

NEW AND LITTLE-KNOWN SPECIES OF THE GENUS *FALCONIUS*
BOLÍVAR, 1898 (ORTHOPTERA: TETRIGIDAE)

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Summary. *Falconius leleji* Storozhenko, **sp. n.** is described and illustrated from Sumatra Island. The new species is most similar to *F. bogor* Storozhenko, 2020 from Java Island but differs from latter by shape of subgenital plate and short ovipositor. The hitherto unknown female of *F. becvari* (Buzzetti et Devriese, 2008) is described and *F. annuliconus* Liang, 2020 is recorded from Vietnam for the first time.

Key words: Scelimeninae, taxonomy, new species, distribution, Indonesia, Vietnam.

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Резюме. С острова Суматра описан и проиллюстрирован *Falconius leleji* Storozhenko, **sp. n.** Новый вид близок к *F. bogor* Storozhenko, 2020 с острова Ява, но отличается от последнего формой субгенитальной пластинки самки и коротким яйцекладом. Описана ранее неизвестная самка *F. becvari* (Buzzetti et Devriese, 2008), а *F. annuliconus* Liang, 2020 впервые приводится из Вьетнама.

INTRODUCTION

At present, the genus *Falconius* Bolívar, 1898 includes 21 species distributed in India, Myanmar, South China, Thailand, Vietnam, Malaysia (Peninsular Malaysia, Borneo), Indonesia (Java, Sumatra, Mentawai), and the Philippines (Palawan) (Bolívar, 1887; Brunner von Wattenwyl, 1893; Bolívar, 1898; Hancock, 1907; Bolívar, 1909; Günther, 1938; Zheng & Jiang, 1997; Liang, 2000; Zheng, 2005; Zheng *et al.*, 2006; Deng *et al.*, 2009; Storozhenko, 2014; Zheng, 2014; Deng *et al.*, 2015; Storozhenko & Dawwrueng, 2015; Storozhenko, 2017; Muhammad *et al.*, 2018; Storozhenko, 2020; Cigliano *et al.*, 2026). A new species of this genus and hitherto unknown female of *F. becvari* (Buzzetti et Devriese, 2008) are described below. Moreover, one species is recorded from Vietnam for the first time.

MATERIAL AND METHODS

This paper is based on the collections of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia (ZISP) and the Federal Scientific Center of East Asia Terrestrial Biodiversity, Vladivostok, Russia (FCBV), as well as on images of the type specimens available in the Orthoptera Species File database (Cigliano *et al.*, 2025), which is here cited as OSF.

The length of body is measured from the frontal ridge to the apex of subgenital plate; the width of prozona is measured along anterior margin of pronotum; other measurements are standardized for Tetrigidae (Tumbrinck, 2014). Photographs were taken with an Olympus SZX16 stereomicroscope and an Olympus DP74 digital camera, and then stacked using Helicon Focus software. The final illustrations were post-processed for contrast and brightness using Adobe® Photoshop® software.

TAXONOMY

Genus *Falconius* Bolívar, 1898

Type species: *Criotettix clavitarsis* Bolívar, 1887, by subsequent designation (Kirby, 1910).

REMARKS. The genus belongs to the nominotypical tribe of the subfamily Scelimeninae Bolívar, 1887. Members of this genus are smaller than most Scelimenini, having visible interhumeral carina, lacking pronotal projections homologous to that of Scelimenini, despite of having sometimes wrinkled pronotum with elevations, and the antennal grooves and lateral ocelli situated higher (Muhammad *et al.*, 2018). Within the genus *Falconius*, large variability in the shape of lateral lobes of the pronotum observed.

