



Revision of the *Stegana nigrolimbata* species group (Diptera: Drosophilidae) from the Oriental Region

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Abstract

The *Stegana nigrolimbata* species group from the Oriental Region is revised, and composed of seven species, five newly described, *S. (S.) belokobylskiji* Sidorenko from Vietnam, *S. (S.) nigrolimbata* Duda, *S. (S.) brevibarba* **sp. nov.** and *S. (S.) xiaoleiae* **sp. nov.** from south China, *S. (S.) capillaria* **sp. nov.**, *S. (S.) longibarba* **sp. nov.** and *S. (S.) multiclavata* **sp. nov.** from east Malaysia. A key to the all species of the group is provided.

Key words: Diagnosis, *nigrolimbata* group, Oriental Region, *Stegana*, taxonomy

Introduction

Up to the present, three species group have been identified in the subgenus *Steganina*: *coleoptrata* group (Laštovka & Máca 1982), *undulata* group (Sidorenko 2002) [= group 2, Okada 1971] and *nigrolimbata* group (Sidorenko 2002 [= group 3, Okada 1971]).

Sidorenko (2002) suggested the *nigrolimbata* group is composed of five species, *S. (S.) belokobylskiji* Sidorenko, *S. (S.) chitouensis* Sidorenko, *S. (S.) nigrolimbata* Duda, *S. (S.) ornatipes* Wheeler and Takada, *S. (S.) vietnamensis* Sidorenko, and assigned the following characters as the diagnosis: palpus dark brown or blackish; thorax without stripes; scutellum unicolorous; mesopleuron with dark bands; cercus partly pubescent; aedeagus articulating with apodeme; female cercus and oviscapt not pubescent; oviscapt with trichoid and peg-like sensillae. However, at least, one character is inaccurate on male cercus not pubescent in *S. (S.) belokobylskiji* and *S. (S.) nigrolimbata*; the other characters usually are present in some species of this subgenus too.

Here we change the composition of the *nigrolimbata* species group, and these three species are excluded from it and will be treated in a future paper: *S. (S.) chitouensis*, *S. (S.) vietnamensis*, and *S. (S.) ornatipes*, see our next study). The *nigrolimbata* group as here defined is supported by aedeagus distally with 4–6 pairs of rod-like and 1 pair of filar-like processes (Figs 6, 10, 14, 18, 22); surstylus with 1 pointed preniseta subapically and numerous scale-like processes (Figs 5, 9, 13, 17, 21); gonopods anteriorly connects with base of aedeagus by a pair of slender processes (Figs 7, 11, 15, 19, 23). The scale-like processes of surstylus have been as teeth or prenisetae by Okada (1971), Okada & Sidorenko (1992), Sidorenko (1998, 2002), however, they without alveoli, different from teeth or prenisetae. Certainly, this group (Cheng et al. 2008), is similar to the *ornatipes* group, because of sharing the following characters: frons and face not rectangular in profile; gena yellow to brown, narrow ($ch \leq 0.10$; Fig. 1); paramere absent (Figs 6, 10, 14, 18, 22); aedeagus basally contiguous to aedeagal apodeme (Figs 7, 11, 15, 19, 23); oviscapt (sternite VIII) with numerous spinules (Fig. 3).