

# First Record of the Genus *Sympelanella* Fennah, 1987 (Hemiptera, Auchenorrhyncha, Fulgoroidea: Caliscelidae) from Vietnam, with Description of a New Species from Yok Don National Park

V. M. Gnezdilov<sup>a,\*</sup>

<sup>a</sup> Zoological Institute, Russian Academy of Sciences, St. Petersburg, 199034 Russia

\*e-mail: vmgnezdilov@mail.ru, vgnezdilov@zin.ru

Received February 20, 2020; revised March 30, 2020; accepted March 30, 2020

**Abstract**—Caliscelid genus *Sympelanella* Fennah, 1987 is recorded for the first time from Vietnam, with *Sympelanella yokdona* sp. n., described from Đăk Lăk Province, *S. breviceps* (Chou, Yuan et Wang, 1994), recorded from Hòa Bình Province, and *S. recurvata* Yang et Chen, 2014, recorded from Đồng Nai Province.

**Keywords:** Augilini, morphology, new species, new record, Ommatidiotinae, systematics, Oriental Region

**DOI:** 10.1134/S001387382001008X

The genus *Sympelanella* was erected by Fennah (1987) for a single species, *Sympelanella breviceps* Fennah, 1987, from eastern Myanmar (Dawna Hills). Later five species were described from southern China (Chou et al., 1994; Zhang and Wang, 2009; Yang and Chen, 2014; Chen et al., 2014). In this paper, a new species is described based on the series of specimens collected on bamboo in a *Dipterocarpus* forest in Yok Don National Park of Đăk Lăk Province in southern Vietnam. Two species of the genus are recorded from Vietnam for the first time. *Sympelanella recurvata* Yang et Chen, 2014, described from Guangdong and Guangxi provinces of China (Yang and Chen, 2014), is recorded from Cat Tien National Park in Đồng Nai Province of southern Vietnam; and *S. breviceps* (Chou, Yuan et Wang, 1994), known from Yunnan Province of China (Chou et al., 1994; Chen et al., 2014), is recorded from Hòa Bình Province of northern Vietnam.

The type series of the new species and other material examined are deposited in the Zoological Institute of the Russian Academy of Sciences, Saint Petersburg, Russia.

Family CALISCELIDAE Amyot et Seville

Subfamily OMMATIDIOTINAЕ Fieber

Tribe Augilini Baker

Genus *Sympelanella* Fennah, 1987

*Sympelanella* Fennah, 1987 : 244.

Type species *Sympelanella breviceps* Fennah, 1987.

*Sympelanella yokdona* Gnezdilov, sp. n.  
(Figs. 1, 2)