Falconius leleji Storozhenko, *sp. n.*

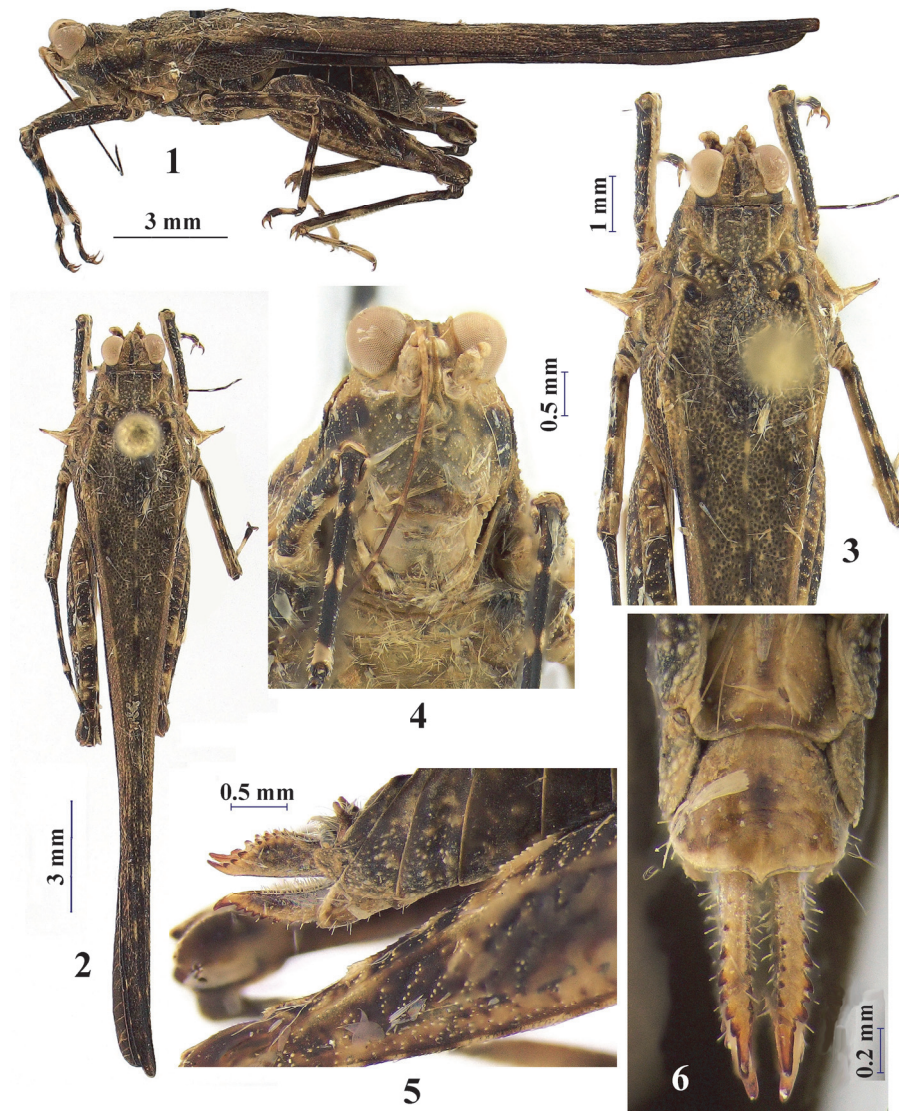
<https://zoobank.org/NomenclaturalActs/D3650B38-1D25-4855-B78E-A75C3C905000>

Figs 1–6

TYPE MATERIAL. Holotype – ♀, **Indonesia**: Sumatra Island, Aceh Province, Ketambe Village, Leuser Ketambe Guesthouse, 3°41'20"N, 97°38'09"E, h=400–500 m, 30.I 2023, leg. M.M. Omelko (ZISP).

