

THE GENUS *EURICANIA* MELICHAR (HEMIPTERA: RICANIIDAE) FROM CHINA

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ABSTRACT. – Two new species of *Euricania* Melichar (Hemiptera: Ricaniidae), *E. brevicula*, new species, and *E. longa*, new species, are described from China. Four previously recorded species, *E. ocellus* (Walker), *E. facialis* Walker, *E. clara* Kato and *E. xizangensis* Chou & Lu are redescribed and illustrated. A key to all the Chinese species in the genus is provided.

KEY WORDS. – Hemiptera, Ricaniidae, *Euricania*, new species, redescription, China.

INTRODUCTION

The Ricaniidae is one of the smaller families of the superfamily Fulgoroidea, currently containing about 400 described species in over 40 genera (Metcalf, 1955; Chou et al., 1985). The family is mainly distributed in the Afrotropical, Australian and Oriental regions, with some species in the Palaearctic Region. The ricaniid fauna of China is very poorly known. About 32 species are recorded from China (Fennah, 1956; Chou et al., 1985). Much basic taxonomic work on this group is needed in China.

The genus *Euricania* (Hemiptera: Ricaniidae) was established by Melichar (1898). Until now 43 species were described in the genus from the Oriental, Australian and Palaearctic regions. The most recent studies of genus *Euricania* were by Yang (1989) and Chou & Lu (1985, 1977), four *Euricania* species were recorded in China. All these species were described without genital characters except *E. ocellus* (Walker) (Yang, 1989). In this paper, we describe two new species of *Euricania* and redescribe and illustrate the four previously known species from China. The specimens used in this study are deposited in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZCAS), the Raffles Museum of Biodiversity Research, National University of Singapore, Singapore (RMBR), the Insect Collection of Hebei University, Baoding, China (HU) and the Shanghai Institute of Entomology, Chinese Academy of Sciences, Shanghai, China (SIE).

TAXONOMY

Genus *Euricania* Melichar, 1898

Euricania Melichar, 1898: 393 (Type species: *Euricania ocellus* Walker, 1851).

Generic diagnosis. – Head including eyes broader than pronotum. Frons oblique, broader than long, with central, sublateral and lateral carinae. Frontoclypeal suture arched. Vertex broad and narrow, with a carina between eyes. Pronotum narrow, with a central carina. Mesonotum narrow and long, with 3 carinae: central carina straight; lateral carinae inwardly and anteriorly curved, converging closely together on anterior margin, each bifurcating outwardly near middle in a straight longitudinal carina to or near anterior margin. Tegmina transparent, moderately ampliate, somewhat elliptical; apical area with a pterostigma; apical margin about as long as anal margin; with 3 longitudinal veins arising from basal cell; R₁ and R₂ with common stem; M veins with common stem; cross veins on disc enclosing a number of irregular cellular areas on basal half; with 2 transverse lines formed by cross veins beyond middle, the inner line much angularly waved. Wings short, with 2 cross veins beyond middle and several longitudinal veins forked near apex. Hind tibiae with 2 lateral spines and 6 apical spines. Male genitalia symmetrical; phallobase with 2 spinose processes at each apical angle, ventral process twisted, directed cephalad at apex with basal part incised; genital styles with dorsal and ventral margins nearly parallel. Female genitalia symmetrical, bursa copulatrix with 2 isometric pouches: first pouch with well visible cell and sclerotized ornamentation; second pouch with numerous pores; gonapophysis with teeth at inner side of apical margin.

Distribution. – Australian, Oriental and Palaearctic regions.

Key to species of *Euricania* from China

1. Tegmina without transverse fasciae (Fig. 29) .. *E. clara* Kato
- Tegmina with transverse fasciae (Figs. 3, 16, 42, 55, 68)2

- 2. Tegmina with ring-shaped fasciae (Figs. 16, 55) 3
- Tegmina without ring-shaped fasciae (Figs. 3, 42, 68) 4
- 3. Male aedeagus with dorsal spinose process longer than half length of phallobase (Fig. 59) *E. ocellus* Walker
- Male aedeagus with dorsal spinose process shorter than half length of phallobase (Fig. 20) *E. brevicula*, new species
- 4. Male aedeagus with dorsal spinose process longer than half length of phallobase (Fig. 46) *E. longa*, new species
- Male aedeagus with dorsal spinose process shorter than half length of phallobase (Fig. 7, 72) 5
- 5. In profile view, male aedeagus dilated near base (Fig. 74)
..... *E. xizangensis* Chou & Lu
- In profile view, male aedeagus not dilated near base (Fig. 9).
..... *E. facialis* Melichar

Kuiqi, 100-200m, coll. unknown, 2 Aug.1955; 1 female, Jianyang, Huangkeng, Guilin, 300m, coll. S. Q. Jiang, 4 Aug.1955; 1 female, Shaowu, Chengguan, 150m, coll. F. J. Pu, 28 Jun.1955; 2 males, 1 female, ZHEJIANG: Hangzhou, Lingyin, coll. Y. Chou, 19 Jul.1963; 2 males, Wuyuanling, coll. B. Zhen, 20 Jul.1983; 6 males, 4 females, JIANGXI: Poyang, coll. unknown, 15 Jun.1930; 2 males, Nanchang, Meiling, coll. P. Y. Zhu, 4 Jun.1987; 1 male, 1 female, HENAN: Jigongshan, 500m, H. X. Wu, 14 Jul.2001; 7 males, 2 females, Jigongshan, coll. Y. L. Wang & M. N. Wang, 17 Aug.1990; 1 male, SHANXI: Wugong, coll. Y. J. Liu, 17 Jul.1954 (all in IZCAS except 2 males, 1 female in RMBR).

Japan: 1 male, 1 female, Kyoto, coll. K. Eki, 22 Aug.1931; 1 male, Tokyo: Aoyama, coll. M. Higashino, 9 Aug. 1938; 1 female, Kyoto, coll. Y. Yie, 20 Sep.1935 (IZCAS).