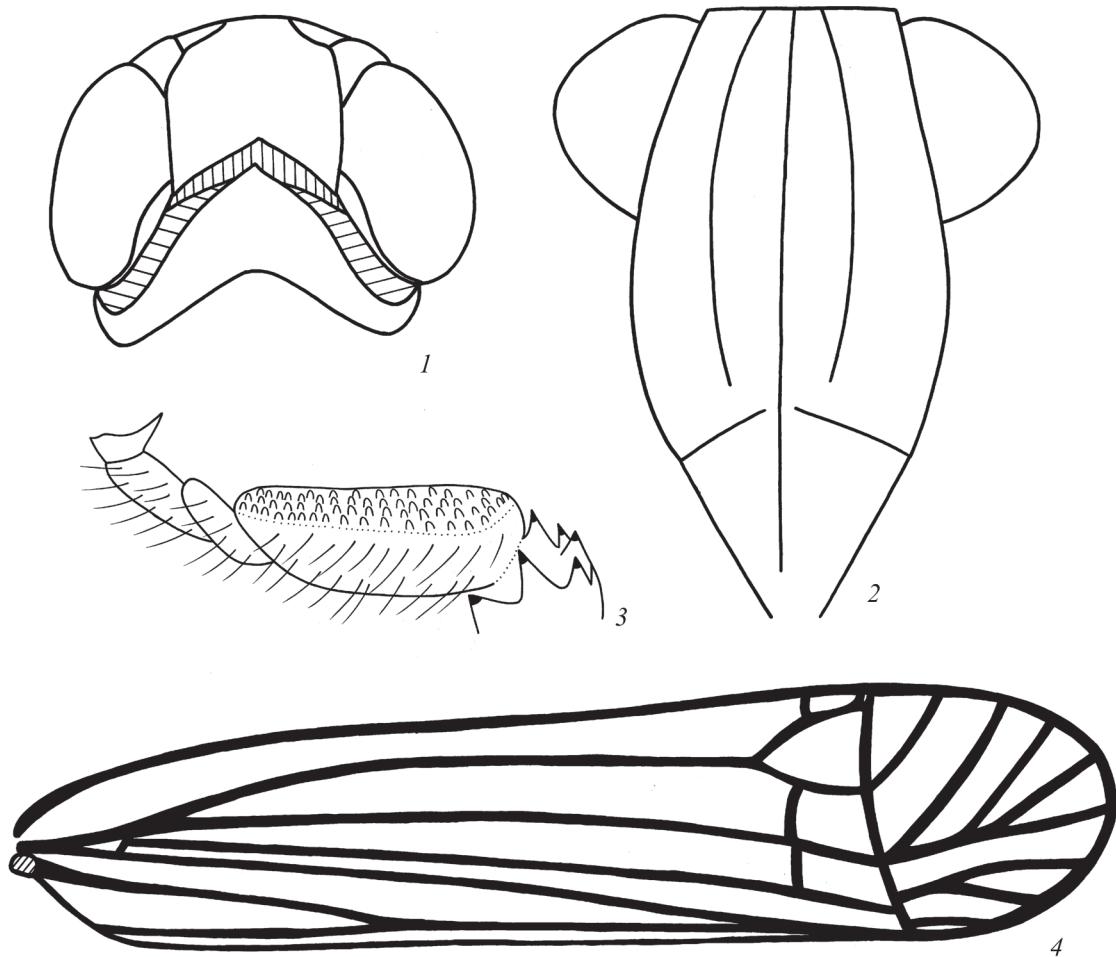
**Description.** Coryphe nearly square—almost as wide as long, without carinae; anterior margin 4-pointed; posterior margin obtusely angulate (Fig. 1, 1). Coryphe and metope joint at obtuse angle (in lateral view). Metope nearly twice as long as wide between the eyes, with distinct median carina, running from its upper margin throughout postclypeus, and distinct sublateral carinae running from its upper margin, not reaching metopoclypeal suture, but turned to midline above the suture; lateral margins convex, overhanging the pedicels (Fig. 1, 2). Metopoclypeal suture angulately convex. Ocelli present. Rostrum with its 3rd segment half as long as 2nd one. Pronotum with obtusely angulate ante-

rior margin; posterior margin concave. Pro- and mesonotum without carinae. Mesonotum 2.5 times as long as pronotum. Fore wings long and narrow, rounded apically, without hypocostal plate. Fore wing vein sequence:  $R_3$ , anterior branch furcating apically before nodal line, and posterior branch crossing nodal line;  $r-m$  1;  $M$  3–4, furcating after nodal line;  $m-cua$  1;  $CuA$  2, furcating after nodal line (Fig. 1, 4). Clavus 3/4 of whole wing length.  $Pcu$  fused with  $A_1$  at wing's basal third. Hind wings well developed, as long as fore wings. Hind tibia with single lateral spine distally and with 6 apical spines. 1st metatarsomere long, narrowing apically, with short and thick setae ventrally (Fig. 1, 3). 2nd metatarsomere short, about 0.25 as long as 1st one. 1st and 2nd metatarsomeres without latero-apical spines. Arolium of pretarsus wide, its hind margin convex, reaching claw

