

A new *Ghilianella* and a New Saicine Genus, *Buninotus* (Hemiptera:Reduviidae) from Panama¹

J. Maldonado Capriles²

ABSTRACT

From material collected at Fortuna, Chiriquí, Panama, a new species of *Ghilianella* and a new saicine genus, *Buninotus*, are described and compared with allied taxa. A key to the American genera of Saicinae is presented.

INTRODUCTION

Among material sent to me for identification by Dr. D. Engleman, stationed at Coco Solo, Canal Zone, Panama, a new *Ghilianella* and a new saicine genus were found. The type material is deposited in the National Museum of Natural History (NMNH), Washington, D.C., the American Museum of Natural History (AMNH), New York City, New York, and in my collection (JMC). In the descriptions that follow, 20 micrometer units are equivalent to 1.0 mm.

RESULTS

FAMILY REDUVIIDAE

Subfamily Emesinae

Ghilianella inflata, NEW SPECIES

Male—head strongly and abundantly granulose. Interantennal spine well developed, slightly downcurved; eyes small, round, interocular space 2× as wide as width of eye (10:5). Beak segments—9:11:22. Antennal segments—220:180:17:—. Thorax conspicuously granulose; mesonotum 1.5× as long as pronotum (84:56); metanotum 2/3 as long as mesonotum (62:84). Forecoxa 2× as long as head (82:40); forefemur not constricted, 1.2× longer than forecoxa (114:82), first spine at about 5× its length from apex of trochanter; trochanter unspined; tibia about 1/3 as long as femur (36:114); armature of inner row of spines of forefemur consisting of strong spines alternating with fine long hairs arising from wartlike bases; claws of foretarsi two, inner claw very short and appressed to base of outer claw. Terga I-III without wartlike elevation medianly on apical margin, very finely transversely corrugate, finely and moderately granulose. First 3 terga slightly widening to apex of third; fourth (fig. 1) widening to midlength, thence expanding to form basal half of bulbous swelling, apical

¹ Manuscript submitted to Editorial Board August 4, 1980.

² Ponce School of Medicine, Ponce, P.R., and Department of Plant Protection, College of Agricultural Sciences, Mayagüez, Campus, University of Puerto Rico, Mayagüez, P.R.

