

A new species of *Shaanxiana* (Lepidoptera: Lycaenidae) from southern China

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Abstract. *Shaanxiana australis* sp. nov. (Theclinae: Theclini) is described from southern China, representing a new taxon of the genus and a remarkable known geographical range extension of the genus. The larval host plant of *S. australis* is unknown, but the most likely candidate is *Fraxinus chinensis* (Oleaceae), because congeneric *Shaanxiana takashimai* use *Fraxinus* spp. as larval hosts, and *F. chinensis* is known to grow at the type locality of *S. australis*.

Key words: hairstreak, butterflies, Theclini, Theclinae, hostplant

Introduction

The genus *Shaanxiana* is a small group of hairstreak butterflies with two described species, viz: *S. takashimai* Koiwaya, 1993 (type locality: Hu Xian, Shaanxi, [China]) and *S. pauper* Sugiyama, 1994 (type locality: N.-Mt, Signiang, Sichuan, China). The diagnostic characters of the genus include bright yellow or pale yellow wing undersides and possession of two pieces of sclerotized cornuti in phallus of the male genitalia. Both described taxa are known to be restricted to western China (Koiwaya, 2007). Koiwaya (2007) pointed out that *S. pauper* differs from *S. takashimai* only by a few minor differences in wing pattern and synonymized *S. pauper*, treating it as a subspecies of *S. takashimai*. Later in the same year, Weidenhoffer & Bozano (2007) studied a male specimen of *S. pauper*, and found that although the colour pattern (wing markings) and morphology of the genitalia of *S. takashimai* and *S. pauper* are similar, prominent differences exist between the two taxa. Therefore, they reinstated *S. pauper* as a distinct species. A specimen undoubtedly belonging to the genus *Shaanxiana* was collected from Guangdong Province of southern China, representing a remarkable geographical range extension of this genus (Fig. 1). It possesses wing pattern and male genitalia distinct from the two previously described taxa, notably the absence of uncus and harpe, in contrast to the presence of a bifurcate uncus and a spine-like harpe of the latter, suggesting pre-mating isolation mechanism exists between the new species from the two previously known species, and therefore is described as a new species herein.

Material and methods

The following specimens of *Shaanxiana takashimai* were compared with the new taxon: 2 males, Zhouzhi Xian, Shaanxi Province, China; 1 female, Feng Xian, Shaanxi Province, China. Dissection of genitalia was performed by removing the entire abdomen, which was placed in 10% KOH at room temperature for 24 h to dissolve the soft tissues, then transferred to cellulose (Dowanol EE; $C_2H_5OC_2H_4OH$) for another 24 h for descaling, and finally placed in 70% ETOH for dissection. The dissected parts were preserved in 70% Ethyl alcohol. Primary type will be deposited in Institute of Zoology, Academia Sinica, Beijing (IOZ). Measurements are defined and abbreviated as follows: forewing length (FL), distance from the base of the forewing to the apex; antennal length (AL), distance from the base to the distal tip of the antenna. Terminology of wing patterns follow that of Nijhout (1991), and genitalia that of Klots (1970).

Shaanxiana australis, sp. nov.

(Figs. 2–3, 8–9)

Type material. HOLOTYPE ♂ (genitalia preparation YFH 1527): CHINA: GUANGDONG Province, Shaoguan Shi, Ruyuan Xian, Ruyang, 675 m, VI. 25. 2000. Coll. Y.-F. Hsu. (IOZ)