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## On the taxonomy of the genus *Acronicta* Ochsenheimer, 1816 (Lepidoptera, Noctuidae). I. Redescription of *Acronicta grumi* (Alphéraky, 1897), with notes on synonymy and its subgeneric placement

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*Acronicta* Ochsenheimer, 1816 is a large genus of Noctuidae, with worldwide distribution mainly in the temperate zone. The genus includes more than 150 described species and is subdivided into nine subgenera (Sugi 1979; Fibiger *et al.* 2009; Kononenko 2003, 2010; Han & Kononenko 2010): *Subacronicta* Kozhanchikov, 1950, *Jocheaera* Hübner, [1820], *Triaena* Hübner, [1818], *Hyboma* Hübner, [1820], *Viminia* Chapman, 1890, *Acronicta*, *Molybdonycta* Sugi, 1979, *Hylonycta* Sugi, 1979 and *Plataplecta* Butler, 1878. A diagnosis of the genus was given by Fibiger *et al.* (2009) and Han & Kononenko (2010).

*Acronicta grumi* (Alphéraky, 1897) has been described, with some doubt, as a variety of *Acronicta megacephala* ([Denis & Schiffermüller], 1775). The species was placed into the subgenus *Subacronicta* by Kozhanchikov (1950), due to its external similarity with other species of *Subacronicta* (Figs 10, 17), but the genitalia of the holotype were not examined by the author. Our present examination of the genitalia of the holotype of *A. grumi* showed its affinity with the subgenus *Viminia* and not with *Subacronicta* (the manica of *A. grumi* has numerous teeth, the sacculus has no ventral process, the apex of valva has no ventral tooth, the vesica has diverticula, number of cornuti is smaller than in *Subacronicta*).

*Acronicta tiena* (Püngeler, 1906) has been placed into the subgenus *Subacronicta* by Han & Kononenko (2010) in their preliminary check-list of Chinese *Acronicta* and *Craniophora*. We examined the lectotype of *A. tiena* (designated here) deposited in the collection of NKMB, its clasping apparatus has no significant differences from that of the *A. grumi* holotype. The slide of *A. tiena* lectotype is old, and the vesica was not everted by Ch. Boursin, but all diagnostically important sclerotized elements of vesica (sclerotized wrinkled field bearing long cluster of spine-like cornuti, sclerotized diverticulum bearing scobinate patch at tip, and long and narrow band-like sclerotized plate) are visible clearly (Fig. 19) and are identical to those of *A. grumi* (Fig. 18). Despite different forewing colourations of *A. grumi* and *A. tiena* types, all main elements of pattern are the same in both taxa. For these reasons we conclude that *A. tiena* is a junior synonym of the externally variable species *A. grumi* which holotype is a pale form of the species. Similar high external variability is also characteristic for many other *Acronicta* species including closest relative of *A. grumi*, *A. rumicis* (Figs 7, 8).

*Acronicta bicolor* (Moore, 1881) was treated by Poole (1989) as a distinct species. The examination of photographs of syntypes (Fig. 4) and the genitalia of a topotypical female specimen of *A. bicolor* (Figs 5, 22) preserved in ZISP collection as well as examination of a series of externally identical specimens from western China in the collections of ZFMK and ZSM showed the conspecificity of *A. grumi* and *A. bicolor*. Slight differences in the genitalia of both sexes and stable differences in the ground colour of forewings suggest a subspecific rank for the taxon *bicolor*.

Abbreviations of the depositaries names are as follows: NHM—The Natural History Museum (London, Great Britain), NKMB—Naturkunde Museum (Berlin, Germany), ZFMK—Zoologisches Forschungsmuseum Alexander Koenig (Bonn, Germany), ZISP—Zoological Institute of the Russian Academy of Sciences (Saint Petersburg, Russia), ZSM—Zoologische Staatssammlung München (Munich, Germany).