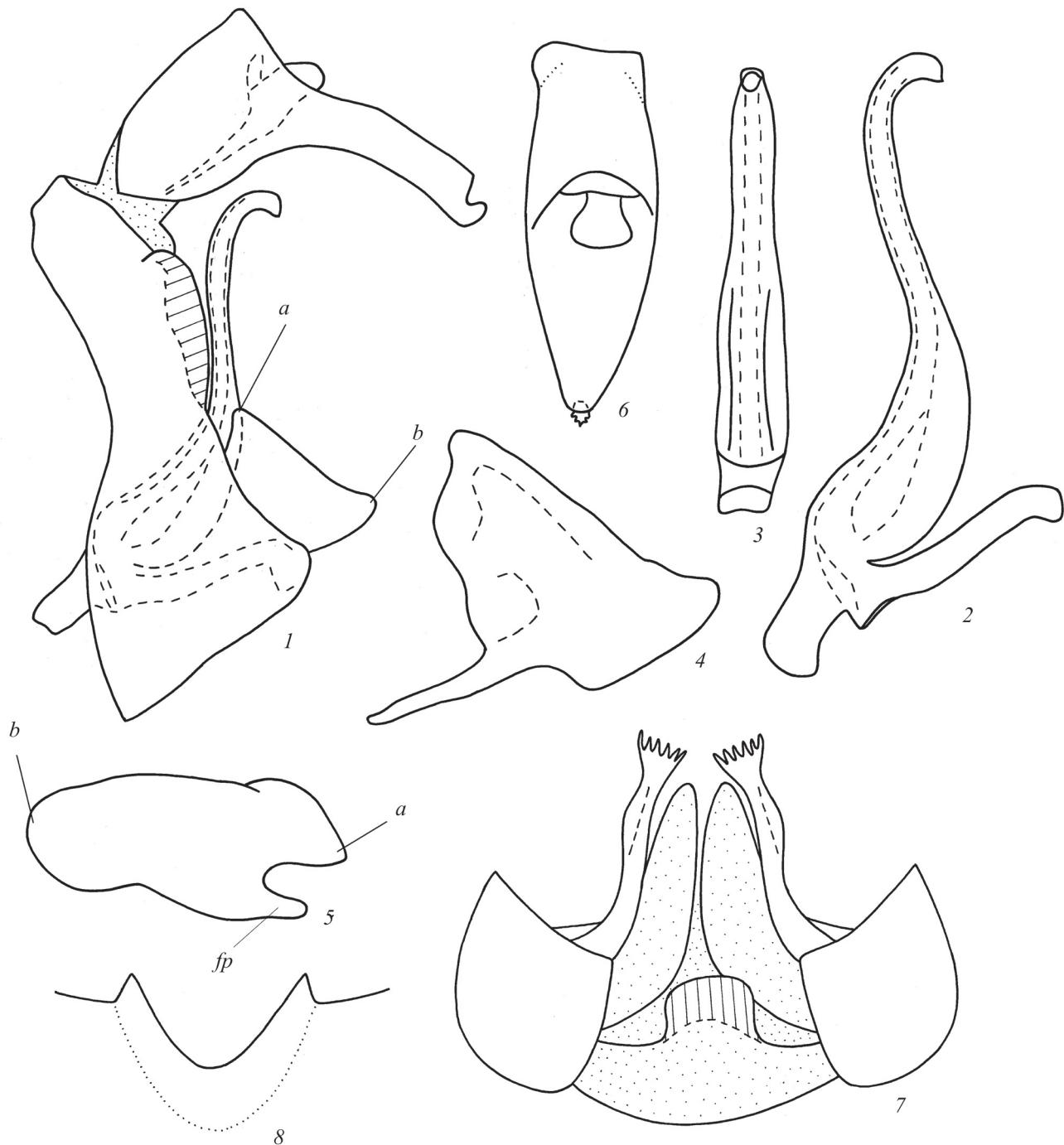
apices (in dorsal view), with a pair of narrow dorso-lateral plates.

**Coloration.** General coloration light green (becoming light yellow in dry specimens), except black pedicels and apex of rostrum, and dark brown to black apices of spines on legs and claws.

**Male genitalia (Fig. 2).** Pygofer elongate vertically, enlarged basally (in lateral view), with elongate lobe-shaped processes of hind margins (Fig. 2, 1); lower margin concave (in caudal view). Anal tube long, narrowing apically (in dorsal view) (Fig. 2, 6), with apex turned down (in lateral view). Anal column short and wide. Aedeagus long, S-shaped, with a pair of high lobe-shaped carinae in its basal half (in dorsal view), with apical gonopore (Fig. 2, 2, 3). Connective small,



**Fig. 1.** *Symplanella yokdona* sp. n., holotype: (1) head and pronotum, dorsal view; (2) face; (3) metatarsomeres, lateral view; (4) fore wing, dorsal view.



**Fig. 2.** *Sympelanella yokdona* sp. n., male and female genitalia: (1) genital block, lateral view; (2) aedeagus and connective, lateral view; (3) aedeagus, dorsal view; (4) style, lateral view; (5) style, dorsal view; (6) male anal tube, dorsal view; (7) gonapophyses VIII, ventral view; (8) female sternite VII, ventral view. *a, b*, upper angles of style; *fp*, finger-shaped process.

fused with aedeagus. Style with long and narrow basal part connected with the connective and with wide plate, bearing finger-shaped process (in dorsal view) (Fig. 2, 1, 4, 5).

