

Identity of the Millipede, *Pseudoniponiella kometis* (Attems, 1938) (Diplopoda: Polydesmida: Cryptodesmidae)

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ABSTRACT.– The widespread Indochinese millipede, *Niponia kometis* (Attems, 1938), is abundantly illustrated from type material and shown to be senior to *Trichopeltis deharvengi* Golovatch, Geoffroy, Mauriès and VandenSpiegel, 2010, syn. n. et comb. n. ex *Pseudoniponiella*. The following formal generic synonymy is also proposed: *Trichopeltis* Pocock, 1894 = *Pseudoniponiella* Verhoeff, 1942, syn. n.

KEY WORDS: *Trichopeltis*, taxonomy, new synonymy, new combination, Vietnam

INTRODUCTION

In tropical or subtropical Asia and Australasia, the millipede family Cryptodesmidae comprises only 12 genera (including two that are dubious) and 35 species (Golovatch, 2015). One of the genera is *Pseudoniponiella* Verhoeff, 1942, whose type, and sole, species *Niponielle kometis* Attems, 1938, inhabits Vietnam (Attems, 1938; Verhoeff, 1942).

Regrettably, when describing *Niponielle kometis*, Attems (1938) provided crude and somewhat misleading sketches of its gonopodal structure which he partly repeated two years later as well (Attems, 1940); by no means do they allow readers to recognize the species. In fact, the gonopod telopodite was depicted and described as bipartite with a broad, rather regularly rounded, lower, caudal lobe placed anterior to a higher, acuminate, laterally serrate lamina. The only mention of a seminal groove was that it was visible through the transparent base of the caudal lobe.

Since *N. kometis* was stated to represent the second species in the genus following *N. nodulosa* (Verhoeff, 1931) (Attems, 1938), *Niponielle* was merely a slight misspelling of *Niponiella* Verhoeff, 1936. That latter name, along with *Onomatoplanus* Attems, 1940, was proposed to replace *Niponia* Verhoeff, 1931, which was thought to be preoccupied (Jeekel, 1971). In fact, *N. nodulosa* Verhoeff, 1931, is the type and still the only accepted species of *Niponia* which is very common in southern Japan and Taiwan (Golovatch et al., 2011). Both *Niponiella* and *Onomatoplanus* have been rejected from nomenclature because they are junior objective synonyms of *Niponia*, and *Niponiella* Verhoeff, 1936, is preoccupied by *Niponiella* Klapálek, 1907 (Plecoptera) (Jeekel, 1971; Hoffman, 1980).

Trichopeltis Pocock, 1894 (= *Otodesmus* Cook, 1896), comprises six species that range from the Himalayas of India (Assam and Darjeeling District) and Myanmar to southern China, Indochina and Indonesia (Sumatra) (Golovatch et al., 2010). Unlike

Niponia, this genus is well-defined and characterized by a tripartite or deeply notched gonopod telopodite, including a small middle to caudal solenomere branch (Golovatch et al., 2010).

Attems' type material of *Pseudoniponiella kometis*, housed in the Naturhistorisches Museum, Vienna, Austria (NHMW), allows us to synonymize *Pseudoniponiella* under *Trichopeltis* and propose a new species synonymy and a new combination.

MATERIAL AND METHODS

We designate a male syntype as the lectotype of *P. kometis* to ensure that the species is based on adult male characters. The illustrated specimens were photographed with a Nikon SMZ25 stereo microscope using NIS-Elements Microscope Imaging Software and the images were assembled with Adobe Indesign CS6.

In the synonymy sections, D stands for a description or descriptive notes, R for new records, while M for a mere mention.

***Trichopeltis kometis* (Attems, 1938), comb. n.**
(Figs 1-16)

Niponielle (sic!) *kometis* Attems, 1938: 244, figs 87–95 (D).

Onomatoplanus kometis – Attems, 1940: 222, figs 310–312 (D); 1953: 179 (R).

Pseudoniponiella kometis – Verhoeff, 1942: 431, 432 (D); Golovatch, 2015: 156 (M).

Niponia kometis – Golovatch, 1983: 180 (R); Enghoff et al., 2004: 141 (R); Likhitrakarn et al., 2014: 479 (R); 2015: 181 (R).

Trichopeltis deharvengi Golovatch, Geoffroy, Mauriès and VandenSpiegel, 2010: 64, figs 1–27 (D), **syn. n.**

Material.— Lectotype NHMW 8694 (designated herewith): ♂, Vietnam, Lang Biang, 2400 m, leg. Dawydoff, 26.01.1930, don. Dawydoff 1936. Paralectotypes: photographed male NHMW8695, Vietnam, Lang Biang, 2400 m, leg. Dawydoff, 26.01.1930, don. Dawydoff 1936; 2 ♂, 1 ♀, 1 juv., Vietnam, Lang Biang, 2400 m, leg. Dawydoff, 26.01.1930, don. Dawydoff 1936 (NHMW 3748); 2 ♂, 2 ♀, 3 body fragments, 1 ♂ mounted on 4 slide preparations, Vietnam, S Annam, Dalat, 1500 m, leg. Dawydoff, 1936, don. Dawydoff (NHMW 3749).