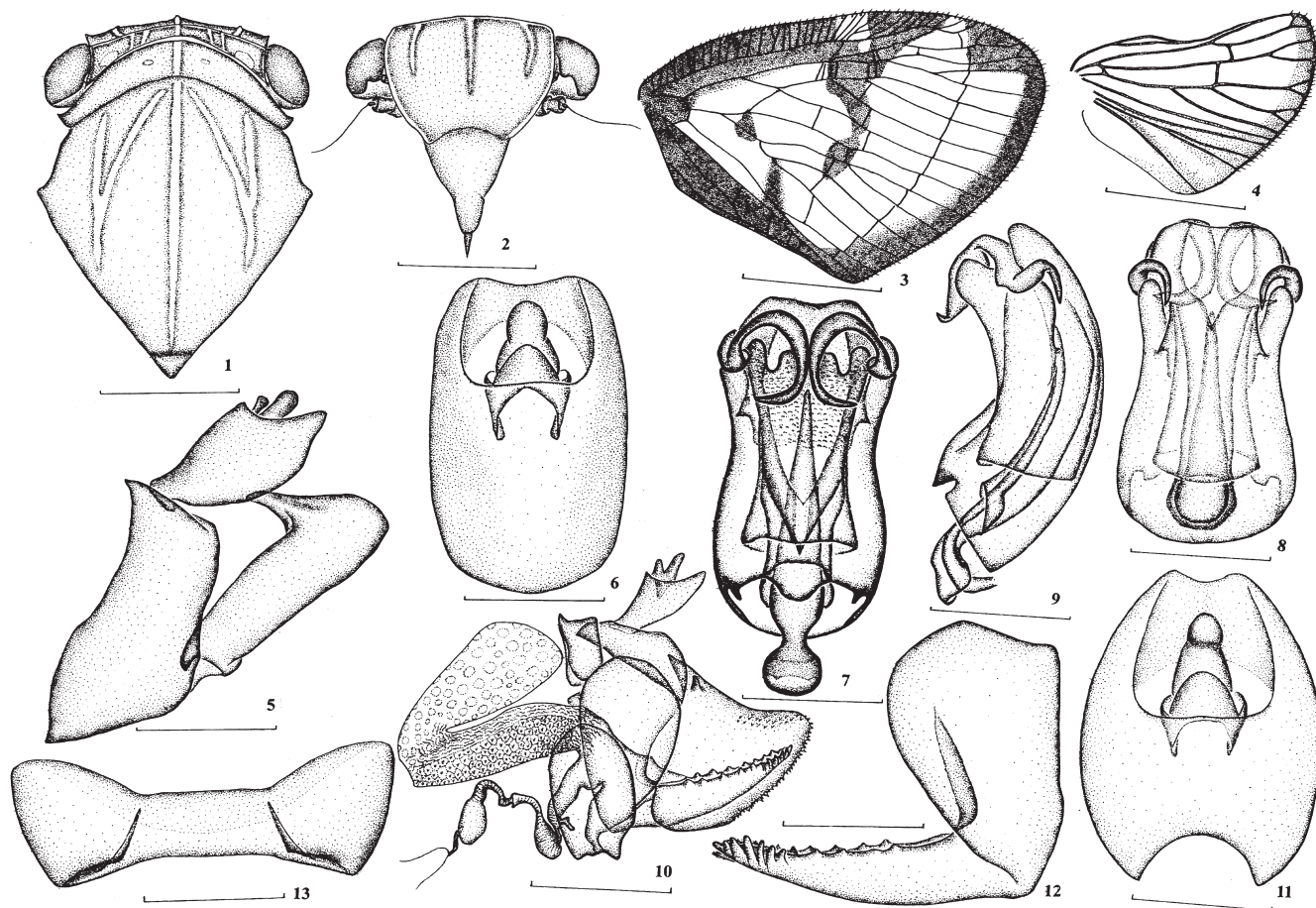
Length (incl. teg.). – Male 9.5-10.5 mm, female 10.5-11.0 mm.

***Euricania facialis* Melichar, 1898**
(Figs. 1-13)

Euricania facialis Melichar, 1898: 259; Distant, 1906: 385; Chou et al., 1985: 74.

Material examined. – **China:** 1 male, FUJIAN: Jianyang, Huangkeng, Guilin, 290-310m, coll. F. J. Pu, 4 Aug.1960; 3 males, Jianyang, Huangkeng, Changxian, 340-400m, coll. C. L. Ma 23 Jul.1960; 1 male, Jianyang, Guilin, coll. Y. G. Li, 14 Jul.1979; 3 males, 1 female, Wuyi, coll. Z. X. Cui, 14 Jul.1984; 2 males, 2 females, San'gang, coll. S. Z. Wang, 15 Jul.1984; 1 male, Fuzhou,

Description. – General colour brown. Head (Fig. 1) (including eyes) narrower than pronotum. Frons (Fig. 2) brown; central carina longer than half length of frons; sublateral carinae shorter than central carina at about 1:1.4; lateral carinae light brown; carina between eyes light brown. Clypeus yellow, ecarinate. Vertex yellow, wider at anterior margin than long in middle line at about 1:1.6, without central carina, posterior corner with light brown macula, occipital margin carinate, brown. Pronotum brown, narrow, wider at widest part than



Figs. 1-13. *Euricania facialis* Melichar: 1, vertex, pronotum and mesonotum, dorsal view; 2, frons and clypeus; 3, tegmina; 4, wing; 5, male genitalia, left side; 6, male anal segment, dorsal view; 7, aedeagus, dorsal view; 8, aedeagus, ventral view; 9, aedeagus, left side; 10, female genitalia, left side; 11, female anal segment, dorsal view; 12, gonophysis VIII, right side; 13, pregenital sternite. Scale bars: Figs. 1, 2, 10 = 1.25mm; Figs. 3, 4 = 3.2mm; Fig. 5 = 0.635mm; Figs. 6, 7-9, 11 = 0.4mm; Figs. 12, 13 = 0.5mm.

long in middle line about 1:6.5, punctated beside central carina; anterior margin carinate. Mesonotum and mesopleura brown.

Tegmina (Fig. 3) with costal marginal fascia brown, with a yellow spot near middle; apical and inner margins with brown fasciae; disc with a transverse, brown fascia; common stalk of R1 and R2 longer than base cell. Wings (Fig. 4) small, costal margin and inner margin with narrow, brown fasciae; apical margin with a broad, brown fascia.

Legs yellowish, fore femora with 3-4 lateral spines; middle coxa with one basal spine; middle femora with 3-5 lateral spines. Abdomen brown or dark brown. Tegula dark brown. Eyes grey. Ocelli golden.

Male genitalia. – Anal segment (Figs. 5, 6) large, oblong in dorsal view (Fig. 6), longer than wide at middle at about 1.5:1, lateral margins almost straight, apical margin slightly concave, basal margin strongly convex, ventral margin in profile (Fig. 5) strongly convex; anal style set in middle but close to apex. Aedeagus with connective symmetrical. Phallobase (Fig. 7) with dorsal process short, shorter than half length of phallobase in middle line about 1:3, directed cephalad and laterad; lateral process shorter than dorsal process at about 1:2. In ventral view, phallobase (Fig. 8) constricted medially, apex concave medially. In profile view (Fig. 9), phallobase not dilated near base. Genital styles (Fig. 5) longer than wide at middle about 3.6:1.

Female genitalia. – Anal segment (Fig. 10) rather small, ventral margin in profile slightly convex; anal style set beyond middle, in dorsal view (Fig. 11), apical margin concave, ventral margin strongly concave, lateral margins convex. Gonophysis VIII (Fig. 12) shoe-shaped, basal part and anterior part in a right angle, anterior part dilated apically. Pregenital sternite (Fig. 13) with anterior and ventral margins nearly straight medially. Bursa copulatrix as in fig. 10.

Distribution. – China (Fujian, Zhejiang, Jiangxi, Henan, Shanxi, Taiwan); Japan.

Remarks. – This species is similar to *E. longa*, new species, but can be separated from the latter by its short spinose process of the male phallobase (Fig. 7) and its long sublateral carinae of the frons (Fig. 2).

Host plants. – Silver chain, orange, tea plant, mulberry.

***Euricania brevicula*, new species**
(Figs. 14-26)

Material examined. – Holotype - Male, **China:** Fujian, Fuzhou, Kuiqi, 100-200m, coll. unknown, 2 Aug.1955 (IZCAS).

Paratypes: **China,** 2 males, 9 females, same data as holotype; 7 males, 1 female, Fuzhou, Kuiqi, coll. unknown, 3 Aug.1955; 2 males, 27 females, Fuzhou, Kuiqi, coll. unknown, Jul.1955; 1 female, Fuzhou, Kuiqi, coll. unknown, 8 Aug.1955; 8 males, 3 females,

Jiuxianshan, coll. S. Z. Wang, 14 Jul.1979; 4 males, 3 females, GUANGXI: Bobai, coll. J. J. Wang, 18 Jun.1985; 2 males, GUANGDONG: Meixian, Yinnashan, coll. P. Lin, 4-7 Aug.1963 (all in IZCAS except 2 males, 1 female in RMBR).

