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DISCOVERY OF *SIBATANIOZEPHYRUS* FROM MAINLAND CHINA (LEPIDOPTERA: LYCAENIDAE: THECLINAE)

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ABSTRACT.– *Sibataniozephyrus* is reported from mainland China for the first time; a new species, *S. lijinae*, closely related to *S. kuafui* Hsu & Lin of Taiwan is described. The presumed larval host of *S. lijinae* is *Fagus lucida* Rehder & Wilson (Fagaceae).

KEY WORDS: Fagaceae, hostplant, Japan, Oriental, ***Sibataniozephyrus lijinae*** n. sp., Taiwan, taxonomy, Theclini.

Sibataniozephyrus, a Theclini genus exclusively associated with beech (*Fagus* spp.; Fagaceae) forests, was formerly considered endemic to Japan before the second member of the genus was discovered in Taiwan by 1992 (Hsu and Lin, 1994). Hsu and Lin (1994) suggested that members of *Sibataniozephyrus* were highly likely to inhabit mainland China, because the Chinese mainland harbors the richest diversity of both Theclini lycaenids and beech species. The discovery of a new species of *Sibataniozephyrus* described here proves the prediction made by Hsu and Lin was correct.

Sibataniozephyrus lijinae Hsu, **new sp.**

Description.– MALE (Fig. 3-4): Forewing length 18mm. *Head*: Scaling on vertex, frons upraised, black mixed with grayish white; a white rim surrounding eye. Eye semi-oval, hairy. Labial palpus hairy, porrect, pointed. Proboscis unscaled. Antenna scaling appressed, with projecting setae at nudum. *Thorax*: Hairy, grayish white with metallic greenish blue reflection dorsally, white ventrally. Scaling on legs white, banded with dark brown on tarsi. *Abdomen*: Uniformly brown dorsally, white ventrally. *Forewing*: Upperside metallic greenish blue with narrow distal fuscous margin. Underside ground color white. A fuscous, straight band present discally. A series of black spots present submarginally. A fuscous discoidal bar present. An irregularly-shaped, fuscous band present postdiscally from costa to vein Cu2. Fringe white. *Hindwing*: Upperside metallic greenish blue with fuscous margin 2 to 3 times broader than that of forewing. Black Cu2 spot of underside visible by transparency. A white, narrow thread present marginally. Tail-like projection of vein Cu2 approximately 4 mm in length, black with white distal tip. White scaling prominent, present along costa. Underside ground color white. A fuscous, straight band present discally, sharply turning around at vein Cu1+2, forming a "V"-shape angle. A series of fuscous bars with ill-defined edges present submarginally. A broad, prominent, fuscous band present postdiscally, slightly curved outwards with proximal margin nearly straight, distal margin uneven. A prominent, round, black spot encircled by orange yellow scaling present near distal end of cell Cu1. A tornal orange yellow patch present, with a prominent black spot present at tornus. Fringe white. *Male genitalia* (Fig. 6-10): Sclerites of 9th, 10th segment fused, forming a complete ring with flat dorsal surface. Uncus absent. Socii folded inwards. Brachium single-articulated with tegumen, hook-like, slightly twisted distally, distal end truncate. Phallus strongly upcurved; aedeagus approximately 1.1 times of phallobase. Cornuti present, in form of a cluster of spines. Juxta a flat plate with lateral projections, concave dorsally. Valva semicircular, setose externally. Ampulla a long, straight projection. Harpal region bearing a slender process proximally, distal margin with 16 to 17 teeth. Ventral ridge of sacculus serrate.

FEMALE (Fig. 1-2): Forewing length 17mm. Color pattern generally similar to male but wing uppersides somber brown, markings on wing undersides more prominent, scaling around tornal area orange instead of orange yellow, tail-like projection of vein Cu2 of hindwing longer, approximately 5 mm in length. *Female genitalia* (Fig. 5): Apophyses posteriores elongate, slender, with somewhat square-shaped papillae anales. Ductus bursae robust, heavilly sclerotized near base. Lamella postvaginalis heavilly sclerotized, forming a pair of flat projections distally; projection pointed, branched distally, lobed laterally. Corpus bursae oval, bearing a pair of small, flat, invaginated, somewhat semicircular signa. Ductus seminalis originated at ductus bursae.