Descriptive notes.— Length 11–12.2 (♂) or 11.9–13 mm (♀), width of midbody pro- and metazonae 1–1.1 and 2.5–2.9 (♂) or 1.4 and 2.9–3.2 mm (♀), respectively. Lectotype ♂ (NHMW 8694), length 11.3 mm, width of midbody pro- and metazonae 1.0 and 2.5 mm, respectively.

All characters as described and overwhelmingly illustrated for *T. deharvengi* by Golovatch et al. (2010) and further documented in Figs 1–16.

Remarks.— There can be no doubt that *T. deharvengi* is a junior subjective synonym of *T. kometis*, syn. n. et comb. n. ex *Pseudoniponiella*. This fact also leads to the following formal generic synonymy: *Trichopeltis* Pocock, 1894 = *Pseudoniponiella* Verhoeff, 1942, syn. n.

Indeed, *T. deharvengi* was reported from near Dalat, where *T. kometis* also occurs (Attems, 1938; Golovatch et al., 2010), and this species is quite widespread in Vietnam, Laos and Cambodia.



FIGURE 1-2. *Trichopeltis kometis* (Attems, 1938), ♂ lectotype (NHMW 8694): (1) habitus, lateral view; (2) anterior part of body, lateral view.

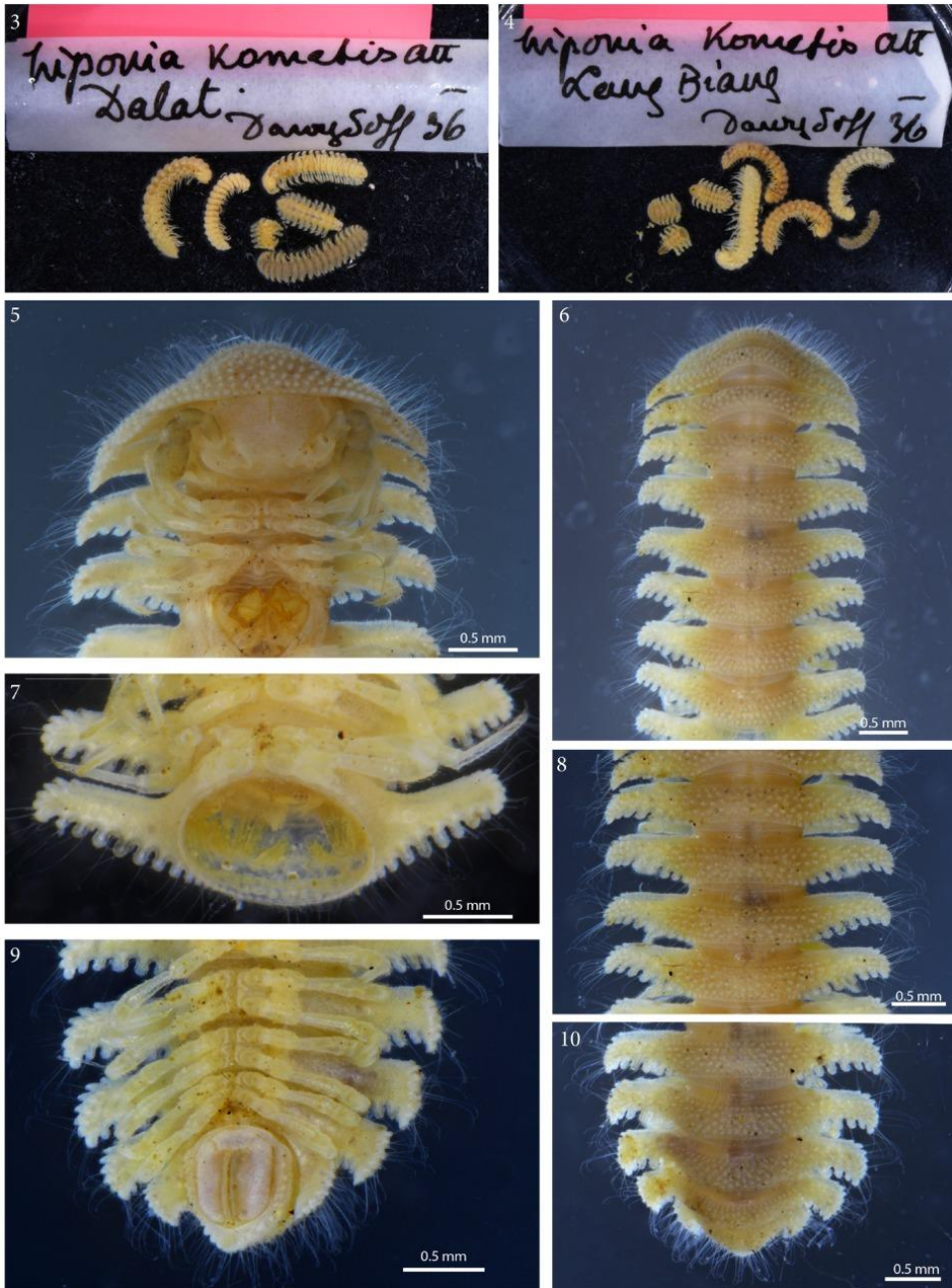


FIGURE 3-10. *Trichopeltis kometis* (Attems, 1938): (3–4) type series from Dalat and Lang Biang, respectively; (5–10) ♂ paralectotype (NHWM 8695): (5–6) anterior part of body, ventral and dorsal views, respectively; (7–8) midbody segments, ventral and dorsal views, respectively; (9–10) posterior part of body, ventral and dorsal views, respectively.

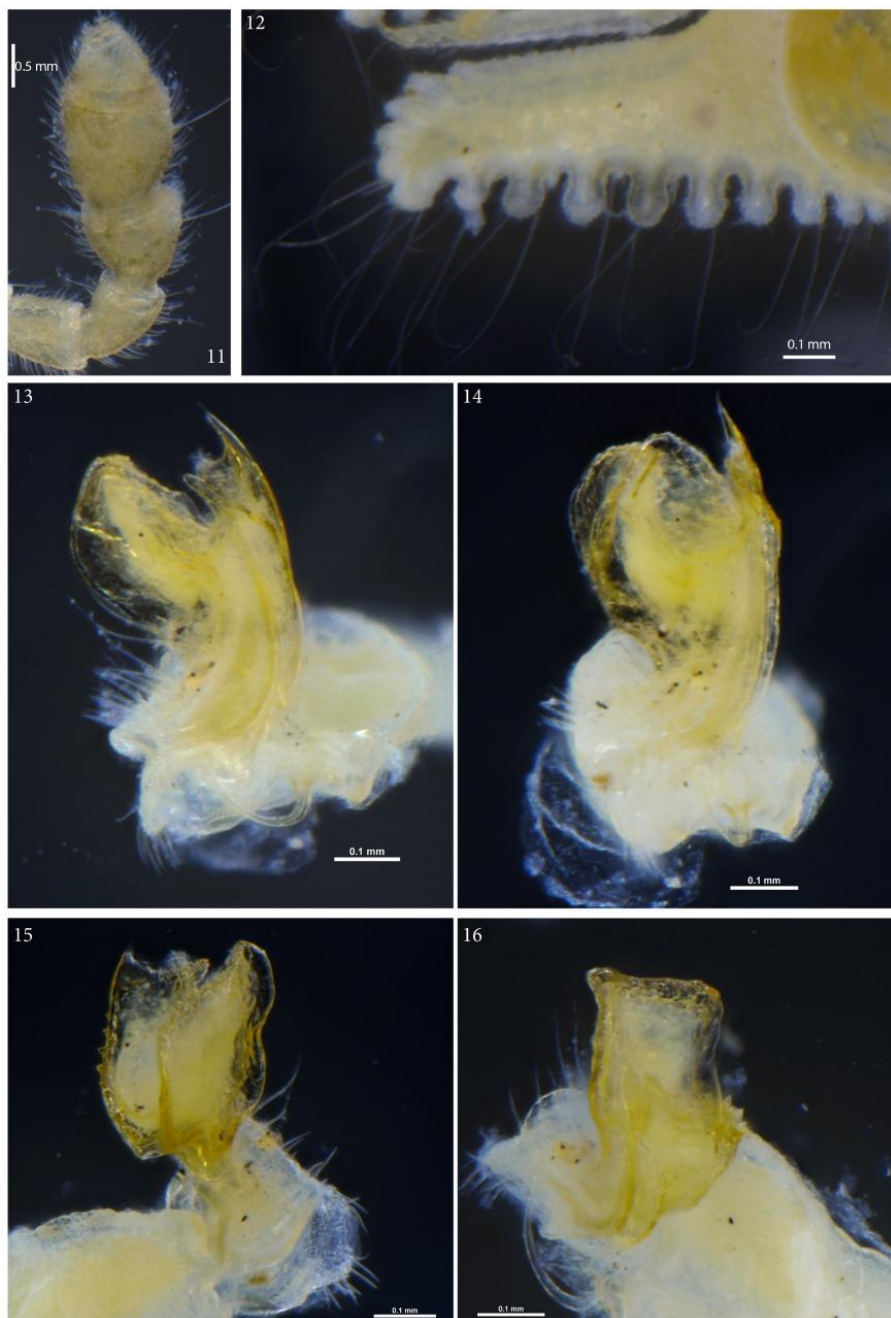


FIGURE 11-16. *Trichopeltis kometis* (Attems, 1938), ♂ paralectotype (NHWM 8695): (11) antenna, ventral view; (12) a right midbody paratergum, ventral view; (13–16) right gonopod, mesal, subventral, lateral and subdorsal views, respectively.

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