Length (incl. teg.). – Male 9.0-10.0 mm, female 10.5-11.5 mm.

Description. – Head (incl. eyes) (Fig. 14) wider than pronotum. Frons (Fig. 15) brown, longer than half length of frons; sublateral carinae shorter than central carina at about 1:1.2; lateral carinae brown. Carinae between eyes brown. Clypeus yellow, ecarinate or indistinctly carinate. Vertex (Fig. 14) brown, wider at anterior margin than long in middle line about 15:1, with light brown maculae at each posterior corner; without central carina; occipital margin with a dark carina. Pronotum brown and narrow, wider at widest part than long in middle line about 5.5:1; punctated beside central carina; anterior margin carinate. Mesonotum and mesopleura brown.

Tegmina (Fig. 16) with costal marginal fascia brown, with a yellow spot near middle, posterior outer corner of the spot with a rather small white spot; apical margin and inner margin each with a brown fascia; disc with 2 transverse brown fasciae: the outer one nearly straight and connected with apical fascia near posterior corner; the inner one forming a ring in middle, with median part of the ring white; common stalk of R1 and R2 longer than base cell. Wings (Fig. 17) rather small, costal margin and inner margin with narrow brown fascias, apical margin with a broad brown fascia.

Legs yellow; fore femora with 2-3 lateral spines; middle femora with 3-4 lateral spines. Abdomen brown. Eyes brown or piceous. Ocelli yellowish.

Male genitalia. – Anal segment in dorsal view (Fig. 18) trapeziform, longer than wide at middle about 1.5:1; lateral margin convex, apical margin slightly concave, basal margin slightly convex; ventral margin in profile (Fig. 19) strongly convex; anal style set in middle close to apex. Aedeagus with connective symmetrical. Phallobase (Fig. 20) with dorsal process short, directed first cephalad then laterad at apex, shorter than phallobase in middle line about 1:3; lateral process shorter than dorsal process at about 1:2. In ventral view (Fig. 21), phallobase constricted near base, apex concave medially. In profile view (Fig. 22), phallobase slightly dilated near base. Genital styles longer than wide at middle about 3:1.

Female genitalia. – Anal segment (Fig. 23) rather small, ventral margin slightly convex; anal style set beyond middle, in dorsal view (Fig. 24), apical margin slightly concave, ventral margin almost straight, lateral margin convex. Gonophysis VIII (Fig. 25) shoe-shaped, basal part and anterior part in a right angle. Pregenital sternite (Fig. 26) with anterior margin produced forward medially, ventral margin with median portion concave.

Distribution. – China (Fujian, Guangxi, Guangdong).

Remarks. – This species is similar to *E. ocellus*, but can be

separated from the latter by its long sublateral carinae of frons (Fig. 15) and shorter dorsal spinose process of the male phallobase (Fig. 20).

Etymology. – The species name is derived from the Latin *breviculus*, referring to the short dorsal spinous process of the male phallobase.

***Euricania clara* Kato, 1932**

(Figs. 27-39)

Euricania clara Kato, 1932: 228; Chou & Lu, 1977: 314; Chou et al., 1985: 70.

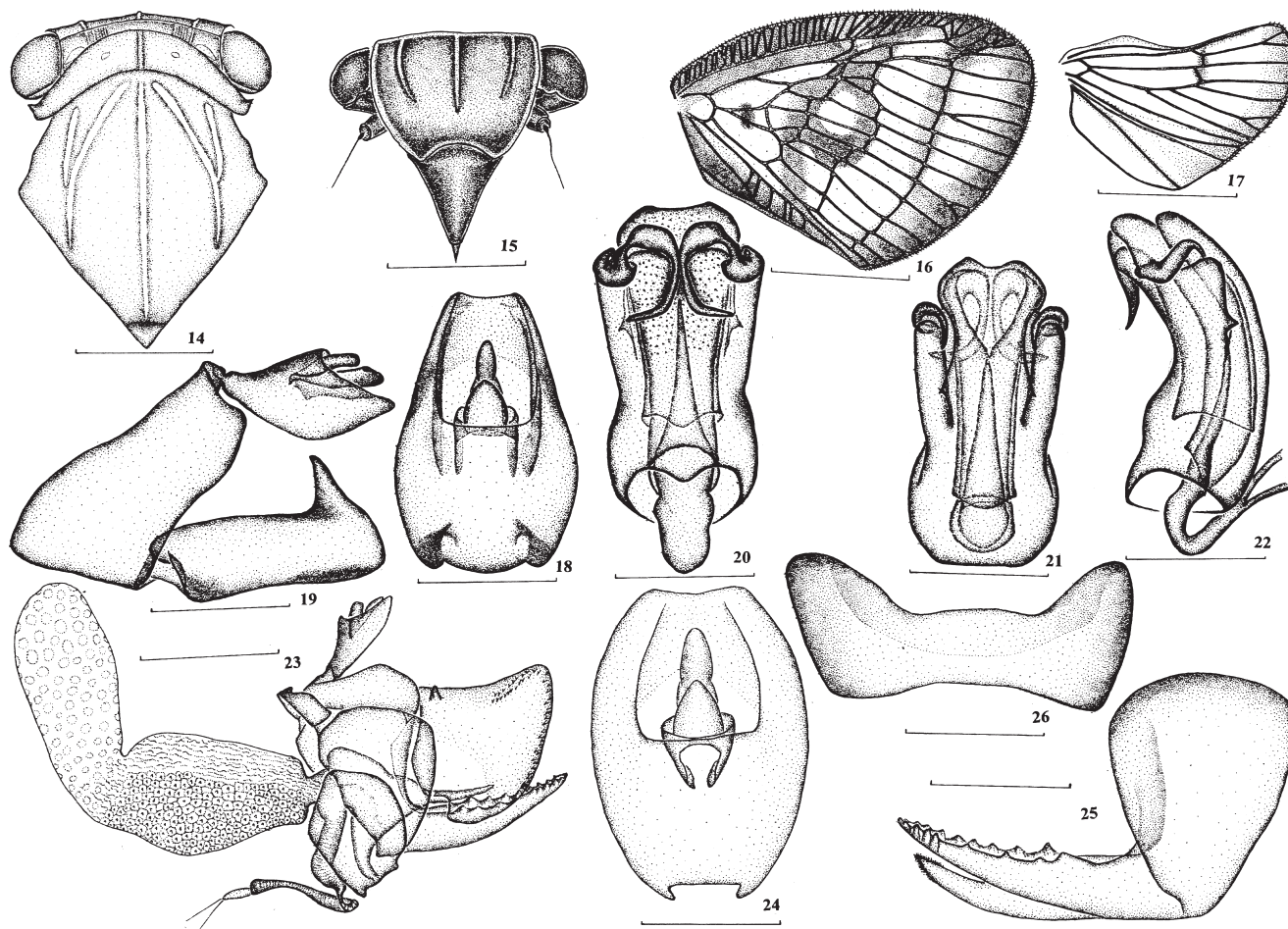
Material examined. – **China:** 45 males, 7 females, BEIJING: Xijiao, 50m, coll. Y. R. Zhang, 8 Aug.1951; 38 males, Beijing, coll. Z. B. Zhang, 16 Sept.1936; 14 males, 7 females, Beijing, coll. unknown, 13 Aug.1935; 3 males, 38 females, Tiantan, 50 m, coll. unknown, 27 Aug.1938; 5 males, Wanshengyuan, coll. L. Y. Wang, 21 Jun.1948; 15 males, Xijiao, Yiheyuan, coll. Q. Zhou, 18 Aug.1956; 3 males, 4 females, Sanbao, coll. S. B. Liao, 19 Aug.1964; 4 males, 2 females, Xiangshan, coll. C. Q. Xu, 14 Jul.2001; 1 male, GANSU: Wenxian, coll. unknown, Jul.1988; 3 males, 4 females, SHANDONG: Pingyi, Wanshougong, coll. C. Q. Xu, 2 Oct.2002; 1 male, SHANXI: Qinling, Laoyu, coll. unknown, 8 Jul.1951; 14

males, 18 females, Wugong, coll. Y. Chou, 12 Aug.1956 (all in IZCAS except 4 males, 2 females in RMBR).