DESCRIPTION. Female. Body medium-sized for genus. Antennae filiform, 15-segmented. Antennal sockets situated between lower margins of eyes. Fastigium of vertex 1.2 times as wide as one eye from above; median carina of fastigium distinct; transverse carinae disappearing near middle of fastigium; supraocular lobes vestigial. Eyes not protruding above pronotum in lateral view. Lateral ocelli large, situated between middle of eyes. Frontal costa in lateral view broadly rounded between the antennal sockets and slightly excised below the median ocellus; in frontal view the costa slightly widened below the antennal sockets. Width of frontal costa near the base of the antennae 2.0 times narrower than width of the 1st antennal segment. Pronotum in dorsal view with almost straight anterior margin; posterior process of pronotum narrow and very long, far surpassing apex of hind tarsi. Median carina of pronotum in profile low, distinctly sinuate in anterior part, straight in posterior part. Lateral carinae in prozona parallel-side; width of prozona 1.25 times its length. Disc of pronotum distinctly depressed between prozona and humeral angles and concave behind apex of tegmina, with a pair of interhumeral carina; posterior process of pronotum almost smooth. Hind margin of lateral lobes of pronotum with tegminal (upper) sinus as deep as lower sinus; lower side of lateral lobes pronotum in dorsal view forming long transverse but slightly curved forwards spine. Tegmina ovate, with acutely rounded apex; visible part of tegmen 2.9 times as long as wide; width of visible part of tegmen 1.8 times width of mid femur. Hind wing almost reaching apex of posterior process of pronotum. Upper side of fore femora sinuate and serrate, lower side straight, serrated, without lobules. Upper and lower side of mid femora straight. Fore femur 5.8 times, and mid femur 6.2 times as long as wide. Upper side of hind femur serrate,

lower side almost smooth. Hind femur 3.8 times as long as wide. Upper side of hind tibia without outer and inner teeth, lamelliform, finely serrate. First tarsal segment of hind leg compressed, 1.3 times as long as 3rd segment (without claws); dorsal side of 1st segment with 3 subequal and distinctly pointed pads; 3rd segment swollen. Epiproct triangular, with



Figs 1–6. *Falconius leleji* sp. n., female (holotype). 1 – body, dorsal view; 2 – the same, lateral view; 3 – head, frontal view; 4 – head and anterior part of pronotum, dorsal view; 5 – apex of abdomen, lateral view; 6 – the same, ventral view.

pointed apex. Subgenital plate subsquare, almost as long as wide; posterior side of plate weakly triangular near middle. Cerci conical, with pointed apices. Valves of ovipositor short, dentate; length of upper valve 2.5 times its maximum width; length of lower valve 4.4 times its maximum width.

General coloration of body brownish black with light brown marks. Disc of pronotum and lower part of lateral lobes blackish brown; spine light brown. Visible part of tegmina black with light brown veinlets; anterior margin of hind wings black. Fore femora black; mid femora black with light marks. Fore and middle tibiae black with 3 pale rings. Hind femur black with light brown marks. Hind tibia black, with 2 light brown rings. First tarsal segment of hind leg pale brown, 3rd segment brown. Abdominal tergites, sternites and epiproct black; subgenital plate brown. Ovipositor blackish brown.

Male. Unknown.

MEASUREMENTS (in mm). Length of female body: 10.5; pronotum: 21.5; tegmen: 2.6; fore femur: 2.6; mid femur: 3.1; hind femur: ♀ 6.4; ovipositor 1.1 mm.

DIAGNOSIS. The new species is most similar to *Falconius bogor* Storozhenko, 2020 from Java Island, but differs from latter by very narrow frontal costa, subsquare subgenital plate, short ovipositor and shape of its valves (in *F. bogor*, frontal costa 1.5 times narrower than width of the 1st antennal segment; subgenital plate elongated, 1.3 times as long as wide; length of ovipositor 1.6 mm; valves of ovipositor elongated, length of upper valve 3.2 times its maximum width, length of lower valve 4.6 times its maximum width).

DISTRIBUTION. Indonesia: north part of Sumatra Island.

ETHYMOLOGY. The new species is named in honor of Russian entomologist Dr., Prof. Arkady Stepanovich Lelej.

***Falconius becvari* (Buzzeti et Devriese, 2008)**

Figs 7–12

Gavialidium becvari Buzzeti & Devriese, 2008: 163, fig. 1A–G.