Types.– Holotype ♀: CHINA.– Guizhou Prov., Tongren Prefecture., Mt. Fanjing. 1000-1350m, 18/19 Jun 1995 (YFH 1074 genitalia)(Zoological Institute, Academia Sinica, Beijing, IZASB). Allotype ♂: same data, associated with *Fagus lucida* (YFH 1064 genitalia) (IZASB).

Paratypes (1♀,1♂).- Same data as holotype: 1♀ (YFH 1065 genitalia) (Insect Museum, National Taiwan University, NTUIM); same data as allotype: 1♂ (NTUIM).

Etymology.– This species is named after my beloved, Li Jin.

Distribution.– Known from Guizhou Province, southwestern China.

Host.– The adults were associated with *Fagus lucida* Rehder & Wilson (Fagaceae), indicating a likely possible host. *Sibataniozephyrus fujisanus* Matsumura, of Japan, is known to use *Fagus crenata* Blume and *F. japonica* Maximowiczi as larval hosts (Fukuda *et al.*, 1984; Shirôzu, 1961). Larvae of *S. kuafui* Hsu & Lin of Taiwan were collected from *Fagus hayatae* Palibin ex Hayata (Yen and Jan, 1995).

Remarks.– This new species is closely related to *Sibataniozephyrus kuafui* Hsu & Lin from Taiwan, but can be separated by 1) much more prominent markings on wing undersides, 2) presence of prominent white scaling along costa of hindwing upperside (♂), 3) branched lamella postvaginalis, and 4) twisted brachium. *Fagus lucida*, the presumed larval host of *S. lijinae*,

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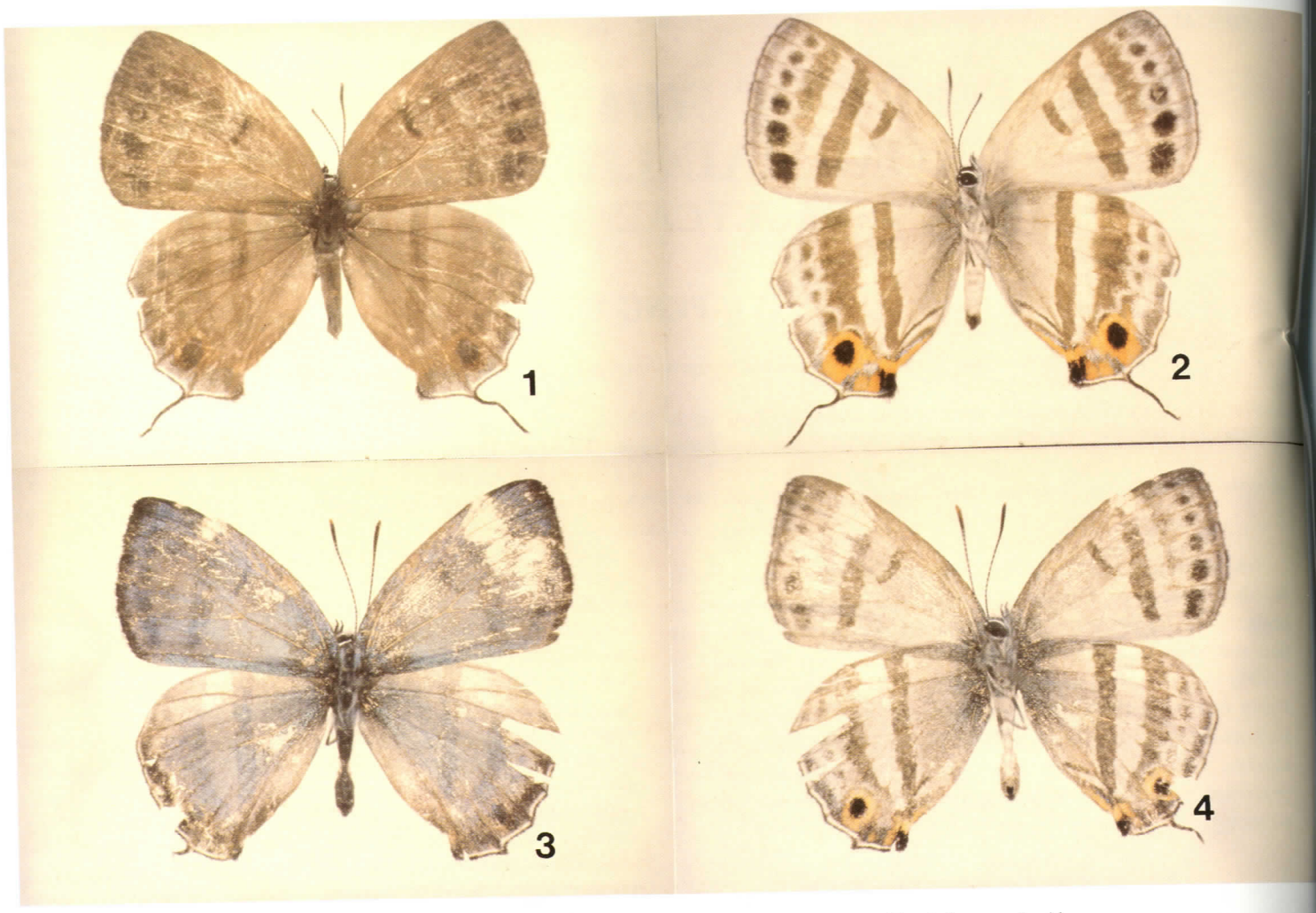