Length (incl. teg.). – male 10.0-11.0 mm, female 12.0-13.0 mm.

Description. – Head (incl. eyes) (Fig. 27) wider than pronotum. Frons (Fig. 28) brown or dark-brown, central carina longer than half length of frons; sublateral carinae shorter than central carina at about 1:1.4; lateral carinae light brown. Carinae between eyes light brown. Clypeus yellow or light brown, ecarinate. Vertex (Fig. 27) brown or piceous, wider at anterior margin than long in middle line about 15:1, posterior corner with macula, bright yellow; carinate sublaterally, without central carina; occipital margin carinate and piceous. Pronotum brown or piceous, narrow, wider at widest part than long in middle line about 6:1, punctated beside central carina; anterior margin carinate. Mesonotum piceous. Mesopleura brown or dark brown.

Tegmina (Fig. 29) with costal marginal fascia brown or piceous, with a yellow spot near middle, posterior corner of the yellowish spot with one rather small white spot; apical margin with or without fascia, inner margin with a narrow brown fascia; disc without transverse fasciae; common stem



Figs. 14-26. *Euricania brevicula*, new species: 14, vertex, pronotum and mesonotum, dorsal view; 15, frons and clypeus; 16, tegmina; 17, wing; 18, male anal segment, dorsal view; 19, male genitalia, left side; 20, aedeagus, dorsal view; 21, aedeagus, ventral view; 22, aedeagus, left side; 23, female genitalia, left side; 24, female anal segment, dorsal view; 25, gonophysis VIII, right side; 26, pregenital sternite. Scale bars: Figs. 14, 15, 23 = 1.25mm; Figs. 16, 17 = 3.2mm; Figs. 18, 20-22, 24 = 0.4mm; Fig. 19 = 0.635mm; Figs. 25, 26 = 0.5mm.

of R1 and R2 longer than basal cell. Wings (Fig. 30) with costal margin and apical margin without fasciae, inner margin with a narrow, light brown fascia.

Legs yellow; fore femora with 3-4 lateral spines; middle femora with 3-4 lateral spines. Abdomen brown or dark brown, dorsum dark brown or piceous. Tegula brown or dark brown. Eyes grey. Ocelli bright yellow.

Male genitalia. – Anal segment in dorsal view quadrate (Figs. 31, 32), lateral margin convex; apical margin slightly concave, basal margin slightly convex, ventral margin in profile almost straight; anal style set about in middle close to apex. Aedeagus with connective symmetrical. Phallobase (Fig. 33) with dorsal process short, directed dorsocephalad, shorter than half length of phallobase in middle line at about 1:3; lateral process shorter than dorsal process at about 1:2. In ventral view (Fig. 34), phallobase not constricted medially, apex truncate. In profile view (Fig. 35), phallobase slightly dilated near base. Genital styles (Fig. 31) longer than wide in middle at about 3.4:1.

Female genitalia. – Anal segment (Fig. 36) rather small, ventral margin almost straight; anal style set beyond middle.

Gonophysis VIII (Fig. 38) tadpole-shaped; basal part and anterior part in an acute angle; teeth of anterior part normal, not dilated. Median part of pregenital sternite (Fig. 39) with anterior margin and ventral margin nearly straight. Bursa copulatrix as in fig. 36.

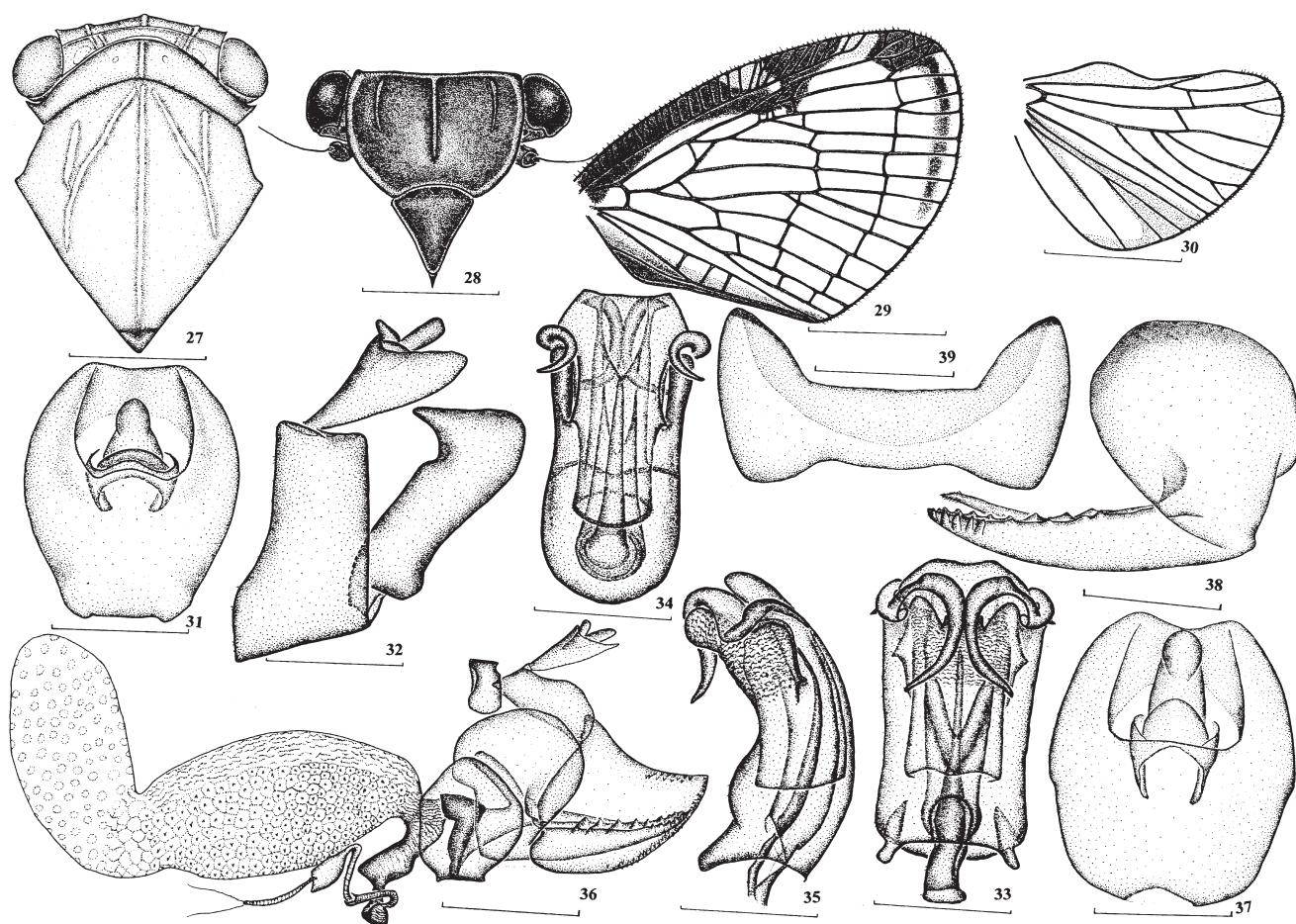
Distribution. – China (Beijing, Shandong, Shanxi, Gansu); Japan.