Female genitalia (Fig. 2, 7, 8). Hind margin of sternite VII deeply concave medially, with two horn-shaped processes (Fig. 2, 8). Anal tube cylindrical, slightly longer than wide. Gonoplacs flat, nearly triangular, with

turned-up apices. Endogonocoxal lobes connected by large square sclerite, well visible behind the marginal concavity of sternite VII (Fig. 2, 7).

Total length. Males 4.5–4.8, females – 4.5–5.0 mm.

**Material.** Holotype, ♂: Vietnam, Đăk Lăk Province, Yok Don National Park, 10 km NE of Buôn Dôn Village, 12°56.765'N 107°47.047'E, 200–250 m, 18–20.VI.2014 (V.M. Gnezdilov). Paratypes: 1 ♂, 4 ♀, as holotype; 1 ♀, Yok Don National Park, 10 km NE of Buôn Dôn Village, 12°56.301'N 107°43.471'E, 194 m, 19–20.VI.2014 (V.M. Gnezdilov); 3 ♂, 2 ♀, near Buôn Dôn Village, 23.XI.1993 (A.V. Gorochov).

**Comparison.** The new species is closely related to *S. brevicephala* (Chou, Yuan et Wang, 1994) which is evidenced by the elongate male anal tube and S-shaped aedeagus, but *S. brevicephala* is distinguished by a pair of spiniform processes on the sides of the aedeagal shaft, and by the horn-shaped processes of the hind margins of pygofer (Chen et al., 2014, figs. 2–101 I, L, M).

**Etymology.** The name of the new species is derived from the name of the type locality, Yok Don National Park.

#### *Sympelanella brevicephala*

(Chou, Yuan et Wang, 1994)

**Material. Vietnam.** Hòa Bình Province: 1 ♂, 1 ♀, Cao Phong, 24.X.1990; 1 ♀, Tuly, 16.X.1990 (A.V. Gorochov).

#### *Sympelanella recurvata* (Yang et Chen, 2014)

**Material. Vietnam.** Đồng Nai Province, Cat Tien National Park: 1 ♂, 1 ♀, 10°46'N, 106°41'E, 16–17.

XI.2012; 1 ♂, 2 ♀, 11°25'N, 107°25'E, 15–18.XI.2012; 1 ♀, 11°27'N, 107°24'E, 26.XI.2012 (V.M. Gnezdilov).

## FUNDING

The study is performed within the framework of the Russian State Research project no. AAAA-A19-119020690101-6. My trip to Vietnam was provided by the Russian-Vietnamese Tropical Centre, southern branch (Hồ Chí Minh, Vietnam).

## COMPLIANCE WITH ETHICAL STANDARDS

All applicable international, national, and institutional guidelines for the care and use of animals were followed. All procedures performed in studies involving animals were in accordance with the ethical standards of the institution or practice at which the studies were conducted.

## REFERENCES

- Chen, X.-S., Zhang, Z.-G., and Chang, Z.-M., *Issidae and Caliscelidae (Hemiptera: Fulgoroidea) from China*, Guiyang: Guizhou Science and Technology Publ., 2014.
- Chou, I., Yuan, F., and Wang, Y.L., A newly recorded genus and three new species of Lophopidae from China (Homoptera: Fulgoroidea), *J. Northwest Forestry Coll.*, 1994, vol. 9, p. 44.
- Fennah, R.G., A recharacterisation of the Ommatidiotini (Hem.-Hom., Fulgoroidea, Issidae, Caliscelinae) with description of two new genera, *Entomol.'s Mon. Mag.*, 1987, vol. 123, p. 243.
- Yang, L. and Chen, X.S., Three new bamboo-feeding species of the genus *Sympelanella* Fennah (Hemiptera, Fulgoromorpha, Caliscelidae) from China, *ZooKeys*, 2014, vol. 408, p. 19.  
<https://doi.org/10.3897/zookeys.408.5797>
- Zhang, L. and Wang, Y., A taxonomic study on the genus *Sympelanella* Fennah (Hemiptera: Issidae) from China, *Entomotaxonomia*, 2009, vol. 31, p. 176.