



A taxonomic study on the species of the genus *Ocellarnaca* (Orthoptera, Gryllacrididae, Gryllacridinae)

MIAOMIAO LI¹, YAN FANG¹, XIANWEI LIU² & KAI LI^{1,3}

¹School of Life Science, East China Normal University, Shanghai 200062, China. E-mail: kaili@admin.ecnu.edu.cn

²Shanghai Entomology Museum, Chinese Academy of Sciences, Shanghai 200032, China. E-mail: liuxianwei2008@163.com

³Corresponding author

Abstract

A taxonomic study of the genus *Ocellarnaca* Gorochov, 2004 was presented. Four new species were described: *O. omeica* sp. nov., *O. coomani* sp. nov., *O. xiai* sp. nov., *O. brevicauda* sp. nov.. A key to the species and the distributional data of *Ocellarnaca* were provided.

Key words: Gryllacrididae, Gryllacridinae, *Ocellarnaca*, new species

Introduction

The genus *Ocellarnaca* was proposed by Gorochov in 2004, with the type species *O. ocellata* Gorochov, 2004. Besides, the subspecies *O. wolffi angulata* Gorochov, 2004 was described and 5 species were transferred to this genus.

Bian *et al.* (2013) reviewed the *Ocellarnaca* of China, provided a key including 6 species and described 1 new species *O. conica* Bian *et al.*, 2013, 1 new recorded species *O. braueri* (Griffini, 1911) and 1 new combination *O. angulata* (Gorochov 2004). Bian *et al.* (2013) suggested that the subspecies *O. wolffi wolffi* (Krausze, 1906) and *O. wolffi angulata* Gorochov, 2004 should be treated as two distinct species, and *O. wolffi* which had been reported by Liu & Yin (2004) in China actually should be a subspecies of *O. angulata* (Gorochov 2004). Moreover, *O. fallax* (Liu, 1999) had been redescribed. We examined the holotype of *O. fallax* (Liu, 1999) and failed to find the taper-like process at the center of subgenital plate. In conclusion, we believed that *O. fallax* (Liu, 1999) they treated should be another species which we described as a new species, *O. xiai* Li *et al.* sp. nov.

Up to now, there were 13 species in *Ocellarnaca*, including 9 species recorded from China and 4 species occurred in Vietnam. In this paper, 4 new species of *Ocellarnaca* are identified and described under the name of *O. emeiensis* Li *et al.* sp. nov., *O. coomani* Li *et al.* sp. nov., *O. xiai* Li *et al.* sp. nov., and *O. brevicauda* Li *et al.* sp. nov. All type specimens are deposited in the Shanghai Entomology Museum, the Chinese Academy of Sciences.

Ocellarnaca Gorochov, 2004

Ocellarnaca Gorochov, 2004. *Entomological Review*, 84(8): 915; Bian *et al.*, 2013. *Journal of Orthoptera Research*, 22(1): 57.

Type species. *Ocellarnaca ocellata* Gorochov, 2004.

Generic diagnosis. Body of medium sized for the subfamily. Head large, with wide fastigium of vertex (rostrum), and with very large median ocellus (larger than, or as large as antennal sockets) and fine lateral ocelli. Tegmina and wings well-developed, but slightly shortened, not reaching apex of abdomen, with transparent or pale venations, M vein of tegmina united with R vein on base. Fore coxae with a spine, fore and mid tibiae with 5 pairs of spurs, mid tibia with an upper apical spur. Hind femur on lower side and hind tibia on upper side with 2 rows of

spines. Male 2nd–3th abdominal tergite with 1–2 rows of stridulatory teeth at both sides; male 9th abdominal tergite with a pair of lobiform processes each bearing apical hook, male subgenital plate with styli, male genitalia entirely membranous. Female 7th abdominal sternite often deformed; ovipositor moderately or rather strongly upcurved.

Key to species of the genus *Ocellarnaca*

- 1 Frons or genae blackish. 2
- Frons or genae not blackish. 5
- 2 Frons blackish; pronotum without blackish longitudinal stripes 3
- Genae blackish; pronotum with a broad blackish longitudinal band laterally *O. fuscotessellata* (Karny, 1926)
- 3 Knees of legs blackish; posterior margin of 7th female abdominal sternum with a pair of processes. 4
- Knees of legs not blackish; posterior margin of 7th female abdominal sternum with an acute process *O. conica* Bian *et al.*, 2013
- 4 Body large and stout; female 7th abdominal sternum with processes curved outwards *O. wolffi* (Krausze, 1906)
- Body small and slender; female 7th abdominal sternum with processes protruded backside *O. emeiensis* Li *et al.* **sp. nov.**
- 5 Body large; tegmina 23–24mm long. *O. braueri* (Griffini, 1911)
- Body medium sized; tegmina 14–20mm long. 6
- 6 Processes of male 9th abdominal tergite on the middle of posterior margin; female 7th abdominal sternum with median process 7
- Processes of male 9th abdominal tergite laterally situated on posterior margin; female 7th abdominal sternum without median process. *O. brevicauda* Li *et al.* **sp. nov.**
- 7 Processes of male 9th abdominal tergite with longer apical spine; male subgenital plate with pointed posterior margin *O. coomani* Li *et al.* **sp. nov.**
- Processes of male 9th abdominal tergite with shorter apical spine; male subgenital plate with concave posterior margin 8
- 8 Processes of male 9th abdominal tergite with flatten upper branch, apex slightly curved; processes of female 7th abdominal sternum with apex bifurcate. *O. furcifera* (Karny, 1926)
- Processes of male 9th abdominal tergite with conical upper branch; process of female 7th abdominal sternum not bifurcate 9
- 9 Subgenital plate of male without process at the centre; female 7th abdominal sternum with thin process *O. fallax* (Liu, 1999)
- Subgenital plate of male with a short, taper-like process at the centre; female 7th abdominal sternum with thick process *O. xiai* Li *et al.* **sp. nov.**

1. *Ocellarnaca fuscotessellata* (Karny, 1926)

(Figs. 1–3)

Gryllacris fuscotessellata Karny, 1926. *Mitt. Zool. Mus. Berlin*, 12: 389–391, figs. 11, 14.

Eugryllacris fuscotessellata Karny, 1937. *Genera Insectorum*, 206: 152; Liu & Jin, 1994. *Contr. Shanghai Inst. Entomol.*, 11: 100; Jin & Xia, 1994. *Journal of Orthoptera Research*, 3: 17.