Host plants. – Mulberry, silver chain, medlar.

***Euricania longa*, new species**
(Figs. 40-52)

Material examined. – Holotype - male, **China:** Yunnan, Xishuangbanna, Meng'a, 1050-1080 m, coll. S. Y. Wang, 19 Aug.1958.

Paratypes: 19 males, 21 females, **China:** YUNNAN: Xishuangbanna, Meng'a, 1050-1080 m, coll. S. Y. Wang, 19 Aug.1958; 2 males, 9 females, Xishuangbanna, Menglun, 650 m, coll. F. J. Pu, 15 Aug.1958; 1 male, 6 females, Xishuangbanna, Xiaomengyang, 850 m, coll. S. Y. Wang, 30 Aug.1957; 3 males, 4 females, Xishuangbanna, Mengla, 620-650 m, coll. Y. R. Zhang,



Figs. 27-39. *Euricania clara* Kato: 27, vertex, pronotum and mesonotum, dorsal view; 28, frons and clypeus; 29, tegmina; 30, wing; 31, male anal segment, dorsal view; 32, male genitalia, left side; 33, aedeagus, dorsal view; 34, aedeagus, ventral view; 35, aedeagus, left side; 36, female genitalia, left side; 37, female anal segment, dorsal view; 38, gonophysis VIII, right side; 39, pregenital sternite. Scale bars: Figs. 27, 28, 36 = 1.25mm; Figs. 29, 30 = 3.2mm; Figs. 31, 33-35, 37 = 0.4mm; Fig. 32 = 0.635mm; Figs. 38, 39 = 0.5mm.

12 Jul.1959; 48 males, 37 females, Xishuangbanna, Mengzhe, 870 m, coll. F. J. Pu, 2 Sept.1958; 4 males, 1 female, HUNAN: Dayong, coll. unknown, Dec.1986 (all in IZCAS except 4 males, 2 females in RMBR).

Length (incl. teg.). – male 9.0-10.0 mm, female 11.0-12.0 mm.

Description. – Head (incl. eyes) (Fig. 40) wider than pronotum. Frons (Fig. 41) dark-brown or piceous, sublateral carinae indistinct, shorter than central carina at about 1:3.4; lateral carinae light brown. Carina between eyes light brown. Clypeus yellow, ecarinate. Vertex (Fig. 40) brown, without central carina, wider at anterior margin than long in middle line about 14:1, macula present in posterior corner, light brown; occipital margin carinate, piceous. Pronotum brown, narrow, wider at widest part than long in middle line about 6:1, punctated beside central carina; anterior margin carinate. Mesonotum and mesopleura piceous.

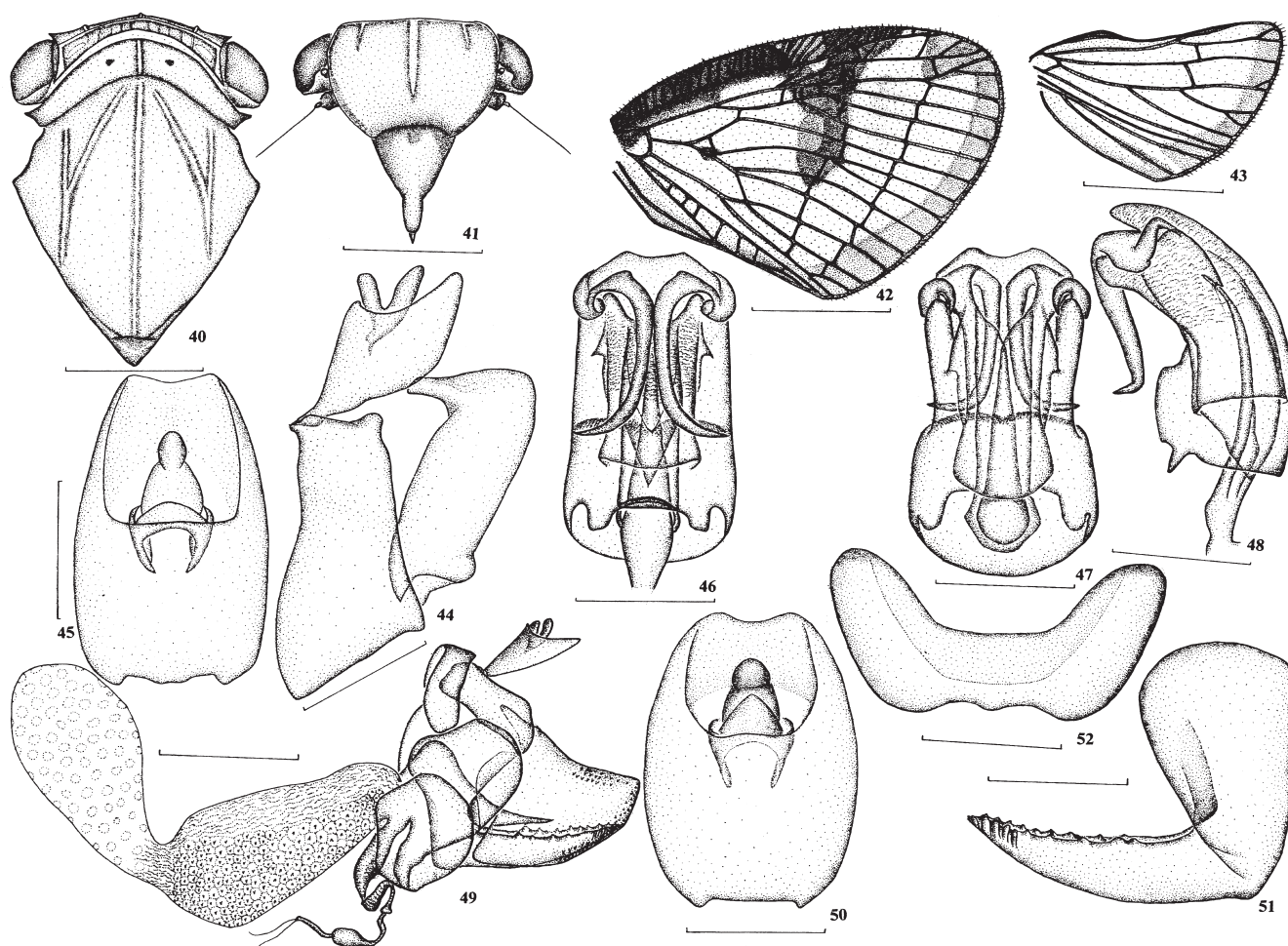
Tegmina (Fig. 42) with costal marginal fascia brown, with a yellow spot near middle; apical margin and inner margin with broad brown fasciae; disc with one transverse brown fascia; common stalk of R1 and R2 longer than basal cell. Wings

(Fig. 43) rather small, costal and inner margins with narrow brown fasciae, apical area with a broad, brown fascia.

Legs yellow, median part of hind femora black; fore femora with 2-4 lateral spines; middle femora with 3-5 lateral spines. Tegula brown. Eyes piceous. Ocelli golden.

