



A new species of *Phycodes* from China (Lepidoptera: Sesioidea: Brachodidae)

AXEL KALLIES¹, MIN WANG² & YUTAKA ARITA³

¹The Walter and Eliza Hall Institute of Medical Research, 1G Royal Parade, Melbourne/Parkville, Victoria 3050, Australia.

E-mail: kallies@wehi.edu.au

²Department of Entomology, South China Agricultural University, Guangzhou, Guangdong, 510642, P.R. China.

E-mail: minwang@scau.edu.cn

³Zoological Laboratories, Faculty of Agriculture, Meijo University, Tempaku-ku, Nagoya, 468-8502 Japan.

E-mail: arita.yutaka@gmail.com

Brachodidae are a small family of fewer than 140 described species that are distributed worldwide except in North America. They reach their greatest diversity in the tropical regions of Asia and South America; however, many species occur in the Palaearctic region and in Australia, but these are restricted to a small number of genera. More than 40 species are known from the Oriental region and many more await description (Kallies 1998, 2000, 2004).

We recently described a new species of *Nigilgia* Walker, 1863 (Phycodinae) from the Nanling Mts. in the province of Guangdong, China, and briefly discussed the Brachodidae known from China (Kallies *et al.* 2007). Here we describe a striking new species of *Phycodes* Guenée, 1852 from Guangdong that shows some similarities with *Phycodes maculata* Moore, 1881 from northeastern India. The new species can be readily distinguished from the latter and all other congeners by the distinct orange spots on the forewings.

Including this new species, 10 species of Brachodidae have been reported from mainland China (Kallies 2002; Kallies *et al.* 2007); however, two additional unidentified species are known from Hong Kong (Kendrick *in litt.*). Three species are known from Taiwan, and one species has been described from Hainan Island recently (Kallies 2004; Heppner 2009).

Phycodes interstincta Kallies & Arita sp. nov.

(Figs 1, 2)

Holotype: 1 female, China, Guangdong, Guangzhou, Mt. Huolushan, 8. VII. 2008, leg. Chen Liusheng; deposited in Department of Entomology, South China Agricultural University, Guangzhou, Guangdong, China. Paratypes: 2 females, same data; deposited in National Science Museum Tokyo, Japan.

Description. Female (Fig. 1, holotype). Alar expanse 23.5 mm, forewing length 11.3 mm, body length 11 mm. Head: black; antenna simple, black, entirely covered with rough black scales; frons and vertex black; pericephalic scales black with individual yellow scales dorsally, white laterally; labial palps bright white, terminal segment black. Thorax: black; patagia black dorsally, bright white laterally; legs black, coxae white; femurs white along posterior margins; hindtibia between tibial spurs ventrally white. Forewing black; with a well-developed deep orange fascia near base, a distinct elongated spot at both costa and posterior edge medially, and three irregular spots of the same color apically; fringe black; underside very similar to upper side but somewhat lighter and with orange markings bigger. Hindwing uniformly blackish brown; fringe yellow, black towards the apex and the anal margin; underside with yellow streaks near base, a yellow patch in the cell and a short and narrow yellow band along anterior margin towards apex. Abdomen: black; sternites 1+2 bright white, sternite 3 dirty white, sternite 4 with narrow white posterior margin, sternite 5 dirty white with a black patch near posterior margin, sternite 6 white in the middle; anal tuft laterally bright white.

Female Genitalia (Fig. 2): Ovipositor relatively short, with a weakly developed triangular pouch-like structure posteriorly (Fig. 2a); papillae anales well developed; apophyses anteriores relatively short, about half as long as apophyses posteriores; ostium large, membranous, with a narrow sclerotized plate posteriorly (Fig. 2b); tergite 8 well sclerotized; sternite 8 reduced to a narrow band; ductus bursae very long and narrow, with a well-sclerotized antrum; corpus bursae globular, without signum.

Male. Unknown.