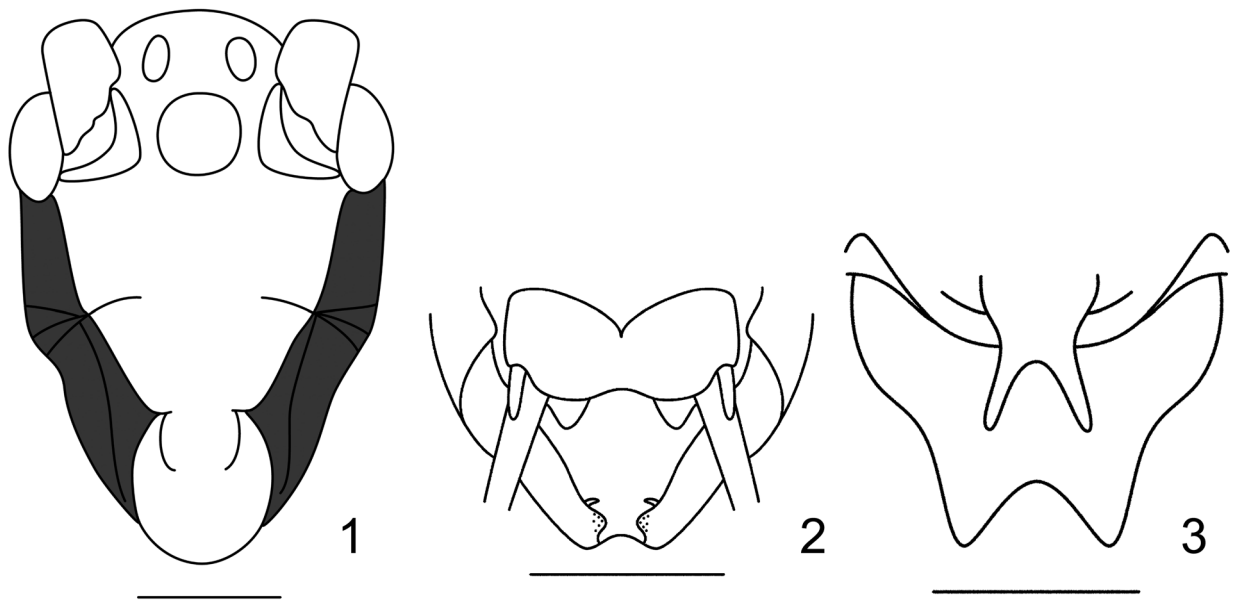
Ocellarnaca fuscotessellata Gorochov, 2004. *Entomological Review*, 84(8): 916; Bian *et al.*, 2013. *Journal of Orthoptera Research*, 22(1): 63.

Measurements. (length in mm)

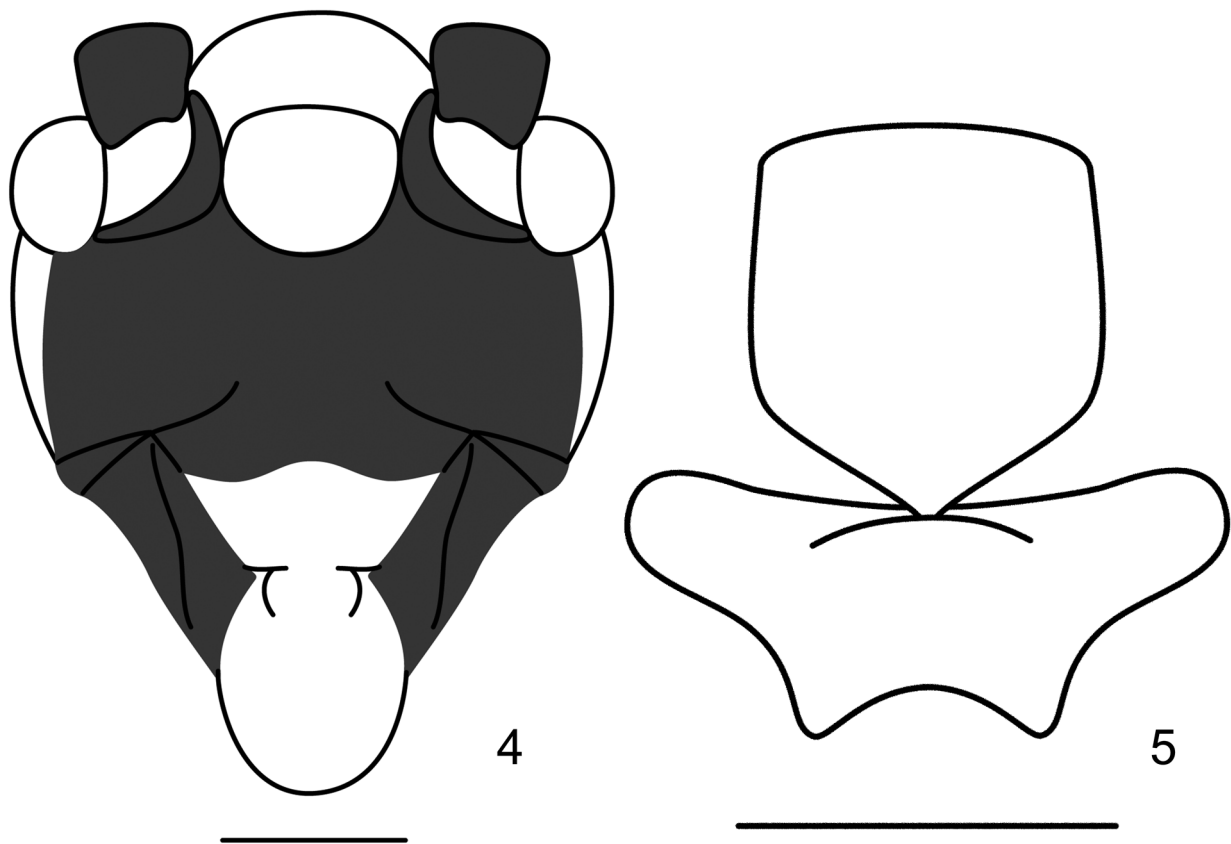
	Body	Pronotum	Tegmina	Hind femora	Ovipositor
♂	20.0	5.0	15.0	12.5	/
♀	16.0–23.0	5.0–5.5	14.0–15.0	12.5–13.5	8.5–9.5

Material. 1♀, Huaping, Longsheng, Guangxi, China, 1962.VIII.30, collector unknown; 1♀, Maer Mountain, Xing'an, Guangxi, China, Alt. 600–900m, 1992.VIII.24, collected by Liu Xian-Wei & Yin Hai-Sheng; 1♂, Zhangjiajie, Hunan, China, 2001.VIII.10, collected by Shi Fu-Ming; 1♀, Fanjing Mountain, Guizhou, China, 2001.VII.28, collected by Shi Fu-Ming; 1♀, Gunbei Mountain, Guangxi, China, 2001.VIII.24, collected by Shi Fu-Ming; 1♂, Datang, Leigong Mountain, Guizhou, China, Alt. 900–1000m, 2004.VIII.4, collected by Song Qiong-Zhang (Guizhou University); 2♀♀, Yueliangshan, Congjiang, Guizhou, China, Alt. 1159m, 2006.VI.19–23, collected by Zhang Pei (Guizhou University); 1♂, Yantian, Shenzhen, Guangdong, China, Alt. 200m, collector unknown; 1♀, Daming Mountain, Wuming, Guangxi, China, Alt. 1200m, 2012.VII.28–31, collected by Bi Wen-Xuan.

Distribution. China (Hunan, Guangdong, Guangxi, Guizhou).



FIGURES 1–3. *Ocellarnaca fuscotessellata* (Karny, 1926). 1. head of male, frontal view; 2. end of male abdomen, ventral view; 3. 7th abdominal sternum and subgenital plate of female, ventral view; scale bars=2mm.



FIGURES 4–5. *Ocellarnaca conica* Bian *et al.*, 2013. 4. head of male, frontal view; 5. 7th abdominal sternum and subgenital plate of female, ventral view; scale bars=2mm.

2. *Ocellarnaca conica* Bian *et al.*, 2013

(Figs. 4–5)

Ocellarnaca conica Bian *et al.*, 2013. *Journal of Orthoptera Research*, 22(1): 58.

Measurements. (length in mm)

	Body	Pronotum	Tegmina	Hind femora	Ovipositor
♀	24.0	6.0	17.0	13.0	10.0
♂	20.0–24.5	5.5–6.3	15.3–17.5	8.0–13.0	/

Material. 1♀, Bawangling, Hainan, China, Alt. 140m, 2005.VIII.22, collected by Tang Yi.