Male genitalia. – Anal segment in dorsal view (Figs. 44, 45) trapeziform, longer than wide at middle at about 1.4:1, lateral margin slightly convex, apical margin slightly concave, basal margin slightly convex, ventral margin in profile view (Fig. 44) strongly convex; anal style set in middle close to apex. Aedeagus with connective symmetrical. Phallobase (Fig. 46) with dorsal process long, directed cephalad and laterad, longer than half length of phallobase in middle line at about 1:2; lateral process shorter than dorsal process at about 1:3. In ventral view (Fig. 47), phallobase constricted medially; apex concave medially. In profile view (Fig. 48), phallobase dilated basally. Genital styles longer than wide at middle about 2.7:1.

Female genitalia. – Anal segment (Fig. 49) rather small; anal style set beyond middle, in dorsal view (Fig. 50), apical and lateral margin concave, ventral margin straight. Gonophysis VIII (Fig. 51) shoe-shaped, basal part and anterior part in a



Figs. 40-52. *Euricania longa*, new species: 40, vertex, pronotum and mesonotum, dorsal view; 41, frons and clypeus; 42, tegmina; 43, wing; 44, male genitalia, left side; 45, male anal segment, dorsal view; 46, aedeagus, dorsal view; 47, aedeagus, ventral view; 48, aedeagus, left side; 49, female genitalia, left side; 50, female anal segment, dorsal view; 51, gonophysis VIII, right side; 52, pregenital sternite. Scale bars: Figs. 40, 41, 49 = 1.25mm; Figs. 42, 43 = 3.2mm; Fig. 44 = 0.635mm; Figs. 45, 46-48, 50 = 0.4mm; Figs. 51, 52 = 0.5mm.

right angle. Apical teeth of gonophysis VIII normal, not dilated. Median part of pregenital sternite (Fig. 52) with anterior margin nearly straight, ventral margin mesially convex. Bursa copulatrix as in fig. 49.

Distribution. – China (Yunnan, Hunan).

Remarks. – This species is similar to *E. facialis* Melichar, but can be separated from the latter by its rather long dorsal spinose process of male phallobase (Fig. 46) and its short sublateral carinae of frons (Fig. 41).

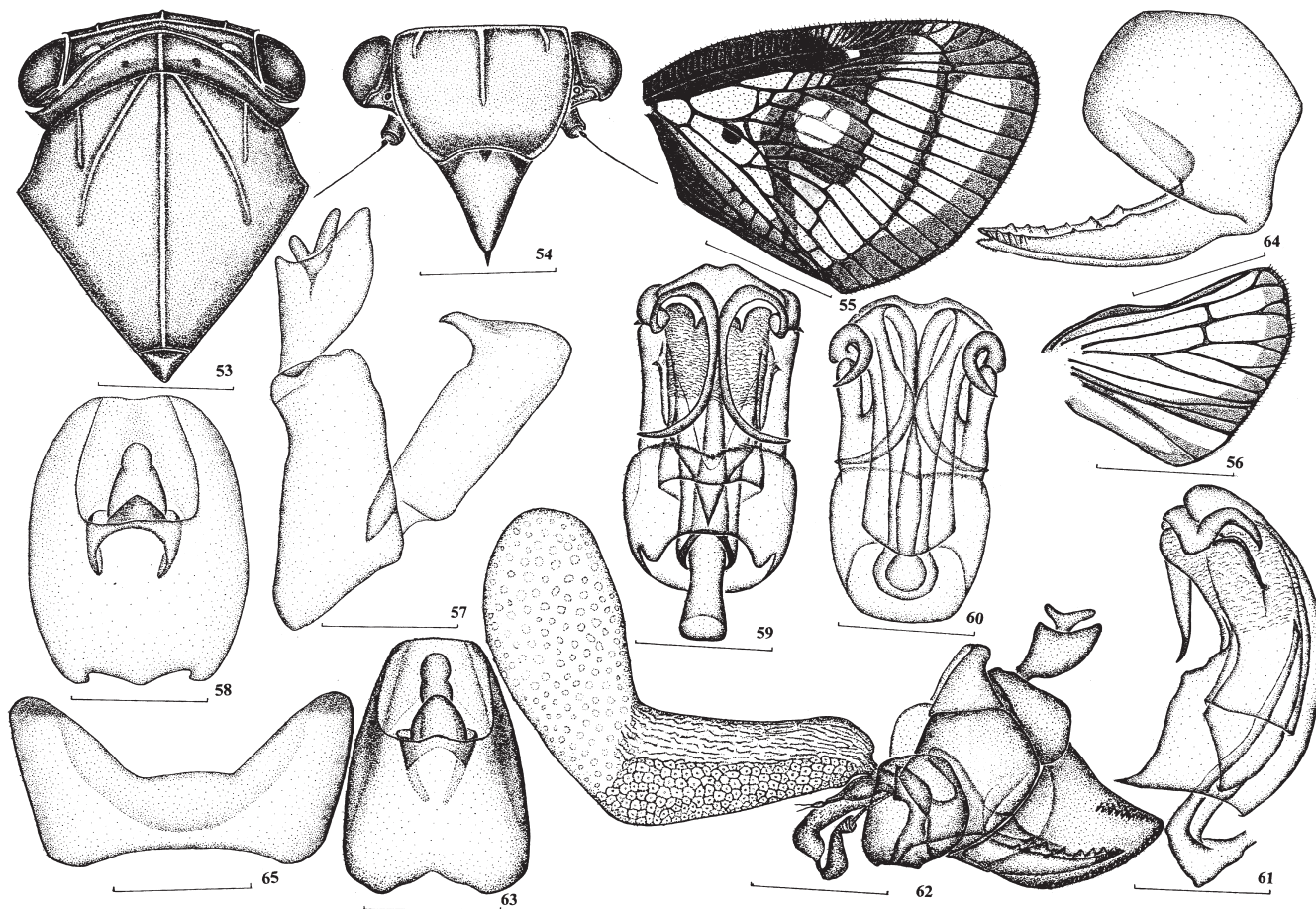
Etymology. – The species name is derived from the Latin *longus*, referring to the long dorsal spinous process of the male phallobase.

***Euricania ocellus* (Walker, 1851)**
(Figs. 53-65)

Pochazia ocellus Walker, 1851: 429.

Euricania ocellus - Melichar, 1898: 259; Distant, 1906: 385; Chou & Lu, 1977: 314; Yang, 1989: 201.

Material examined. – **China:** 13 males, 10 females, GUANGXI: Guilin, Liangfeng, 200m, coll. C. G. Wang, 11 Jul.1963; 2 males, Guilin, coll. X. K. Yang, 12 Jul.1992; 9 males, 10 females, Guilin, Yanshan, 200m, coll. Y. S. Shi, 10 Jul.1963; 1 male, 1 female, Longzhou, Nonggang, 15 Jun.2000, coll. J. Yao; 1 male, 1 female, Longzhou, Nonggang, coll. C. D. Zhu, 15 Jun.2000; 1 male, Longzhou, Sanlian, coll. W. Z. Li, 15 Jun.2000; 2 males, 1 female, Longzhou, Nonggang, 330m, coll. J. Chen, 15 Jun.2000; 2 males, Yangshuo, 150m, coll. S. Y. Wang, 20 Jul.1963; 1 male, 2 females, Baishou, 25 Jun.1959; 3 males, Lingtian, coll. Z. L. Wu & X. L. Lu, 3 Jun.1984; 4 males, 4 females, HAINAN: Baoting, 80m, coll. C. Q. Li, 16 May1960; 5 males, 4 females, Shuiman, 640m, coll. S. F. Li, 30 May1960; 2 males, Lehui, coll. K. R. Huang, 06 May1954; 1 male, GUANGDONG: Lianxian, coll. Y. W. Zhang, 28 Jun.1965; 2 males, Nada, 25 Apr.1954, coll. K. R. Huang; 1 male, Lechang, Pingshi, coll. Y. W. Zhang, 1 Jul.1965; 2 males, HUNAN: Changsha, Yuelushan, coll. unknown, 2 Aug.1957; Changsha: Yuelushan, 1 male, 1 female, coll. unknown, 15 Jul.1955; 1 male, Hunan, coll. unknown, no date; 27 males, 10 females, Chenzhou, coll. Y. L. Zhang & Y. H. Chai, 18-26 Jul.1985; 3 males, 11 females, Hengshan, coll. Y. L. Zhang & Y. H. Chai, 10 Aug.1985; 9 males, 2 females, Changsha, Yuelushan, coll. Z. R. Lei, 30 Aug.1991; 2 males, GUIZHOU: Lilang, coll. Y. Z. Du, 10 Jul.1994 (all in IZCAS except 4 males, 2 females in RMBR). **Vietnam:** 1 male, Tonkin, Hoa-Binh, coll. unknown, no date (IZCAS).