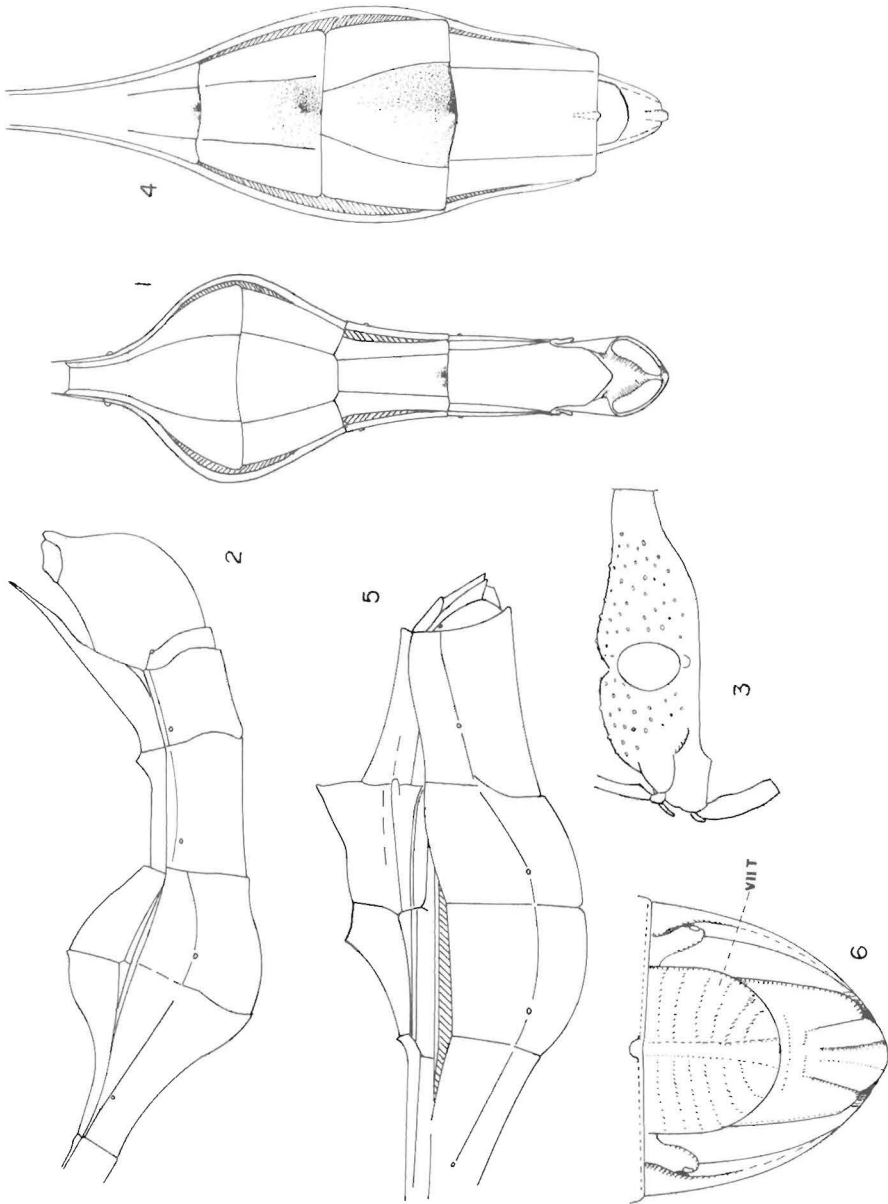


Plate I.—*Ghilianella inflata*: 1. last four abdominal segments, dorsal, male; 2. last abdominal segments and hypopygium, lateral, male; 3. head, female, lateral; 4. abdominal terga, dorsal, female; 5. apex abdomen, lateral, female; 6. genital segments, caudal.

angles slightly roundly produced and appearing as carinae near lateral margins; fifth tergum forming apical half of swelling; sixth not forming part of swelling, slightly constricted basally; seventh with basal third slightly expanding toward apex, thence lateral margins concave to near apex, apex sharply produced, strongly transversely corrugate on apical half. On lateral aspect last abdominal sterna as in figure 2; fourth and fifth forming bulbosity; sixth with apical margin caudally produced on sides, about $1.5\times$ as long as seventh; seventh apically with a small V-shaped median notch; eighth sternum visible on its entire length, median length about $1/4$ as long as seventh (5:18). Hypopygium opening upward, upper margin with concavity to receive claspers; as seen from above claspers curved inwardly, exposed beyond apex of seventh tergum, apical margin of hypopygium slightly produced, with a wartlike elevation slightly beyond apex of claspers.

Black; mid and hind femora with two inconspicuous brownish bands on apical half. Forefemur with basal half brownish above.

Female—head strongly granulose (fig. 3); interantennal spine well developed, downcurved; eyes small, interocular space about $2.5\times$ as wide as width of eye (10:4). Beak—9:10:12. Antenna—198:158:14:—. Thorax conspicuously and abundantly granulose; mesonotum over $1.5\times$ as long as pronotum (82:52), metanotum slightly longer than pronotum (55:52). Forecoxa slightly over twice as long as head (75:35); forefemur $1.5\times$ as long as forecoxa (112:75), first spine at $3\times$ its length to apex of trochanter (40:14), not constricted. Armature of forefemur and claws as in male. Tibia $1.2\times$ as long as tarsi (35:28).

Terga I-III as in male; finely transversely corrugate and with moderately abundant inconspicuous granulations. Terga (fig. 4 and 5) slightly widening to apex of second; third twice as wide apically than basally (20:10), and apical half forming part of bulbosity, fourth widening toward apex; fifth forming widest part of bulbosity, with a large conical elevation medianly on hind margin, above level of sixth, apical angles produced over the narrower base of sixth tergum; sixth tergum slightly wider basally than long (31:29), apical margin with lateral angles rounded, a small oval median projection. Seventh tergum (fig. 6, VIIT) wider than long (14:9), semicircular, inconspicuously coarsely transversely wrinkled, with inconspicuous median carina; eighth tergum about as long as seventh (10:9), semicircular, inconspicuously transversely wrinkled, sides elevated toward apex, medianly depressed, depression with median keel that slightly rises and broadens toward apex; apex round. Seventh sternum $1.2\times$ as long medianly as sixth (35:28), medianly angularly produced.

It belongs in the group of species having the mesonotum longer than the pronotum and a bulbous abdomen. As the male lacks elevations on

fifth tergum, it runs to the first part of couplet 19 on Wygodzinsky's key.³ It differs from all other species by the exposed claspers, the sixth tergum slightly involved in the bulbosity, and lack of pilose spots. Only two other species, *G. pendula* and *G. cuneata*, have the sixth tergum wider than the fifth, but these species have different fifth to eighth terga. The shape of the fifth tergum is very characteristic.

Holotype—male, Panama, Fortuna, Chiriquí; 8°44' N-82° W, at light in canopy of forest, 12 July 1976, in NMNH, Cat. No. 75961; Henk Wolda collector. Allotype female, same data, in NMNH. Paratypes, 8 males and 4 females, same collecting data, different dates in 1976; 1 male and 1 female in AMNH, others in JMC.