Distribution. China (Hainan).

Diagnosis. This species is very similar to *Ocellarnaca wolffi* (Krausze, 1906), but differs from the latter in: all knees not black; posterior margin of 7th abdominal sternum with an acute process in the middle.

3. *Ocellarnaca wolffi* (Krausze, 1906)

(Figs. 6–9)

Gryllacris wolffi Krausze, 1906. *Insectenbörse*, 33: 32; Griffini, 1914. *Zool. Jahrb. Abt. Syst.*, 38: 85–88; Karny, 1926. *Mitt. Zool. Mus. Berlin*, 12: 385; Karny, 1930. *Ann. Nat. Hist. Mus. Wien.*, 44: 68, fig. 91.

Eugryllacris wolffi Karny, 1937. *Genera Insectorum*, 206: 153; Liu & Yin, 2004. In: Yang (Ed.). *Insects from Mt. Shiwandashan area of Guangxi*: 105.

Ocellarnaca wolffi Gorochov, 2004. *Entomological Review*, 84(8): 916; Bian *et al.*, 2013. *Journal of Orthoptera Research*, 22(1): 63.

Measurements. (length in mm)

	Body	Pronotum	Tegmina	Hind femora	Ovipositor
♂	29.0–36.0	7.0–7.5	13.0–15.7	15.5–18.0	/
♀	25.0	6.0	14.0	14.0	15.0

Material. 1♀, Menglun botanic garden, Xishuangbanna, Yunnan, China, 2007.VIII.4, collector unknown; 5♂♂1♀, Nonggang, Longzhou, Guangxi, China, Alt. 200m, 2013.VII.10–13, collected by Liu Xian-Wei *et al.*; 5♂♂5♀♀, Sanlian, Longzhou, Guangxi, China, Alt. 300m, 2013.VII.14–17, collected by Liu Xian-Wei *et al.*; 1♀ (Beijing Zoology), Nonggang, Longzhou, Guangxi, China, Alt. 330m, 2000.VI.15, collected by Chen Jun.

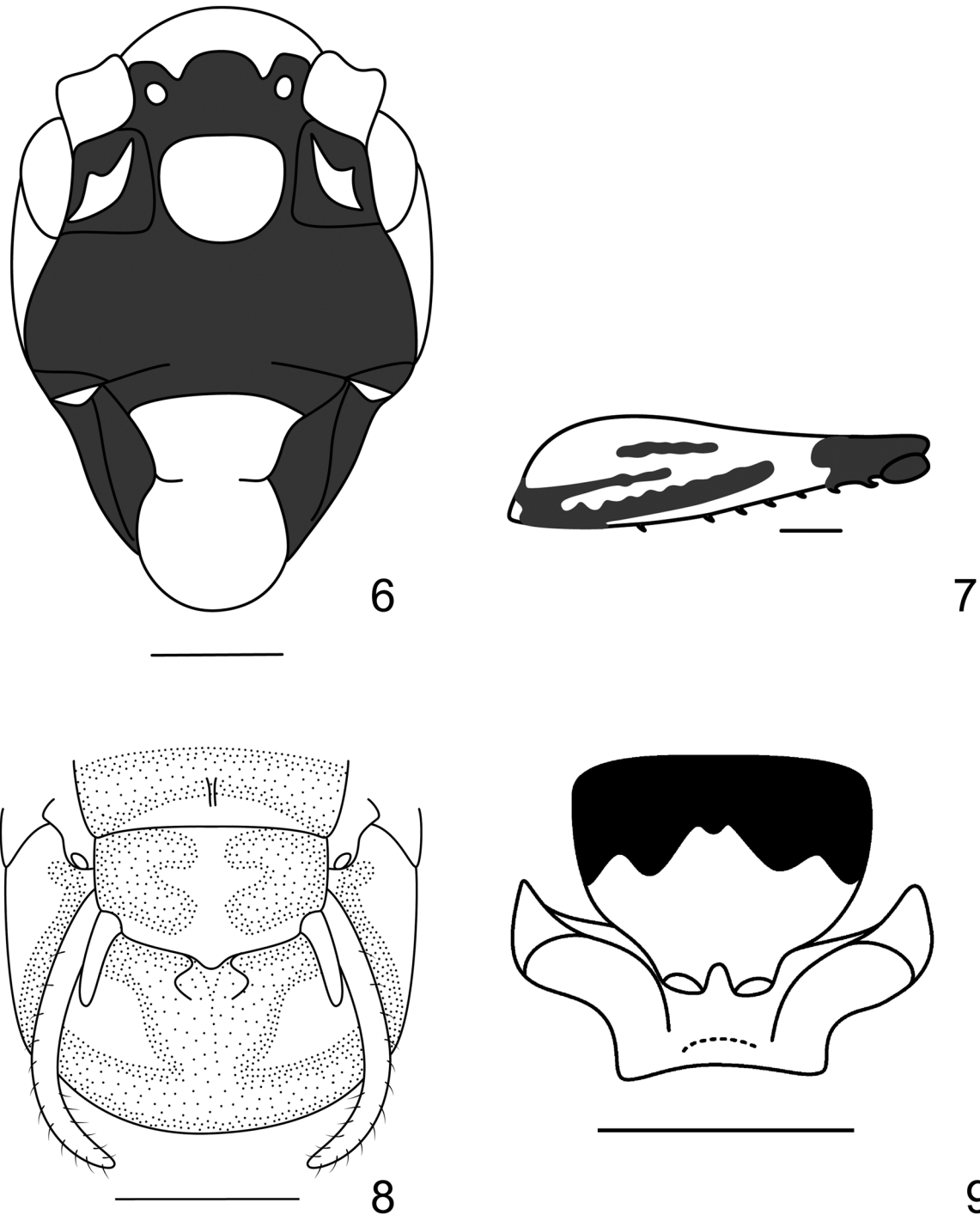
Distribution. China (Yunnan, Guangxi); Vietnam.

4. *Ocellarnaca emeiensis* Li *et al.* sp. nov.

(Figs. 10–13)

Ocellarnaca angulata (Gorochov, 2004). Bian *et al.*, 2013. *Journal of Orthoptera Research*, 22(1): 63, fig.8 (partum).

Description. Male. Head broadly oval, Fastigium of vertex about 2 times as wide as scape, frons backward lean; middle ocellus large, rounded (Fig. 10). Tegmina reaching the posterior margin of 8th abdominal tergite, M vein united with R vein on the base, Rs vein occurred at the median of R vein. Wings slightly longer than tegmina. Fore and mid femora unarmed, fore and mid tibiae with 5 pairs of lower spurs, mid tibia with an upper spur. Hind femur armed 10–13 internal spines and 5–6 external spines ventrally, hind tibia with 6 spines on each side of dorsal surface. Posterior margin of 9th abdominal tergite with paired lobiform processes and bearing a shorter apical hook (Fig. 12). Posterior margin of subgenital plate slightly convex and strongly swollen.