Figs. 53-65. *Euricania ocellus* (Walker): 53, vertex, pronotum and mesonotum, dorsal view; 54, frons and clypeus; 55, tegmina; 56, wing; 57, male genitalia, left side; 58, male anal segment, dorsal view; 59, aedeagus, dorsal view; 60, aedeagus, ventral view; 61, aedeagus, left side; 62, female genitalia, left side; 63, female anal segment, dorsal view; 64, gonophysis VIII, right side; 65, pregenital sternite. Scale bars: Figs. 53, 54, 62 = 1.25mm; Figs. 55, 56 = 3.2mm; Fig. 57 = 0.635mm; Figs. 58, 59-61, 63 = 0.4mm; Figs. 64, 65 = 0.5mm.

Length (incl. teg.). – Male 10.5-11.0 mm, female 11.0-12.0 mm.

Description. – General colour brown. Head (incl. eyes) (Fig. 53) wider than pronotum. Frons (Fig. 54) with central carina longer than half length of frons; sublateral carinae shorter than central carina at about 1:3; lateral carinae yellow. Carina between eyes brown. Clypeus brown, central carina indistinct. Vertex (Fig. 53) brown, wider at anterior margin than long in middle line about 17:1, with light brown macula in each posterior corner, carinate centrally; occipital margin carinate, piceous. Pronotum narrow, wider at widest part than long in middle line about 13:1; anterior margin carinate. Mesonotum and mesopleura brown or piceous.

Tegmina (Fig. 55) with costal marginal fascia brown, with a yellow spot near middle, with a very small white spot at outer lower angle of the yellowish spot; apical and inner margins with brown fasciae; disc with 2 transverse fasciae: outer fascia nearly straight and connected with apical fascia near posterior corner, inner fascia forming a ring in middle with central part of the ring white; R1 and R2 with a long common stem; apex round, common stem closed to claval suture. Wings (Fig. 56) rather small, apical margin with a brown fascia, costal and inner marginal fasciae very narrow, brown.

Legs yellow; fore femora with 2-3 lateral spines; middle femora with 4-5 lateral spines. Abdomen brown or dark brown. Tegula brown or dark brown. Eyes piceous, ocelli rufous.

Male genitalia. – Anal segment in dorsal view (Figs. 57, 58) longer than wide at middle about 1.5:1, lateral margin convex, basal margin slightly convex; in profile view with ventral margin convex; anal style set about in middle, close to apex. Aedeagus stout. In dorsal view (Fig. 59), phallobase with dorsal process very long, directed first cephalad then laterad at apex, longer than half length of phallobase in middle line at about 1:2; lateral process shorter than dorsal process at about 1:5, directed laterad at apex. In ventral view, phallobase (Fig. 60) not constricted medially, apex concave medially. In profile view, phallobase (Fig. 61) dilated basally. Genital styles (Fig. 58) longer than wide at middle about 1.7:1.

Female genitalia. – Anal segment (Fig. 62) rather small, ventral margin slightly convex; anal style set at middle, apical margin in dorsal view (Fig. 63) almost straight, ventral margin concave, lateral margin almost straight. Gonophysis VIII (Fig. 64) tadpole-shaped, basal part and anterior part in an acute angle. Pregenital sternite (Fig. 65) with anterior margin and ventral margin nearly straight medially. Bursa copulatrix (Fig. 62) second pouch slightly bigger than first pouch.

Distribution. – China (Guangxi, Hainan, Hunan, Guizhou, Taiwan); Bengal, Sikkim, India, Japan, Vietnam.

Remarks. – This species is similar to *E. brevicula*, but can be separated from the latter by its shorter sublateral carinae of frons (Fig. 54) and very long dorsal spinose process of the male phallobase (Fig. 59).

Host plants. – Silver chain, orange, tea plant, tung, and castor-oil plant.

***Euricania xizangensis* Chou & Lu**
(Figs. 66-78)

Euricania xizangensis Chou & Lu, 1981: 225; Chou et al., 1985: 70.

Material examined. – **China:** 4 males, 2 females, XIZANG: Motuo, 800-1100m, coll. G. D. Ren, 17 Aug. 2003 (HU); 1 female, Muotuo, Maniwong, 930m, coll. F. S. Huang, 25 Aug. 1974 (IZCAS); 2 males, 2 females, Muotuo, coll. G. T. Jin, 13 Jul. 1980 (SIE).

Length (incl. teg.). – Male 10.5-11.0 mm, female 11.0-11.5 mm.

Description. – Head (incl. eyes) (Fig. 66) wider than pronotum. Frons (Fig. 67) piceous, sublateral carinae longer than half length of central carina at about 1:2; lateral carinae with basal part black and apical part light brown. Carina between eyes brown with median part black. Clypeus brown, central carina light brown. Vertex (Fig. 66) piceous, wider at anterior margin than long in middle line about 12.8:1, posterior corner without macula or with indistinct macula; carinate laterally, without central carina; occipital margin carinate, piceous. Pronotum piceous, narrow, wider at widest part than long in middle line about 6:1; punctated beside central carina; anterior margin carinate. Mesonotum and mesopleura piceous.

Tegmina (Fig. 68) with costal marginal fascia piceous, with a yellow or yellowish spot near middle, posterior corner of the spot with one very small white spot; apical area piceous; apical margin and inner margin with piceous fasciae; disc with one transverse piceous fascia which is interrupted or disappeared near claval suture; common stem of R1 and R2 longer than basal cell, common stem closed to claval suture. Wings (Fig. 69) with apical margin with a piceous fascia, costal margin and inner margin without fasciae.

Legs brown; fore femora with 2-4 lateral spines; middle femora with 2-5 lateral spines. Abdomen piceous. Tegula dark brown or piceous. Eyes piceous, ocelli rufous.

Male genitalia. – Anal segment (Figs. 70, 71) in dorsal view longer than wide at middle about 1.5:1, lateral margin convex, apical margin truncate, basal margin almost straight; ventral margin in profile (Fig. 70) strongly convex; anal style set about in middle, close to apex. Aedeagus with connective symmetrical. Phallobase (Fig. 73) with dorsal process short, directed laterad, shorter than half length of phallobase in middle line about 1:3.3; lateral process shorter than dorsal process at about 1:1.3. In ventral view (Fig. 74), phallobase constricted medially, apex concave medially; lateral process shorter than phallobase in middle line about 1:2.6. In profile view (Fig. 75), phallobase dilated near base. Genital styles (Fig. 70) longer than wide at middle about 3:1.

