## Genus

# Two new species of genus *Ricania* GERMAR, 1818 from North Vietnam

(Hemiptera: Fulgoromorpha: Ricaniidae)

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ABSTRACT. Ricania wegrzynowiczi and Ricania sapaensis, new to the science, are described from North Vietnam.

Key words: entomology, taxonomy, new species, North Vietnam, Hemiptera, Fulgoromorpha, Ricaniidae, Ricania.

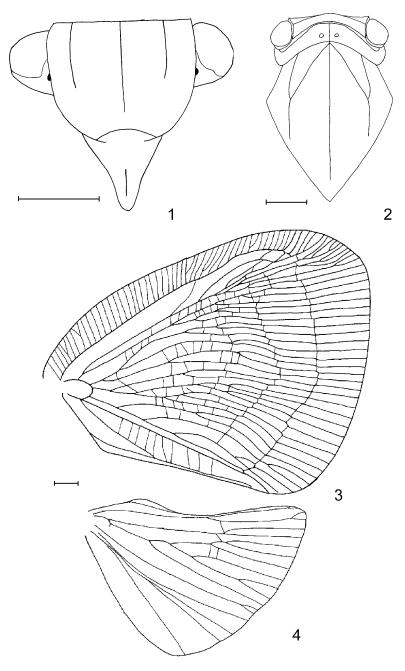
### INTRODUCTION

The genus *Ricania* Germar 1818, with 92 species and subspecies, is among the most speciose genera within the family *Ricaniidae*; which includes 380 species with 52 genera. The genus occurs in all the regions of the Old World (Palearctic, Afrotropical, Oriental and Australo-Pacific). Thirty one species and subspecies were recorded from the Oriental Region (Metcalf 1955; Fennah 1956, 1978; Chou and Lu 1977; Chou at all. 1985; Yang 1989) but only 7 species are known from Vietnam.

# Ricania wegrzynowiczi n. sp.

## ETYMOLOGY

This species is dedicated to my friend Piotr Wegrzynowicz with whom we collected the specimen during our field trip to Vietnam.



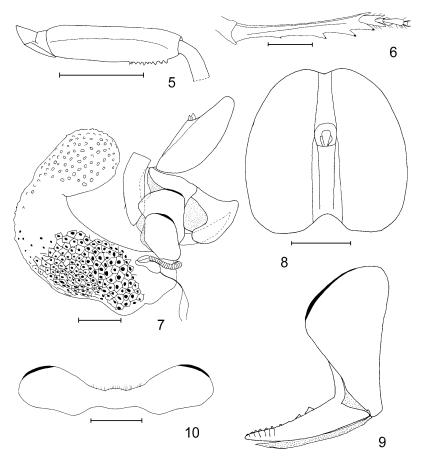
1-4. *Ricania wegrzynowiczi* n. sp., female: 1 - frons and clypeus, anterior view; 2 - head and thorax, dorsal view; 3 - rigth tegmen; 4 - rigth wing (scale line = 1 mm)

## TERRA TYPICA

Tam Dao National Parc (prov. Vinh Phu, North Vietnam).

## Diagnosis

Ricania wegrzynowiczi sp. nov. is similar to R. quadromaculata KATO, 1933 in the tricarinate frons with carinae separated at base, venation of tegmina with veins Sc+R; M<sub>1</sub> and M<sub>2</sub> leaving basal cell as separeted stems and anal tube longer than gonoplac, but differs in the elongate-round tegmina (elongate-triangular in R. quadrimaculata), presence of median carina of clypeus, which is absent in R. quadrimaculata, a row of small dentes in the lower margin of the apical part of mid femur (not present in R. quadrimaculata) and 3 lateral hind tibiae spines (2 lateral spines visible in R. quadrimaculata).



5-10. *Ricania wegrzynowiczi* n. sp., female: 5 - middle femur; 6 - hind tibia; 7 - female genitalia, lateral view; 8 - anal tube, dorsal view; 9 - genital styles, lateral view; 10 - pregenital sternite, flatened (scale line = 1 mm)

#### DESCRIPTION

Vertex (fig.2), without median carina, anterad about 8.6 times as broad as long in mid line; anterior margin slightly produced; lateral margins straight and parallel, posterior margin deeply arcuately incised anterad.