Subfamily Saicinae

Buninotus NEW GENUS

Type of genus—*Buninotus niger* NEW SPECIES

Characterized by: head with posterior lobe subglobose and only first segment of beak spined. Pronotum dorsally with four rounded elevations and humeral angles long spined. Scutellum with long inclined spine; mesoscutum with short, broad spinelike elevation. Anterior coxa, femur, and tibia spined; tibia curved. Forewing with 4 closed cells. Body mostly black, shiny, mostly glabrous.

Female—head (fig. 7 and 8) divided into two lobes by postocular constriction, neck well developed, vertex convex, longer to collum than wide across eyes (24:22); tylus ending in a sharp spine that slightly surpasses apex of jugae. Posterior lobe of head on dorsal aspect semicircular, on lateral aspect convex above. Eyes small, well separated from upper and lower margins of head. Antenna inserted level to upper margin of eye and about midway from eye to apex of head; antennal segments slender, filiform; first segment thicker than last three, slightly shorter than second and third together, with fine decumbent sparse pilosity, hairs as long as thickness of segment; last three segments with abundant similar pilosity, hairs slightly longer than thickness of corresponding segment. Head ventrally with 4 pairs of setigerous spines (s-spines); one near lower end of bucculae, one under eyes together near median line, one ventrolaterally behind eyes, and one almost between the third pair close together near median line. Beak: first segment slightly inflated apically, a pair of s-spines before apex; second segment slightly inflated, without spines; third long conical, without spines; first segment the longest, second about 1/2 as long, and third slightly shorter than second.

Pronotum as in figures 8 and 9; anterior lobe on dorsal aspect with

³ Wygodzinsky, P., 1966. A monograph of the Emesinae (Reduviidae, Hemiptera), Bull. Am. Mus. Nat. Hist. 133:1-614.

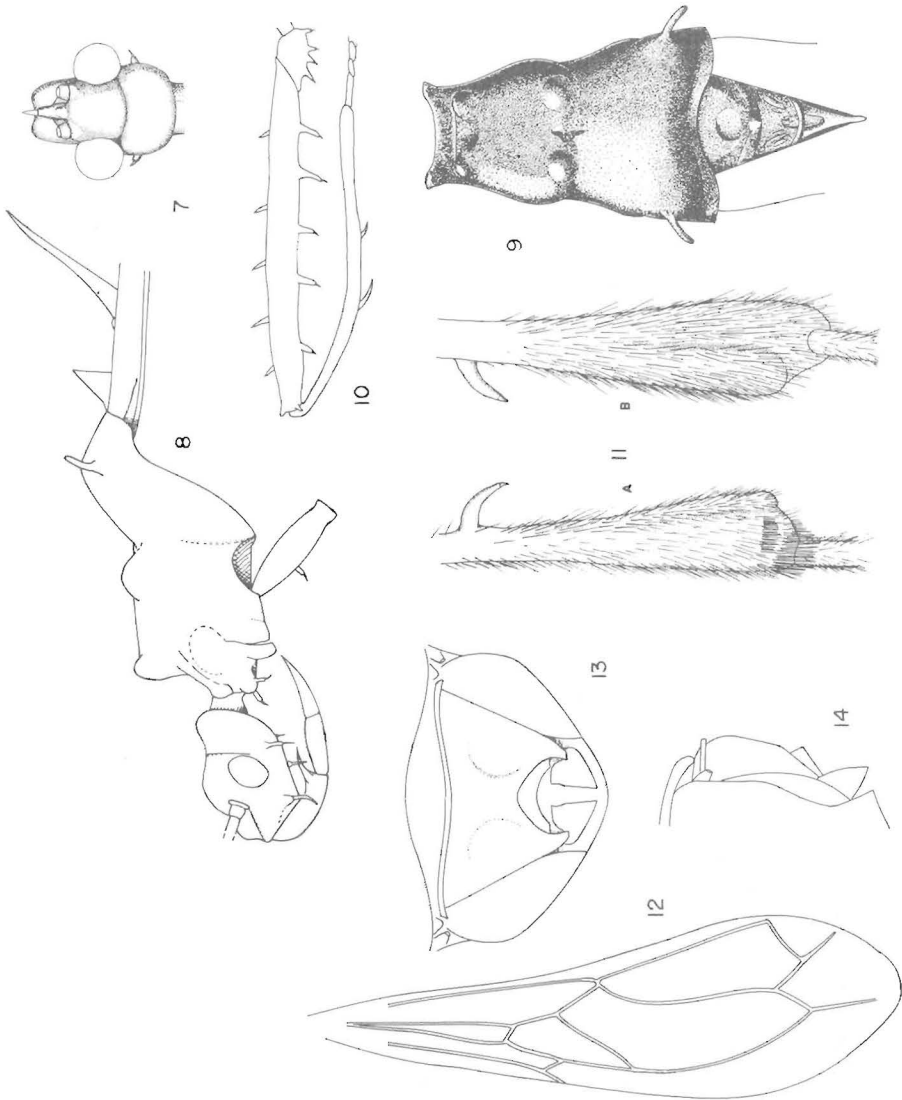


Plate II.—*Buninotus niger*, female; 7. head, dorsal; 8. head, pronotum, and spines of scutellum, lateral; 9. thorax, dorsal; 10. foreleg, lateral; 11. apex of foretibia, inside A, outside B; 12. forewing; 13. genital sclerites, lateral; 14. genital sclerites, caudal.