Female genitalia. – Anal segment (Fig. 75) rather small, ventral margin in profile slightly convex; anal style set beyond middle; in dorsal view (Fig. 76), apical margin straight, ventral margin nearly straight, lateral margins convex. Gonophysis VIII (Fig. 77) shoe-shaped, basal part and anterior part in a right angle, teeth of anterior part dilated apically. Pregenital sternite (Fig. 78) with anterior margin produced forward medially. Bursa copulatrix with second pouch smaller than first pouch.

Distribution. – China (Xizang).

Remarks. – This species is similar to *E. longa* and *E. facialis*, but can be separated from *E. longa* by its shorter dorsal spinose process of male phallobase (Fig. 72) and longer sublateral carinae of frons (Fig. 67) and from *E. facialis* by its dilated basal part of male aedeagus (Fig. 74), distinct carina of clypeus (Fig. 67) and the whole black body.

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LITERATURE CITED

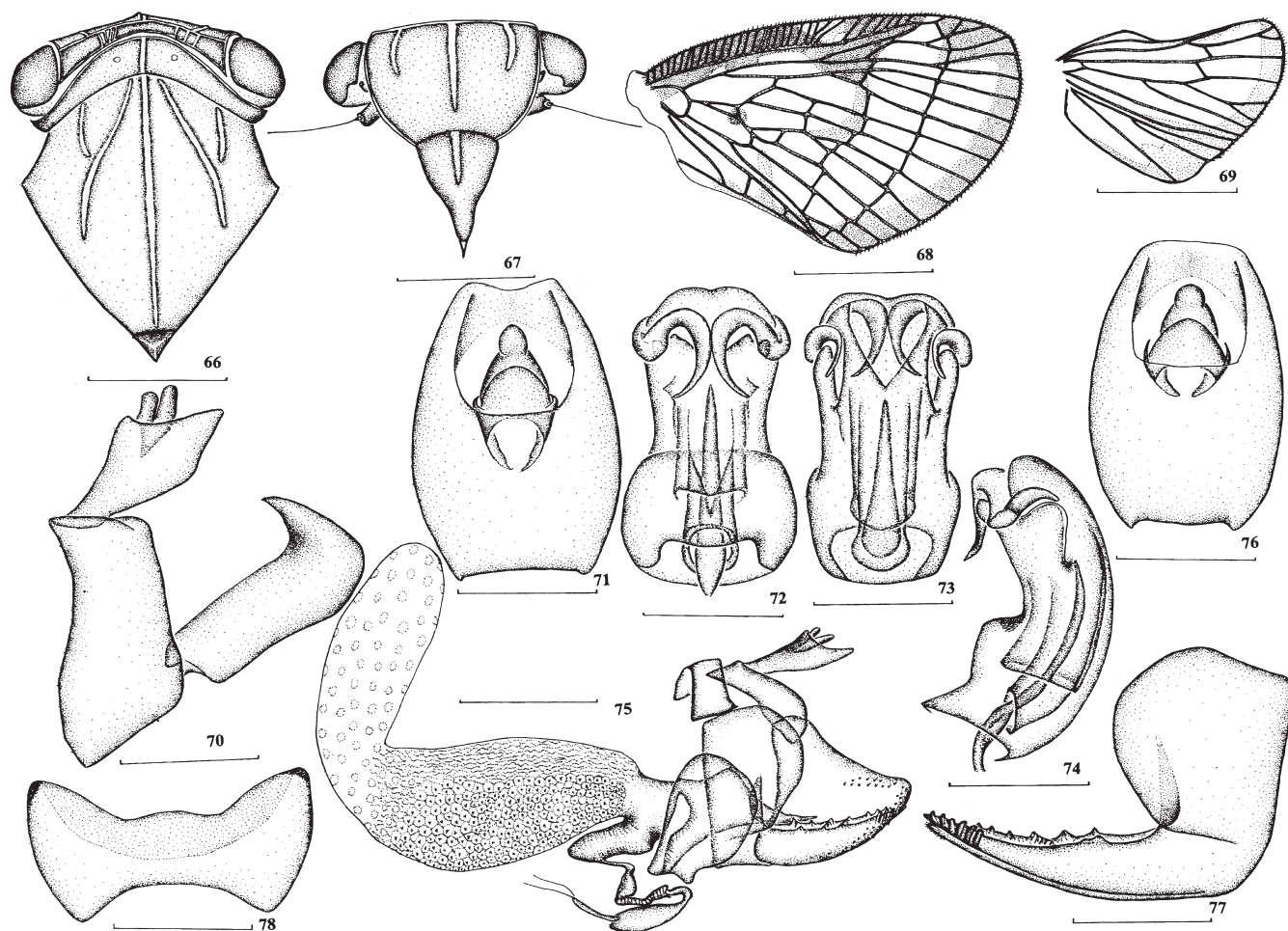
Chou, I. & J. S. Lu, 1977. On the Chinese Ricaniidae with descriptions of eight new species. *Acta Entomologica Sinica*, **20**: 314-322.

Chou, I. & J. S. Lu, 1981. Homoptera: Fulgoroidea. In: Chen, S.X. (ed.), *Insects of Xizang. The Series of the Expedition to the Qinghai-Xizang Plateau. Vol. 1.* Sciences Press, Beijing. Pp. 225-226.

Chou, I., J. S. Lu, J. Huang & S. Z. Wang, 1985. *Homoptera Fulgoroidea. Economic Insects Fauna of China.* Fasc. 36. Sciences Press, Beijing.

Distant, W. L., 1906. *The Fauna of British India, including Ceylon and Burma. Rhynchota 3 (Heteroptera-Homoptera).* London: Taylor & Francis. 503 pp.

Fennah, R. G., 1956. Fulgoroidea from southern China. *Proceedings of the California Academy of Science*, (4)**28**: 441-527.



Figs. 66-78. *Euricania xizangensis* Chou & Lu: 66, vertex, pronotum and mesonotum, dorsal view; 67, frons and clypeus; 68, tegmina; 69, wing; 70, male genitalia, left side; 71, male anal segment, dorsal view; 72, aedeagus, dorsal view; 73, aedeagus, ventral view; 74, aedeagus, left side; 75, female genitalia, left side; 76, female anal segment, dorsal view; 77, gonophysis VIII, right side; 78, pregenital sternite. Scale bars: Figs. 66, 67, 75 = 1.25mm; Figs. 68, 69 = 3.2mm; Fig. 70 = 0.635mm; Figs. 71-74, 76 = 0.4mm; Figs. 77, 78 = 0.5mm.

- Kato, M., 1932. Notes on some Homoptera from south Manchuria, collected by Mr. Yukimichi. *Kontyû*, **5**(5): 216-229.
- Matsumura, S., 1930. *The Illustrated Thousand Insects of Japan*. Keiseisha, Tokyo.
- Melichar, L., 1898. Monographie der Ricaniiden (*Homoptera*). *Annalen des K. K. Naturhistorischen Hofmuseums*, **8**(2-3): 197-359.
- Metcalf, Z. P., 1955. *General Catalogue of the Homoptera. Fasc. IV. Fulgoroidea. Part 16. Ricaniidae*. North Carolina State College, Raleigh, N.C., USA.
- Wytsman, P., 1923. *Genera Insectorum. Homoptera*. **182**: 120-173.
- Yang, C. T., 1989. Ricaniidae of Taiwan (Homoptera: Fulgoroidea). *Taiwan Museum Special Publication Series*, **8**: 201-202.
- Walker, F., 1851. *List of the Specimens of Homopterous Insects in the Collection of the British Museum*, **2**: 261-636.