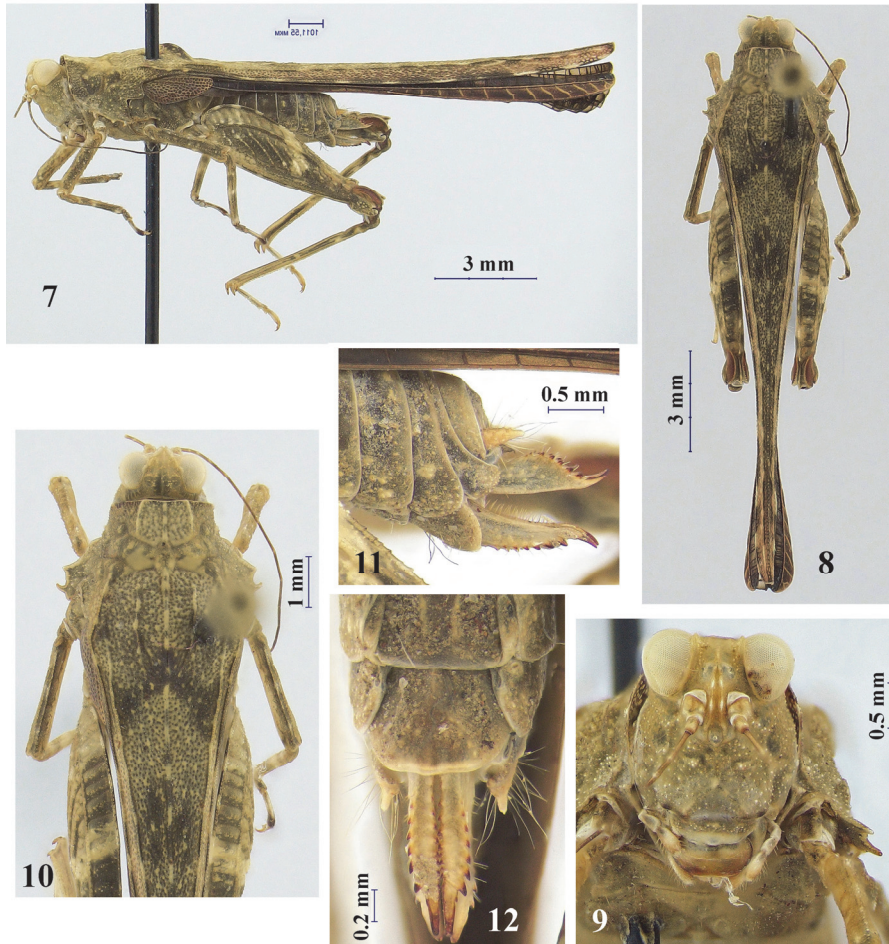
Falconius becvari: Muhammad *et al.*, 2018: 24.

MATERIAL EXAMINED. **Indonesia:** Sumatra Island, North Sumatra Province, Bukit Lawang Village, Kupu-Kupu Garden Guest House, 3°33'03"N, 98°06'08"E, h=200 m, 15–17.II 2023, 2♂, 2♀, leg. M.M. Omelko; Aceh Province, Ketambe Village, Leuser Ketambe Guesthouse, 3°41'20"N, 97°38'09"E, h=400–500 m, 29.I 2023, 1♂, leg. M.M. Omelko (all in FCBV).

REMARKS. This species was described by one male (holotype) from North Sumatra Province, Bukit Lawang, 3°33'26"N, 98°08'52"E (Buzzeti & Devriese, 2008). The unknown female is described below, along with additional details on the male's morphology.

DESCRIPTION. Female (hitherto unknown). Similar to male, but larger. Antennae filiform, 15-segmented. Antennal sockets situated between lower margins of eyes. Fastigium of vertex 1.2 times as wide as one eye from above. Eyes not protruding above pronotum in lateral view. Lateral ocelli large, situated between middle of eyes. Frontal costa in lateral view broadly rounded between the antennal sockets and slightly excised below the median ocellus. Width of frontal costa near the base of the antennae 1.25 times narrower than width of the 1st antennal segment. Pronotum in dorsal view with straight anterior margin; posterior process of pronotum narrow and far surpassing apex of hind tarsi. Median carina of pronotum in profile low, distinctly sinuate in anterior part, straight in posterior part. Lateral carinae in prozona parallel-side; width of prozona 1.6 times its length. Disc of pronotum distinctly depressed between prozona and humeral angles and concave behind apex of tegmina, with a pair of interhumeral carina; posterior process of pronotum almost smooth. Hind margin of lateral lobes of pronotum