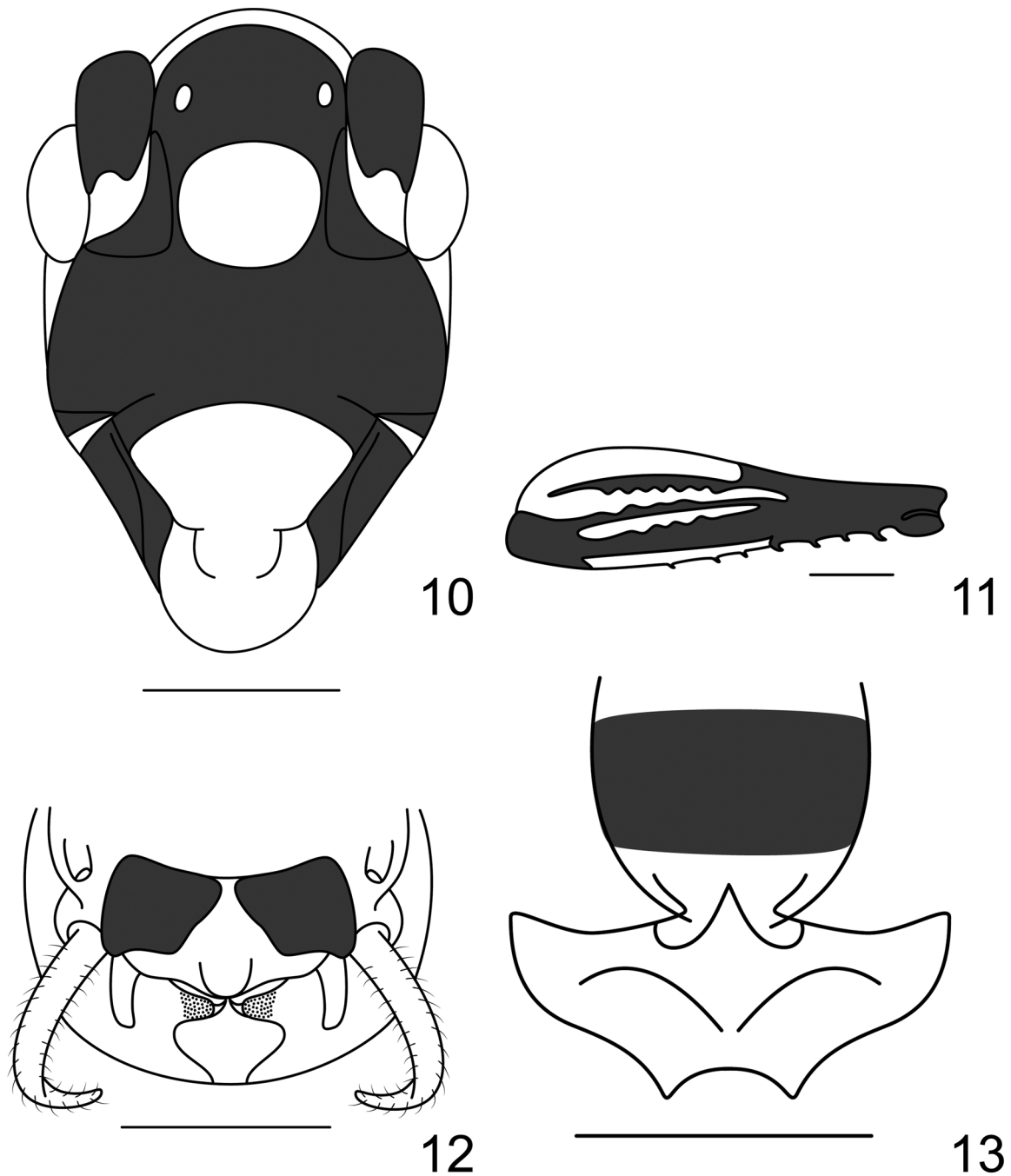


FIGURES 6–9. *Ocellarnaca wolffi* (Krausze, 1906). 6. head of male, frontal view; 7. femur of male, lateral view; 8. 7th abdominal sternum and subgenital plate of female, ventral view; 9. end of male abdomen, ventral view; scale bars=2mm.

Female. Tegmina reaching the posterior margin of 6th abdominal tergite. Posterior margin of 7th abdominal sternum with a pair of backward processes, subgenital plate strongly transverse, with paired of subacute apical lobes (Fig. 13). Ovipositor almost as long as hind femur, strongly curved upwards.

Coloration. Body yellowish brown and black variegated. Fastigium of vertex, frons, mandibles and the base two antennal segments black (Fig. 10). Ocellus yellow. Pronotum yellowish brown, the posterior and lateral margin with two broad black longitudinal stripes. All femora, tibiae and base and terminal of tarsus black, basal half of hind femur with 3 black bands of which width different and apical half totally black (Fig. 11). Venation of tegmina

pale, membranes dark black. Hind wings dark black, along venation with pale bands. 8th and 9th abdominal tergites entirely black.



FIGURES 10–13. *Ocellarnaca emeiensis* Li *et al.* **sp. nov.** 10. head of male, frontal view; 11. femur of male, lateral view; 12. end of male abdomen, ventral view; 13. 7th abdominal sternum and subgenital plate of female, ventral view; scale bars=2mm.

Measurements. (length in mm)

	Body	Pronotum	Tegmina	Hind femora	Ovipositor
♂	18.0	5.0	8.0–10.0	10.0	/
♀	23.0	5.0	11.0	12.0	13.0

Material. Holotype, ♂, paratype, ♀, Wuxiangang, Emei Mountain, Sichuan, China, Alt. 700m, 2007.VIII.4, collected by Liu Xian-Wei *et al.*; 2♂♂, Daming Mountain, Wuming, Guangxi, China, Alt. 1200m, 2012.VII.28–31, collected by Bi Wen-Xuan; 3♂♂1♀, Daming Mountain, Wuming, Guangxi, China, Alt. 1250m, 2013.VII.19–25, collected by Liu Xian-Wei *et al.*

Distribution. China (Sichuan, Guangxi).

Diagnosis. This new species with distinctly small and slender body, tegmina shorter, apical hook of processes of male 9th abdominal tergite distinctly shorter, subgenital plate of female with pointed apical lobes distinguishable from *Ocellarnaca wolffi* (Krausze, 1906).

5. *Ocellarnaca brevicauda* Li *et al.* sp. nov.

(Figs. 14–17)

Description. Male. Body moderately large, stout. Head broadly ovate, fastigium of vertex round, about 2 times as wide as scape, antennae extremely long, about 2.5 times longer than body. Middle ocellus large, with truncate upper margin (Fig. 14). Tegmina not reaching the apex of hind femora; base of M vein united with R vein. Wings slightly extending beyond tegmina. Fore and mid femur unarmed, fore and mid tibiae with 5 pairs of lower spurs, middle tibia with an upper spur. Hind femur armed 8–19 spines on each side of ventral surface, hind tibia with 6 spines on each side of dorsal surface. 9th abdominal tergite broad conical, with truncate posterior margin and with hook-like process on each side (Fig. 15). Subgenital plate broad, with roundly truncate posterior margin, styli conical.

Female. Posterior margin of 7th abdominal sternum without process, but with round latero-posterior angle. Posterior margin of subgenital plate notched, apical lobes acute and slightly curved outward (Fig. 17). Ovipositor short, distinctly shorter than hind femur, strongly upcurved (Fig. 16).

Coloration. Body yellowish brown, but with rufescent frons, yellowish ocelli, and blackish mandibles (Fig. 14). Venation of tegmina pale infusate, membranes darkish black. Wings also darkish black, but with pale stripes along transverse venation. Spines on hind legs brown. 8th and 9th abdominal tergites darkish black.

Measurements. (length in mm)

	Body	Pronotum	Tegmina	Hind femora	Ovipositor
♂	18.0	5.0	15.5	11.0	/
♀	22.0	5.0	14.0	11.0	7.0

Material. Holotype, ♂, paratype, 2♀♀2♂♂, Wuxiangang, Emei Mountain, Sichuan, China, Alt. 700m, 2007.VIII.2–4, collected by Liu Huang & Zhou Bi.