Frons (fig. 1) tricarinate, 1.26 times broader at upper margin than long in mid line, widest at the level of compound eyes, and 1.39 times as wide as its length in mid line; disc rugose. Lateral carinae of frons not well visible, separated at base; median carina extending to clypeal suture; lateral carinae parallel to lateral margin, reaching almost to the level of half the frons length; upper margin straight, lateral margins weakly arcuate. Clypeal suture distinctly convex. Compound eyes with large callus at the lower margin. Clypeus with short median carina at the lower portion. Rostrum surpassing mid-coxae, apical segment 0.65 times shorter than subapical one.

Pronotum (fig. 2) 2 times as long as vertex, with median carina and two concavities on disc; anterior and posterior margin arcuate, the first more curved anterad than the latter posterior one weakly.

Mesonotum (fig. 2) with five longitudinal carinae, 1.17 times as long as wide and 6.06 times longer than combined length of vertex and pronotum in mid line. Lateral carinae fused to anterolateral carinae posterior to half length of lateral carina, not reaching to posterior margin; anterolateral carinae straight. Tegula big, ovoid

Tegmina (fig. 3) elongate-round about 1.28 times as long as wide. Costal margin weakly curved at base, at median portion sinuate; apical and claval angles widely rounded, apical margin almost straight. Costal membrane up to twice as wide as costal cell, with dense transverse veinlets. Costal cell without transverse veinlets.



11. Ricania wegrzynowiczi sp. nov. holotype, female

Sc+R leaving basal cell with common short stem; veins  $M_1$  and  $M_2$  leaving basal cell as separately; vein Cu bifurcates distad of Sc+R forking. Tegmina with 2 transverse lines, apical and subapical, apical and subapical cells longer than wide; corium with numerous transvere veins.

Clavus with numerous transverse veinlets. Claval vein A1 united with A2 (PCu) slightly before the middle of total length claval suture and before the middle A2 (PCu) vein.

Wing (fig. 4) with 4 transvese veinlets. Precostal cell of wing elongated, 12 times as long as wide.

Lower part of mid femur with row of small dentes (fig. 5). Hind tibia (fig. 6), widened apicad, 1.7 times as long as hind femur. Hind tibia with 3 lateral and 7 apical spines, first tarsomere with 7 spines. Length ratio of tarsomeres, in order of appearance: 1:0.72:0.77.

Colouration. General colour dark brown to black. Vertex black with two ochre patches at the posterior margin; face, lateral part of head, pronotum, mesonotum and tegula black. Eyes pearly—colored. Median portion of clypeus, rostrum, tibiae and tarsomeres yellowish brown.

Tegmina dull brown, with costal membrane, apical margin and environs of the median spot black, with 5 white markings, rounded in middle and lower part, triangular on the costal margin and 2 elongate at the apical-margin. Wing smoky. Abdomen and genital segment brown basad, to yellowish brown.

Male. Unknown.

Female genitalia. Anal tube distinct in lateral view, twice as long as gonoplac (fig. 7); lateral margins arcuate; in middle of posterior and anterior margins emarginate (fig. 8). Anus placed at half length of mid line. Gonoplac shoe-shaped, with 3 irregular rows of the small teeth. Gonophyses VIII normally developed with 9 teeth (fig. 9).

Bursa copulatrix 2 pouches (fig. 7). First pouch 2.5 times as long as the second with well visible cells and sclerotized ornamentation. Second pouch rounded, without cells and ornamentation but with numerous pores.

Pregenital sternite (fig. 10) 10.2 times as wide as long in the middle; anterior and posterior margins produced medially; lateral plates well developed.

TYPE

HOLOTYPE: female, "Tam Dao National Parc, prov. Vinh Phu, 06-08. VI. 2000, leg. A. Stroiński and P. Węgrzynowicz" - preserved at the Museum and Institute of Zoology PAS in Warsaw, Poland (MIZPAN).

## Ricania sapaensis n. sp.

ETYMOLOGY

The species is named after its locus typicus.