with tegminal (upper) sinus as deep as lower sinus; lower side of lateral lobes pronotum in dorsal view forming two teeth (anterior triangle, posterior short and curved forwards). Tegmina ovate, with acutely rounded apex; visible part of tegmen 2.6 times as long as wide; width of visible part of tegmen 1.8 times width of mid femur. Hind wing reaching apex of posterior process of pronotum. Fore femur 4.4 times, mid femur 4.6 times as long as wide. Hind femur 3.3–3.4 times as long as wide. Upper side of hind tibia without outer and inner teeth, lamelliform, finely serrate. First tarsal segment of hind leg compressed, 1.5 times as long as 3rd segment (without claws); dorsal side of 1st segment with 3 subequal and pointed



Figs 7–12. *Falconius becvari*, female. 71 – body, dorsal view; 8 – the same, lateral view; 9 – head, frontal view; 10 – head and anterior part of pronotum, dorsal view; 11 – apex of abdomen, lateral view; 12 – the same, ventral view.

pads; 3rd segment swollen. Epiproct triangular, with pointed apex. Subgenital plate 1.3 times as wide as long; posterior side of plate broadly rounded. Cerci conical. Valves of ovipositor short, dentate; length of upper valve 1.7 times its maximum width; length of lower valve 4.1 times its maximum width.

General coloration of body blackish with light brown marks. Visible part of tegmina black with brown veinlets; anterior margin of hind wings black. Fore and mid femora black. Hind femur black with light brown stripe. Abdominal tergites and sternites black; subgenital plate blackish. Ovipositor blackish brown.

Male. Fastigium of vertex equal or 1.1 times as wide as one eye from above. Antennae filiform, 14-segmented, 2.4 times as long as fore femur. Width of frontal ridge near the base of the antennae 1.5 times narrower than width of the 1st antennal segment. Visible part of tegmen 2.7 times as long as wide. Fore femur 4.7–4.8 times, mid femur 5.0 times, and hind femur 3.4 times as long as wide. First tarsal segment of hind leg slightly compressed; 3rd segment not swollen. Subgenital plate conical.

MEASUREMENTS (in mm). Length body: ♀ 8.7–9.7, ♂ 8.9–9.4; antenna: ♀ 4.6, ♂ 4.5; pronotum: ♀ 15.6–16.5, ♂ 13.2–14.7; tegmen: ♀ 2.1, ♂ 1.9; fore femur: ♀ 2.1–2.2, ♂ 1.9–2.0; mid femur: ♀ 2.2–2.3, ♂ 2.0–2.1; hind femur: ♀ 6.2, ♂ 5.1–5.4; ovipositor 1.2 mm.

DISTRIBUTION. Indonesia: north part of Sumatra Island.

NEW RECORD

Falconius annuliconus Liang, 2000

Figs 13–15

Falconius annuliconus Liang, 2000: 28, 30, fig. 4; Zheng, 2005: 53, fig. 109; Muhammad *et al.*, 2018: 24.

MATERIAL EXAMINED. Vietnam: Cao Bằng Prov., Nguyên Bình Distr., Quang Thành vill., 22°38'24"N, 105°55'48"E, h=800 m, 4–13.V 1998, 1 ♂, 1 ♀, leg. N. Orlov (ZISP).



Figs 13–15. *Falconius annuliconus*, female. 13 – body, dorsal view; 14 – the same, lateral view; 15 – head, frontal view.

REMARKS. The examined specimens from North Vietnam well agree with description and illustration of *Falconius annuliconus* from Heishiding Nature Reserve (Guangdong: Fengkai County) described by males and females (Liang, 2000).

MEASUREMENTS (in mm). Length body: ♀ 9.8, ♂ 9.7; antenna: ♀ 9.5, ♂ 7.4; pronotum: ♀ 17.7, ♂ 16.1; tegmen: ♀ 2.7, ♂ 2.6; fore femur: ♀ 2.7, ♂ 2.4; mid femur: ♀ 3.1, ♂ 2.7; hind femur: ♀ 7.1, ♂ 6.4; ovipositor 1.2 mm.

DISTRIBUTION. South China (Guangdong Province), Vietnam (new record).

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