Diagnosis. This new species differs from the congeners in 9th abdominal tergite of male with hook-like processes at both side, 7th abdominal sternum of female without process and ovipositor much shorter than hind femur.

Distribution. China (Sichuan).

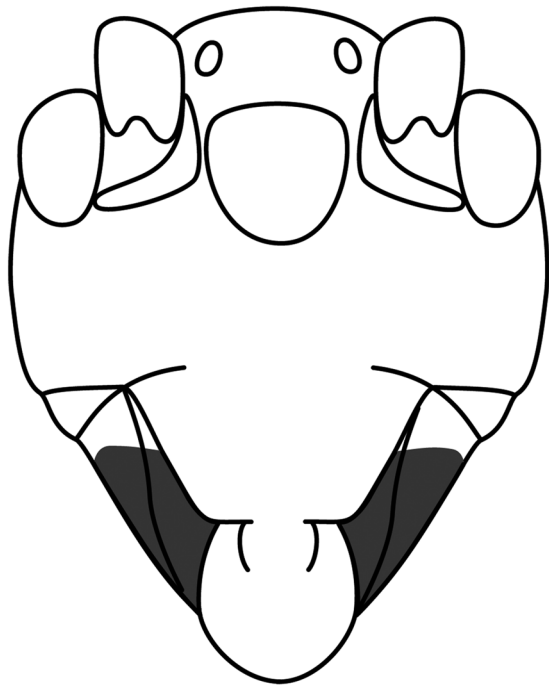
6. *Ocellarnaca coomani* Li *et al.* sp. nov.

(Figs. 18–19)

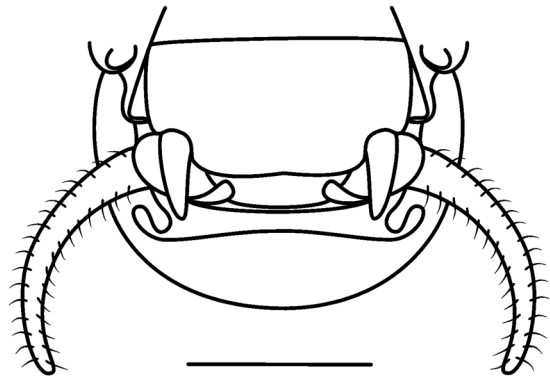
Description. Male. Body medium sized, stout. Antennae extremely long, about 3 times longer than body. Fastigium of vertex round, about 2 times as wide as scape; middle ocellus large, with truncate upper margin. Tegmina not exceed the apex of hind femur; base of M vein united with R vein. Fore and mid femur unarmed, fore and mid tibiae with 5 pairs of lower spurs, middle tibia with an upper spur. Hind femur armed 12–19 internal spines and 7–11 external spines on the ventral surface; hind tibia on dorsal surface with 6–7 spines each margin. 9th abdominal tergite broadly arched, ventral surface with roundly triangular depression; lobiform processes very short and bearing a long apical spine (Fig. 19). Subgenital plate with nearly triangular posterior margin, apex pointed; styli conical.

Female. Unknown.

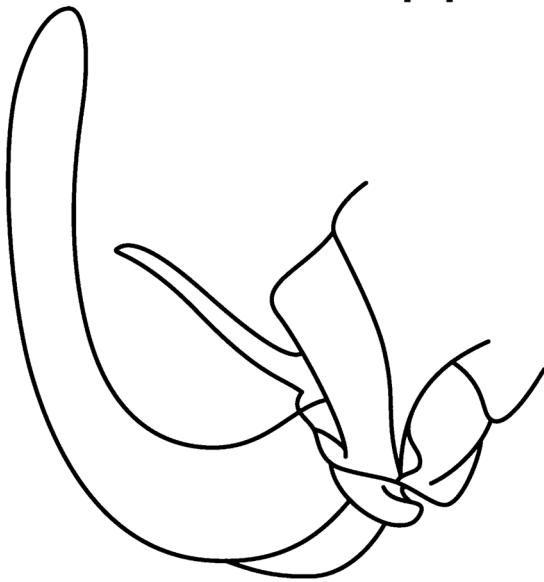
Coloration. Body yellowish brown. Frons and labrum red. Ocelli yellow. Mandibles black (Fig. 18). Tegmina with pale venation, all cell darkish brown. The spurs of fore and mid tibia slightly darkened, spines of hind legs darkish brown.



