—China (Hainan, Fujian, Guangdong, Taiwan), India, Micronesia.

Distantasca tiaca (Dworakowska, 1994), n. comb.—China (Yunnan, Guizhou, Hunan), India (Sikkim).

Distantasca tna (Dworakowska, 1980), n. comb.—China (Guangdong, Yunnan), India (West Bengal).

Distantasca tuberculata (Zhang & Liu, 2010), n. comb.—China (Yunnan).

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