#### DIAGNOSIS

This species is similar to *Ricania wegrzynowiczi* n. sp. in the colouration, tricarinate frons, elongate-round tegmina, presence of median carina of clypeus, 3 lateral hind tibiae spines and big anal tube, but differs in the presence of median carina of vertex,  $M_1$  and  $M_2$  leaving basal cell with short common stem and the absence of dentes on the mid femur.

TERRA TYPICA

Sa-pa (prov. Lao Cai, North Vietnam).

#### DESCRIPTION

Vertex, with median carina, anterad 7.8 times as broad as long in mid line; anterior margin arcuate; lateral margins straight and parallel, posterior margin deeply arcuate.

Frons tricarinate, 1.22 times broader at upper margin than long in mid line, widest at level of compound eyes, and 1.37 times as wide as its length in mid line; disc rugose. Lateral carinae of frons separated at base; median carina extending to clypeal suture; lateral carinae, straight and extending to half length of frons. Upper margin straight, lateral margins weakly convex. Clypeal suture distinctly arcuate. Compound eyes with large callus at the lower margin. Clypeus with short median carina in median portion. Rostrum missing.

Pronotum 2.2 times as long as vertex, with median carina and two concavities on disc, anterior and posterior margin arcuate. Mesonotum with five longitudinal carinae, 1.24 times as long as wide and 5.44 times longer than combined length of vertex and pronotum in mid line. Lateral carinae fused to anterolateral carinae posterior to half length of lateral carinae, almost reaching to posterior margin. Anterolateral carinae straight, disappearing anterad

Tegmina elongate-round about 1.30 times as long as wide. Costal margin weakly curved at base, at median portion slightly sinuate; apical and claval angles widely rounded, apical margin slightly arcuate. Costal membrane, up to twice as wide as costal cell, with dense transverse veinlets. Costal cell without transverse veinlets.

Sc+R leaving basal cell with common short stem veins;  $M_1$  and  $M_2$  leaving basal cell with common short stem; vein Cu bifurcates distad to Sc+R and M1 and M2 forking. Tegmina with 2 transverse lines; apical and subapical, apical and subapical cells longer than wide; corium with numerous transverse veins.

Clavus with numerous transverse veinlets. Claval vein A1 fused with A2 (PCu) slightly before mid of total length of claval suture and before middle A2 (PCu) vein.

Precostal cell of wing elongated, 13.3 times as long as high. Wing with 3 transverse veinlets

Lower part of mid femur without row of small dentes. Hind tibia widened apicad, 1.7 times as long as hind femur. Hind tibia with 3 lateral and 7 apical

spines, first tarsomere with 7 spines. Length ratio of tarsomeres, in order of appearance: 1:0.81:0.75.

Colouration. General colour dark brown to black. Vertex black with two ochre patches at the posterior margin; face, pronotum, mesonotum and tegula black. Lateral part of head anterad black and yellow posteriorly. Compound eyes pearly coloured. Median portion of clypeus, tibiae and tarsomeres yellowish brown.

Tegmina dull brown, with costal membrane, apical margin and environs of the median spot black, with 5 white markings, rounded in mid and lower part, triangular on the costal margin and 2 elongate at the apical-margin. Wing smoky. Abdomen and genital segment brown basad, to yellowish brown.

Male. Unknown.

Female genitalia. Anal tube distinct, in lateral view twice as long as gonoplac; lateral margins arcuate; in middle of posterior and anterior margins emarginate. Anus placed at half length of mid line. Gonoplac shoe-shaped, with 3 irregular rows of small teeth. Gonophyses VIII normally developed with 9 teeth.

Bursa copulatrix with 2 pouches. First pouch 2.0 times as long as the second with weakly visible cells but well visible sclerotized ornamentation. Second pouch rounded, without cells, ornamentation and pores.

Pregenital sternite 9.44 times as wide as long in mid line; anterior and posterior margins shlightly produced medially; lateral plates well developed.

Type

HOLOTYPE, female, "Tonkin, Chapa, 3.VII.1917, Jeanvoine// 1927 2//A. Jacobi Typus// discreta var. parallela Jac". Preserved in the Staadlisches Museum für Tierkunde in Dresno, Germany (SMTD).

#### ACKNOWLEGMENTS

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