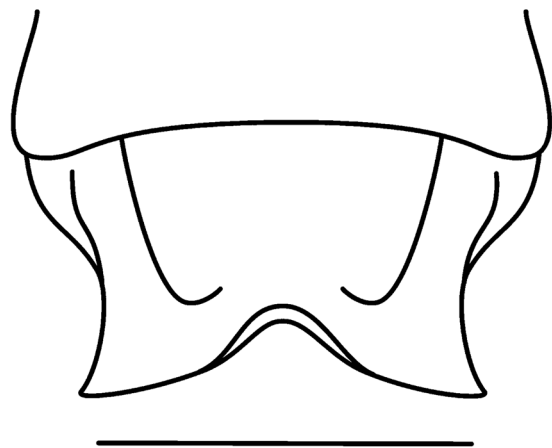
14



15

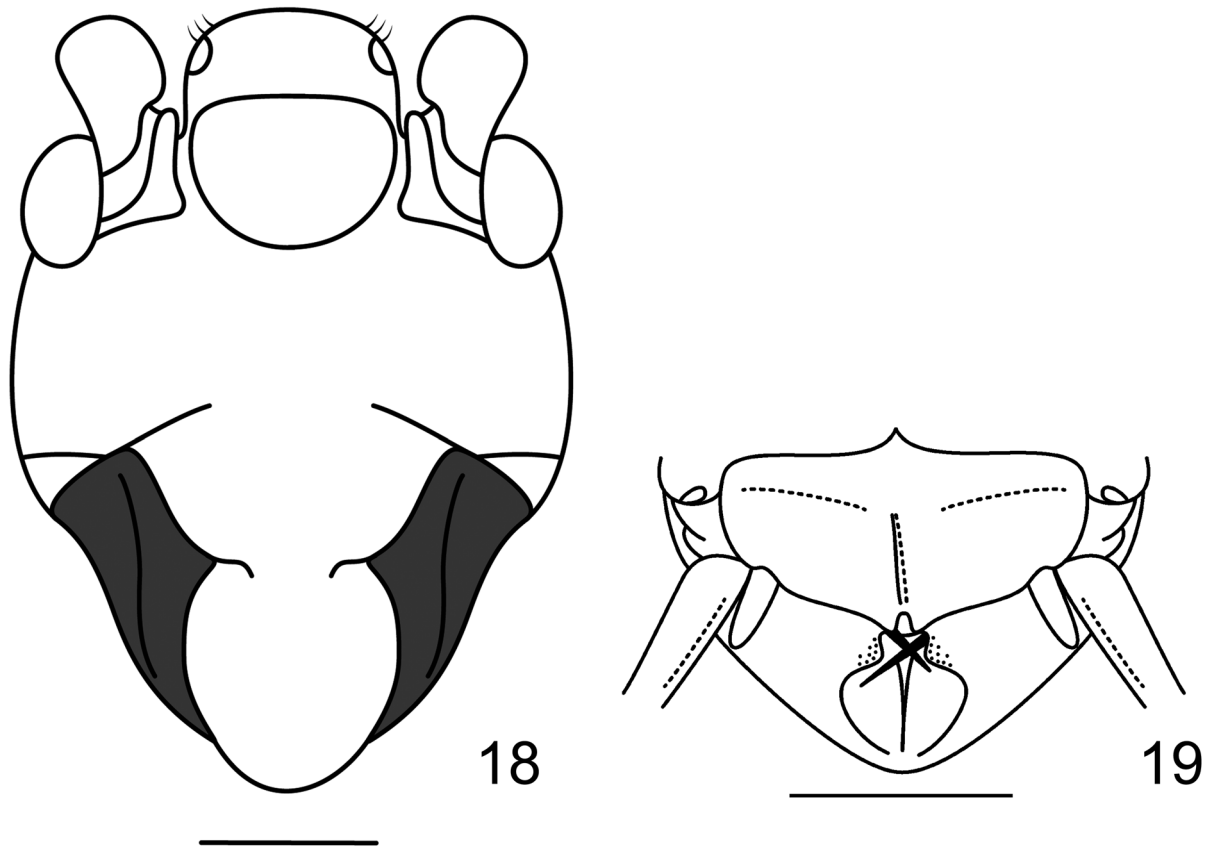


16



17

FIGURES 14–17. *Ocellarnaca brevicauda* Li *et al.* **sp. nov.** 14. head of male, frontal view; 15. end of male abdomen, ventral view; 16. end of female abdomen, lateral view; 17. 7th abdominal sternum and subgenital plate of female, ventral view; scale bars=2mm.



FIGURES 18–19. *Ocellarnaca coomani* Li *et al.* **sp. nov.** 18. head of male, frontal view; 19. end of male abdomen, ventral view; scale bars=2mm.

Measurements. (length in mm)

	Body	Pronotum	Tegmina	Hind femora	Ovipositor
♂	21.0–23.0	6.5–7.0	14.0–15.0	14.5–15.0	/

Material. Holotype, ♂, paratype, ♂, Mt. Bavi, Tonkin, Vietnam, Alt. 800–1000m, 1941.VII, collected by Cooman.

Distribution. Vietnam (Tonkin).

Diagnosis. This new species appears to be closely related to *O. braueri* (Griffini, 1911), but its smaller size and shape of the male subgenital plate body size and posterior edge of female subgenital plate are not paralleled in it.

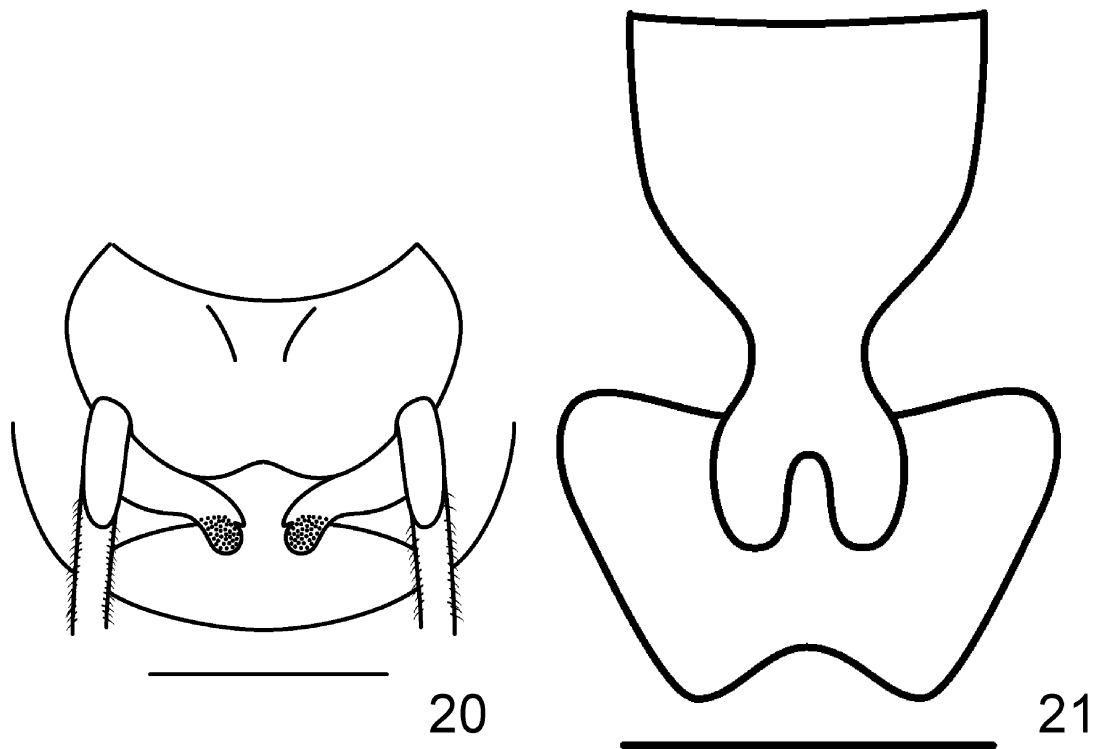
7. *Ocellarnaca furcifera* (Karny, 1926)

(Figs. 20–21)

Gryllacris furcifera Karny, 1926. *Mitt. Zool. Mus. Berlin*, 12: 386–389, figs. 11–13; Karny, 1929. *Lingnan Sci. Journ.*, 7: 744, fig. 14.

Eugryllacris furcifera Karny, 1937. *Genera Insectorum*, 206: 151; Liu & Jin, 1994. *Contr. Shanghai Inst. Entomol.*, 11: 100; Jin & Xia, 1994. *Journal of Orthoptera Research*, 3: 17.

Ocellarnaca furcifera Gorochoy, 2004. *Entomological Review*, 84(8): 916; Bian *et al.*, 2013. *Journal of Orthoptera Research*, 22(1): 62.



FIGURES 20–21. *Ocellarnaca furcifera* (Karny, 1926). 20. end of male abdomen, ventral view; 21. 7th abdominal sternum and subgenital plate of female, ventral view; scale bars=2mm.

Measurements. (length in mm)

	Body	Pronotum	Tegmina	Hind femora	Ovipositor
♂	22.5	6.0	19.0	9.5	/
♀	25.0	7.0	17.5	11.0	11.0

Material. 1♀, Dinghu Mountain, Zhaoqing, Guangdong, China, 1995.VIII.29–IX.1, collected by Liu Xian-Wei *et al.*; 1♂, Longhu Mountain, Long'an, Guangxi, China, 1995.IX.8–9, collected by Jin Xin-Bao & Zhang Wei-Nian; 1♂, Yantian, Shenzhen, Guangdong, China, 2010.VI.17, collected by Huang Bao-Ping.

Distribution. China (Guangdong, Guangxi); Vietnam.