anterior angles roundly produced, with two anterior and two posterior humps; two s-spines in front of acetabula. Posterior lobe above level of anterior lobe, with a long spine inside humeral angle; posterior margin bisinuous. Pronotum polished, glabrous above and laterally; abundant short-pilose in front, along margins of acetabula, and medianly along stridulatory groove of prosternum. Legs (fig. 10-11): forecoxa as long as head to base of neck, cylindrical, a strong s-spine near base on anterior side, 3 strong s-spines on rear of inner face; trochanter with four s-spines along inner-lower surface, femur slightly curved as seen from above, with 5 s-spines along upper surface, spines shorter than thickness of segment, each slightly shorter than preceding, first four equidistant, basal farther apart; lower inner surface with 5 s-spines of nearly equal size, middle one slightly longer; tibia strongly curved on lateral aspect, thicker on apical fifth as a result of having a ventrolateral ridge that gradually increases in height towards apex, thickly covered with sensory hairs on inner surface of apical fifth, four long s-spines on inner side, the basal the shortest; first tarsal segment slightly shorter than last two together (6:7).

Buninotus niger NEW SPECIES

Female—shape as described and illustrated for genus. Body shiny black, abdomen ventrally mostly shiny copper-colored mixed with brown, forewing golden brown, veins concolorous.

Head across eyes 22, from apex of juga to base of collum 24, from apex of juga to base of posterior lobe of head 16, interocular space 11. Beak-22: 12:10. Pronotum 48, width at shoulders 19, greatest width of anterior lobe 26, width at humeral angles 40, length of anterior lobe 25, length of posterior lobe 28. Space between coxa I and II 35, between coxa II and III 20; foreleg - coxa 22, trochanter 10, femur 70, tibia 60, tarsi 14. Venation as in figure 12. Genital sclerites as in figures 13-14. Length 1.15-1.20 cm. Male unknown.

Holotype—female, Panama, Fortuna, Chiriquí, 8°44'N-82° W., at light, 22 July 1977, Henk Wolda collector, in NMNH, Cat. No. 75962. Paratype—female, teneral, mostly orange colored, dimensions similar to holotype, same collection data, 10 November 1976, in JMC.

Buninotus and other American saicine genera can be separated by means of the following key based on Monte's⁴:

- | | |
|---|-----------------------------|
| 1. Anterior tibiae and femora unspined | 2 |
| Anterior tibiae and femora spined | 3 |
| 2. Pronotum unspined, scutellum long spined | |
| | <i>Oncerotrachelus</i> Stal |

⁴ Monte, O., 1943. Notas sobre Saicinae (Hemiptera, Reduviidae). Rev. Brasil Biol. 3 (3): 361-64.

- Anterior lobe of pronotum spined, scutellum unspined
 *Saica* Amyot & Serville
3. Humeral angles of pronotum without processes, rounded
 *Tagalis* Stal
- Humeral angles of pronotum with spinelike processes 4
4. Forecoxa and anterior lobe of pronotum unarmed; foretibia straight;
 forewing with 3 closed cells
 *Bagriella* McAtee & Malloch
- Forecoxa spined, anterior lobe of pronotum with 4 spines or rounded
 humps 5
5. Anterior lobe of pronotum with 4 long vertical spines, forewing with
 3 closed cells; about 7 mm long *Paratagalis* Monte
- Anterior lobe of pronotum with 4 humps, forewing with 4 closed
 cells; over 10 mm long *Buninotus* new genus
- Species of *Saica* and *Buninotus* are over 10 mm long, species in the
 other genera are under 8 mm. Species of *Saica* are mostly reddish, the
 only known species of *Buninotus* is shiny black.

RESUMEN

De ejemplares colectados en Fortuna, Chiriquí, Panamá, el autor describe una nueva especie de *Ghilianella* (Emesinae) y un nuevo género, *Buninotus*, perteneciente a la subfamilia Saicinae de Reduviidae. Se detalla cómo separar éstos de especies y géneros relacionados. Se incluye una clave para los géneros americanos de la subfamilia Saicinae.