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# 1 New fossil Juraphididae (Hemiptera: Aphidomorpha) from Burmese 2 amber, with phylogeny of the family

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## 10 Abstract

11 A new aphid genus and species, *Prolavexillaphis munditia* Liu, Qiao and Yao **gen. nov.**  
12 **et sp. nov.**, is assigned to Juraphididae (Aphidomorpha). The specimen is described from  
13 Upper Cretaceous amber from Myanmar. In this study the phylogeny of the extinct family  
14 Juraphididae based on 33 morphological characters detailed the status of the new fossil and  
15 the relationships within the family Juraphididae. *Isolitaphis prolatantennus* Poinar, 2017  
16 (*Isolitaphidae*) from the same deposit was also included in this phylogenetic analysis due to  
17 the similarities between two families. Two main clades within Juraphididae are recognized  
18 from our cladistic analysis: *Prolavexillaphis* Liu, Yao and Qiao **gen. nov.** and *Isolitaphis*  
19 (Poinar, 2017) form a monophyletic lineage; *Aphaorus* (Wegierek, 1991), *Pterotella*  
20 (Wegierek, 1991), *Juraphis* (Shaposhnikov, 1979) form a monophyletic lineage. These results  
21 indicate that *Isolitaphis* (Poinar, 2017) belongs to Juraphididae. Therefore, we propose a  
22 synonymy of *Isolitaphidae* with Juraphididae and the type species, *Isolitaphis prolatantennus*

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