8. *Ocellarnaca fallax* (Liu, 1999)

(Figs. 22–23)

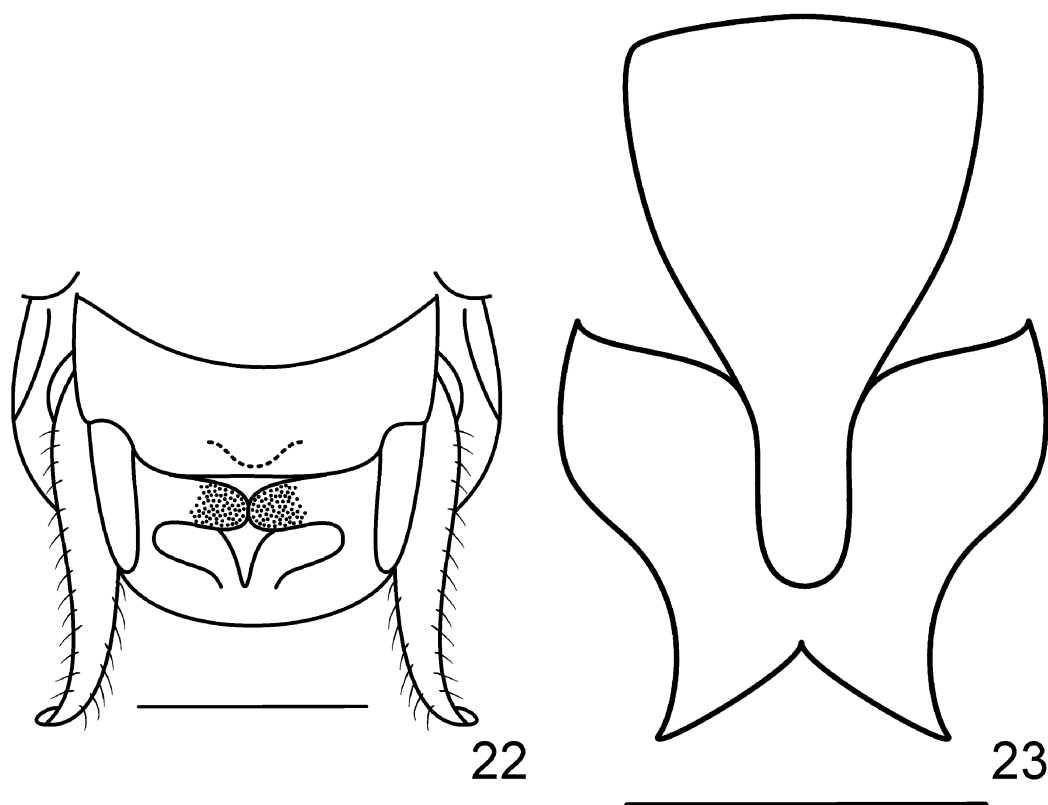
Eugryllacris fallax Liu, 1999. In: Huang (Ed.). Fauna of Insects in Fujian Province of China, 1: 179, figs. 40a–b.
Ocellarnaca fallax Gorochov, 2004. *Entomological Review*, 84(8): 916; Bian *et al.*, 2013. *Journal of Orthoptera Research*, 22(1): 61.

Measurements. (length in mm)

	Body	Pronotum	Tegmina	Hind femora	Ovipositor
♂	20.0	5.0	15.0	13.0	/
♀	23.0–24.0	5.5–6.0	17.0–18.0	13.0–16.0	12.0–13.0

Material. 1♂1♀, Sangang, Wuyi Mountain, Fujian, China, 1994.VIII.22–IX.3, collected by Jin Xin-Bao & Yin Hai-Sheng.

Distribution. China (Fujian).



FIGURES 22–23. *Ocellarnaca fallax* (Liu, 1999). 22. end of male abdomen, ventral view; 23. 7th abdominal sternum and subgenital plate of female, ventral view; scale bars=2mm.

9. *Ocellarnaca xiai* Li *et al.* sp. nov

(Figs. 24–25)

Ocellarnaca fallax Bian *et al.*, 2013. *Journal of Orthoptera Research*, 22(1): 61.

Description. Male. Head broadly oval, fastigium of vertex about 2 times as broad as scape, frons slanting posteriorly; median ocellus large. Tegmina almost reaching the apex of hind femur, base of M vein united with R vein. Hind femur with 11–12 internal spines and 9 external spines on ventral surface; hind tibia with 8–9 spines each margin of dorsal surface. Processes of male 9th abdominal tergite bearing a compressed, short conical spine. Subgenital plate with posterior margin slightly concave (Fig. 24), a short, tapered process at the center; styli as long as subgenital plate, conical.

Female. Posterior margin of 7th abdominal sternite with a conical process (Fig. 25). Subgenital plate with parallel lateral margins in apical half, posterior margin triangularly notched. Ovipositor shorter than hind femur, apex strongly upcurved.

Coloration. Body pale yellow. Mandibles black. Ocelli yellow. Tegmina with pale venation, all cells darkish black.

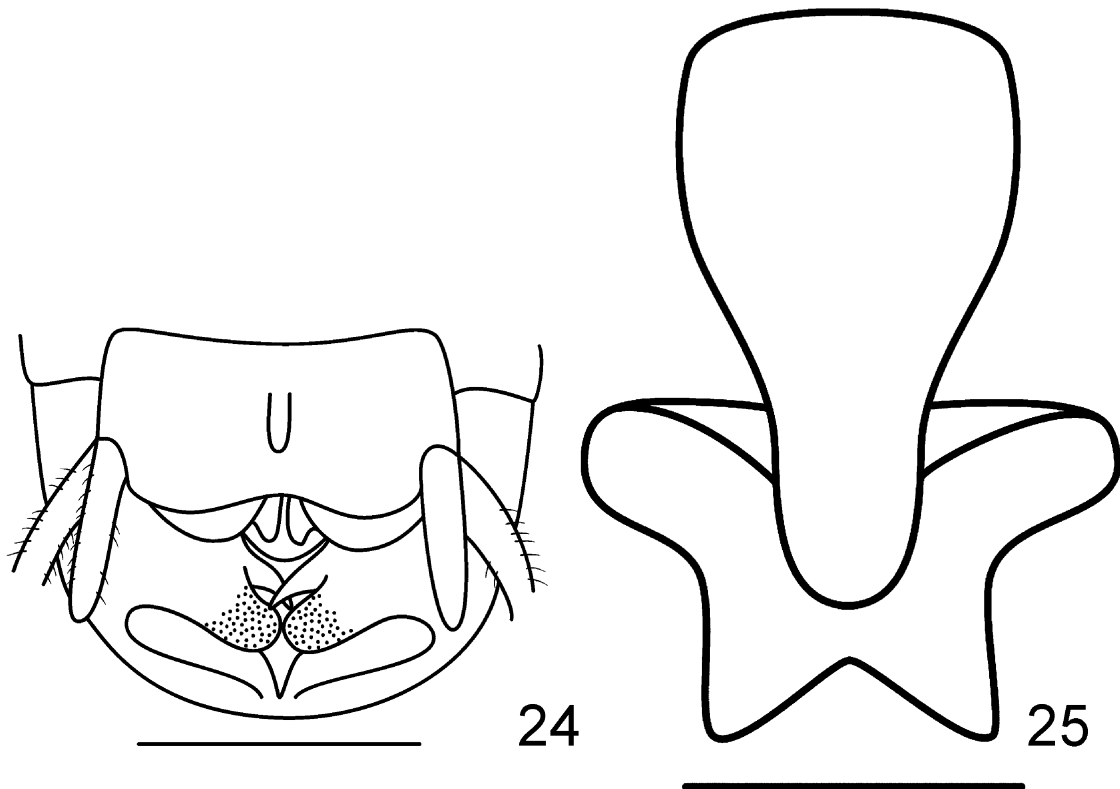
Measurements. (length in mm)

	Body	Pronotum	Tegmina	Hind femora	Ovipositor
♂	20.0	7.0–7.5	20.0	14.5	/
♀	23.0–24.0	8.0	19.0–20.0	15.0–16.0	14.0

Material. Holotype, ♂, Maoer Mountain, Xing'an, Guangxi, China, 2012.VII.28–31, collected by Bi Wen-Xuan. Paratype, ♀, Maoer Mountain, Xing'an, Guangxi, China, Alt. 450–600m, 1992.VIII.24–25, collected by Liu Xian-Wei & Yin Hai-Sheng; 2♂♂2♀♀, Maoer Mountain, Xing'an, Guangxi, China, 2012.VII.28–31, collected by Bi Wen-Xuan; 3♂♂2♀♀, Daming Mountain, Wuming, Guangxi, Alt. 1250m, 2013.VII.19–25, collected by Liu Xian-Wei *et al.*; 2♂♂3♀♀, Maoer Mountain, Xing'an, Guangxi, China, Alt. 500–1100m, 2013.VII.30–VIII.6, collected by Liu Xian-Wei *et al.*

Distribution. China (Guangxi).

