



Two new species of *Syneches* belonging to *S. signatus* species-group from Vietnam (Diptera: Empidoidea, Hybotinae)

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Abstract

The following two species of *Syneches* from Vietnam belonging to the *S. signatus* species-group are described as new to science: *Syneches apicalis* **sp. nov.** and *S. basalis* **sp. nov.** A key to the known species of this group from Vietnam and China is presented.

Key words: Diptera, Empidoidea, *Syneches*, new species, Vietnam

Introduction

Syneches Walker is a large genus in the subfamily Hybotinae traditionally placed in the family Empididae (Melander 1928; Steyskal and Knutson 1981; Woodley 1989; Yang *et al.* 2007) or assigned to the family Hybotidae (Chvála 1983; Chvála & Kovalev 1989; Sinclair and Cumming 2006). The generic concept of *Syneches* has been controversial (Saigusa 1963), as *Syneches* has been divided into 3–4 subgenera (Melander 1928; Smith 1975, 1989) or three different genera (Yang and Yang 2004; Yang *et al.* 2007) and treated as a single genus without separation of the subgenera (Sinclair 2011). The subgenus *Harpamerus* Bigot, 1859 is a unique group in the genus *Syneches*, and distinctly differs from other members of the genus in the following features: abdomen broad and flattened dorsoventrally; hind femur with finger-like ventral tubercles (which are shorter in females), and hind tibia in both sexes curved with thickened apex and usually thin ventral tubercles (Melander 1928; Yang & Yang 2004). Further work including searching for more useful characters and/or performing a cladistic analysis is needed in order to resolve its relationships with similar taxa. Thus, we tentatively treat *Harpamerus* not as a genus group, but as the *S. signatus* species-group in *Syneches*.

The *S. signatus* species-group is distributed in the Oriental and Australasian regions with nine described species (Yang *et al.* 2007). The major references dealing with species of the *S. signatus* species-group are as follows: Bezzi 1904, 1912; Frey 1938; Melander 1928; Yang & Yang 2004. Yang and Yang (2004) reported two species of the *S. signatus* species-group from China. In the present paper, the *S. signatus* species-group is found in Vietnam with two new species, which are described herein. A key to the known species of this group from Vietnam and China is presented.

Material and methods

The type specimens are deposited in the Entomological Museum of China Agricultural University, Beijing (CAU). Terms used for adult structures and male genitalia follow those of McAlpine (1981) and Sinclair and Cumming (2006), respectively. The following abbreviations are used: acr = acrostichal bristle(s), ad = anterodorsal bristle(s), av = anteroventral bristle(s), h = humeral bristle(s), npl = notopleural bristle(s), oc = ocellar bristle(s), pd = posterodorsal bristle(s), psa = postalar bristle(s), pv = posteroventral bristle(s), v = ventral bristle(s).