



## Review of Genus *Zyginella* Löw (Hemiptera: Cicadellidae: Typhlocybinae: Zyginellini) with Description of Four New Species and a New Genus from China

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### Abstract

Species in the genus *Zyginella* Löw from China are reviewed and four new species, *Zyginella petala*, *Z. processa*, *Z. dworakowskiae* and *Z. sichuanensis* **spp. nov.** are described and illustrated. A key to nine species of *Zyginella* from China is provided along with a world species checklist. *Parathailocyba* **gen. nov.** (type species *Parathailocyba orla* (Dworakowska, 1977) **comb. nov.**, transferred from *Zyginella* Löw) is also described and illustrated.

**Key words:** Homoptera, Auchenorrhyncha, taxonomy, morphology, distribution

### Introduction

Zyginellini is one of the smaller tribes in the diverse leafhopper subfamily Typhlocybinae. Some species harm economic crops including apple, citrus and walnut trees. These include *Zyginella mali* (Yang) and *Zyginella minuta* (Yang), which damage apple trees. Members of this tribe usually have bright coloration and distinct patterns. Most lack ocelli. The main diagnostic characters separating Zyginellini from other Typhlocybinae are: vannal veins in hind wing separate apically, only one transverse vein visible and submarginal vein extended directly to vein CuA, forming one open apical cell (Fig. 41). Zyginellini is related to Typhlocybini.

The genus *Zyginella* was described by Löw (1885) with *Zyginella pulchra* Löw from Bulgaria as the type species. Prior to the work presented here, *Zyginella* included 21 species. In this paper we deal with the nine species recorded from China, including four **new species**. *Zyginella orla* Dworakowska 1977 is transferred to the **new genus** *Parathailocyba* as *P. orla* (Dworakowska) **comb. nov.**; this brings the number of species known in *Zyginella* to 24 and a world checklist of *Zyginella* is presented.

All the type specimens for these new species are deposited in the collections of the Entomological Museum, Northwest A & F University, Yangling, China. We follow Dr. I. Dworakowska's morphological terminology.

### *Zyginella* Löw, 1885

*Zyginella* Löw, 1885: 346;

*Pyramidotettix* Matsumura, 1931: 59; Type species: *Conometopis citri* Matsumura, 1907: 113;

*Remmia* Vilbaste, 1968: 91; Type species: *Remmia orbiger*, 1968: 180;

*Zyginella*, Dworakowska, 1969: 433–435; Chou and Zhang, 1985: 292;

Type species: *Zyginella pulchra* Löw, 1885: 346, by original designation.

**Description.** Body mostly bright and contrastingly colored. Vertex moderately projecting. Ocelli absent. Forewing most often obliquely truncate apically, first apical cell short, second usually slightly bigger than third, third often with a distinct dark spot. Submarginal vein of hind wing connected to CuA more distad than transverse m-cu (Fig. 41).