Diagnosis. This new species is very similar to *O. braueri* (Griffini, 1911) and *O. fallax* (Liu, 1999), but differs the former in: body smaller size and posterior margin of female subgenital plate deeply notched; differs from latter in: subgenital plate of male with a tapered median process and process of female 7th abdominal sternum distinctly thick and subgenital plate with parallel lateral margins in apical half.



FIGURES 24–25. *Ocellarnaca xiai* Li *et al.* **sp. nov.** 24. end of male abdomen, ventral view; 25. 7th abdominal sternum and subgenital plate of female, ventral view; scale bars=2mm.

10. *Ocellarnaca braueri* (Griffini, 1911)

(Fig. 26–28)

Gryllacris braueri Griffini, 1911. *Monit. Zool. Ital.*, 22: 30–33; Griffini, 1914. *Zool. Jahrbuch. Abt. Syst.*, 38: 84–85; Karny, 1929. *Mem. Soc. Ent. Ital.*, 7: 89–90; Karny, 1930. *Ann. Nat. Hist. Mus. Wien*, 44: 68–69.

Eugryllacris braueri Karny, 1937. *Genera Insectorum*, 206: 151.

Ocellarnaca braueri Gorochov, 2004. *Entomological Review*, 84(8): 917; Bian *et al.*, 2013. *Journal of Orthoptera Research*, 22(1): 58.

Measurements. (length in mm)

	Body	Pronotum	Tegmina	Hind femora	Ovipositor
♂	36.0	8.0	23.0	19.0	/
♀	31.5–32.0	7.5–8.0	24.0	20.0	13.0–14.5

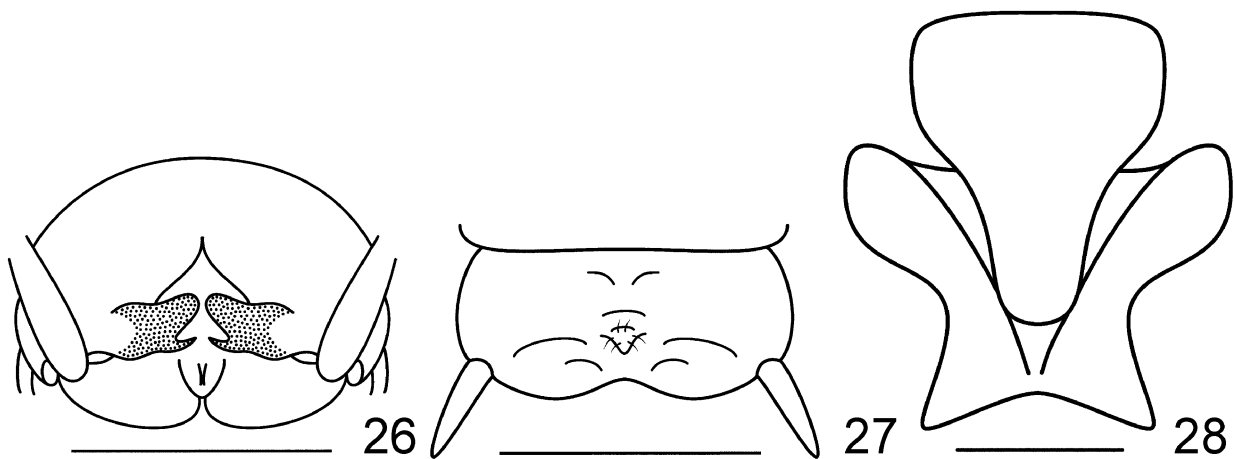


FIGURE 26–28. *Ocellarnaca braueri* (Griffini, 1911). 26. end of male abdomen, caudal view (after Gorochov, 2004); 27. subgenital plate of male, ventral view (after Gorochov, 2004); 28. 7th abdominal sternum and subgenital plate of female, ventral view; scale bars=2mm.

Material. 1 ♀ (China Agricultural University), Longzhou, Guangxi, China, 1980.VI.17, collected by Wu Ying-Sheng.

Distribution. China (Guangxi); Vietnam.

Acknowledgements

We thank Wang Han-Qiang & Dai Li for their help on the manuscript; we are grateful to all collectors of the specimens recorded in this paper. This research was supported by the Natural Science Foundation of Shanghai, China (No. 14ZR1413000) and the Scientific Research Innovation Foundation of East China Normal University (78210268).

References

- Bian, X., Shi, F.M. & Guo, L.Y. (2013) Review of the genus *Ocellarnaca* Gorochov, 2004 (Orthoptera: Gryllacrididae: Gryllacridinae) of China. *Journal of Orthoptera Research*, 22 (1), 57–66.
<http://dx.doi.org/10.1665/034.022.0109>
- Gorochov, A.V. (2004) Contribution to the knowledge of the fauna and systematics of the Stenopelmatoidea (Orthoptera) of Indochina and some other territories: V. *Entomological Review*, 84, 900–921.
- Griffini, A. (1911) Descrizione di due nuove Gryllacris. *Monitore Zoologico Italiano*, 22, 26–34.
- Griffini, A. (1914) I Grillacridi del Tonchino. Studio monografico. *Zoologische Jahrbücher. Abteilung für Systematik, Geographie und Biologie der Tiere*, 79–108.
- Griffini, A. (1914) Note sopra dicesi Grillacridi appartenenti al K. Naturhistor. Hofmuseum di Vienna ed al K. Zoolog. Museum di Berlino. *Atti Sociedad Italiana Scienze Naturali*, 53, 335.
- Jin, X.B. & Xia, K.L. (1994) An Index-Catalogue of Chinese Tettigonioidea (Orthopteroidea: Grylloptera). *Journal of Orthoptera Research*, 3, 17.
<http://dx.doi.org/10.2307/3503405>
- Karny, H.H. (1926) Gryllacridae (China-Ausbeute von R. Mell). *Mitteilungen aus dem Zoology Museum in Berlin*, 12, 389–391.
- Karny, H.H. (1929) On the cricket-locusts (Gryllacris) of China. *Lingnan Science Journal*, 7, 744.
- Karny, H.H. (1930) Revision der Gryllacriden des Naturhistorischen Museum in Wien einschließlic der Collection Brunner v. Wattenwyl. *Annalen des Naturhistorischen Museum in Wien*, 44, 68.
- Karny, H.H. (1937) Orthoptera Fam. Gryllacrididae. *Genera Insectorum*, 206, 151–152.
- Liu, X.W. & Jin, X.B. (1994) List of Chinese Stenopelmatoidea and Tettigonioidea (Grylloptera). *Contributions from Shanghai Institute of Entomology*, 11, 100.
- Liu, X.W. (1999) Stenopelmatoidea. In: Huang, B.K. (Ed.), *Fauna of Insects Fujian Province of China*. Fujian science and technology press, Fuzhou, pp. 175–179.
- Liu, X.W. & Yin, H.S. (2004) Orthoptera: Tettigonioidea. Stenopelmatoidea. In: Yang, X.K. (Ed.), *Insects from Mt. Shiwandashan Area of Guangxi from China*. China Forest Publishing Company, Beijing, pp. 105.