Fig. 1-4. *Sibataniozephyrus lijinae* **n. sp.**: 1) Holotype ♀, upperside. 2) Same, underside. 3) Allotype ♂, upperside. 4) Same, underside.

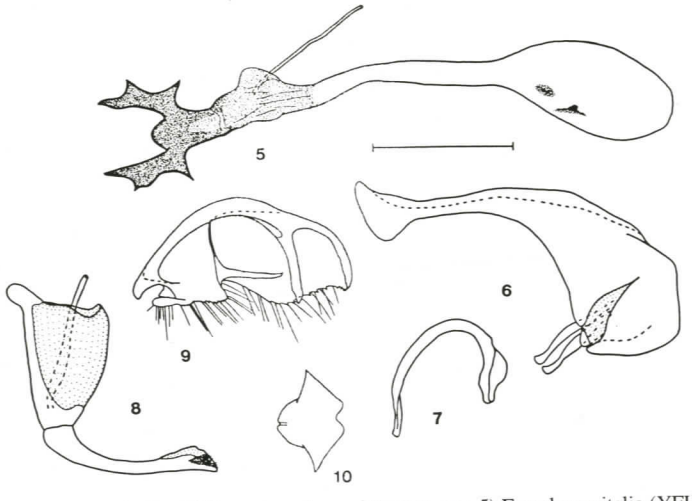

Fig. 5-10. Genitalia of *Sibataniozephyrus lijinae* **n. sp.**: 5) Female genitalia (YFH 1074 Genitalia) (scale line = 1mm). 6) Male genitalia (YFH 1064 Genitalia), lateral view of 9+10 genitalic segments. 7) Left brachium of ♂. 8) Phallus. 9) Dorsal view of right valva. 10) Juxta (scale line = 1mm).

is phylogenetically closely related to the larval host of *S. kuafui*, *F. hayatae*, according to Shen (1992). Therefore, coevolution might have taken place between the common ancestors of *S. kuafui* and *S. lijinae* and their larval hosts.

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