

ENTOMOLOGICAL NEWS

VOL. LXIX

NOVEMBER, 1958

No. 9

A New Genus for *Gerris euphrosyne* Kirkaldy, (Heteroptera, Gerridae)¹

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Kirkaldy described *Gerris euphrosyne* from Victoria, Alexandria, Australia, and said that the specimens were in the Montandon and Kirkaldy collections. We find in the Kirkaldy collection at the University of Kansas a winged female labeled "*Gerris euphrosyne* type" by Kirkaldy. It also carries the label "Victoria, Alexandria, F. L. Billinghamurst." Carrying this second label we find also a winged male, nine wingless males and four wingless females in the type series, and in the Torre Bueno collection a winged female, and a wingless male and female with the same label. While Kirkaldy wrote that *Gerris euphrosyne* "belongs to typical subgenus" we find that it belongs more closely to the *Tenagogonus-Limnometra* complex than to *Gerris*. Its color pattern is like that of *Tenagogonus-Limnometra* complex and has the pronotum with a median longitudinal black stripe. The metathoracic spiracle is not apically approximated to the pronotum as in *Gerris*, but at some distance away as in *Tenagogonus-Limnometra* complex. Its mesosternum is about four times as long as metasternum, whereas in no species of *Gerris* (except for *Eurygerris*) is the mesosternum more than three times as long as metasternum. It has more characters in common with *Tenagogonus* Stål than with *Limnometra* Mayr but differs from all of them in having the third segment of the

¹ Contribution No. 1,016 from the Department of Entomology, University of Kansas. This report is a by-product of a project conducted with the aid of a grant from the National Science Foundation.

beak shorter and stouter and not reaching onto mesosternum; the second, third and fourth segments of antennae being all short, each one less than two-thirds the length of the first segment, whereas in the *Tenagogonus-Limnometra* complex one or more of these may be as long as or often longer than the first and never all of them shorter than two-thirds of the first segment.

Since we have considered it expedient and useful to retain *Tenagogonus* Stål and *Limnometra* Mayr as separate genera (Hungerford and Matsuda, Univ. Kansas Sci. Bull. 39) it is necessary to propose a new genus for *Gerris euphrosyne* Kirkaldy which belongs to this complex for the reasons given above.

TENAGOGERRIS gen. nov.

Type species of the genus: *Tenagogerris euphrosyne* (Kirkaldy)

Gerrids closely related to *Tenagogonus*. Third segment of beak short and stout, not or barely reaching anterior margin of mesosternum. Second, third and fourth antennal segments short, each one less than two thirds the length of first segment. First front tarsal segment shorter than second. Hind coxa of male covering basal three ventral abdominal segments. Metasternum of male longer than first two ventral abdominal segments.

Male abdomen: Shorter than mesosternum. Last ventral abdominal segment without either connexival spine or with processes, longer than preceding segment. Seventh, eight and ninth segments together longer than or equal to four preceding segments together ventrally. Paramere vestigial.

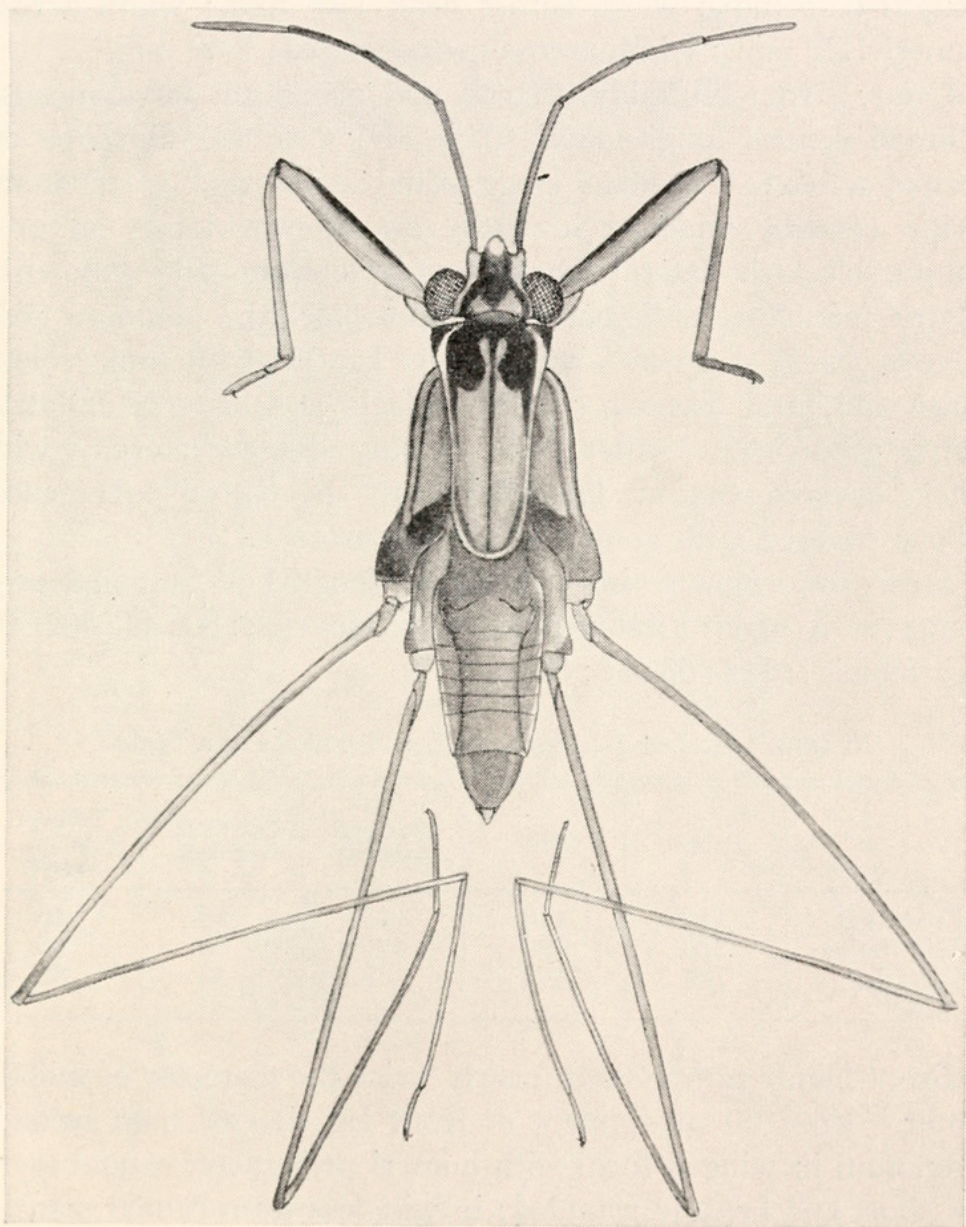
Redescription of **Tenagogerris euphrosyne** (Kirkaldy)

(Figures 1 and 2)

- 1902, *Gerris euphrosyne* Kirkaldy, G. W. Entomologist, 35: 138.
1925, *Gerris euphrysone* Hale, H. M. Arkiv för Zoologi 17A (20): 11 (typographical error, adds to distribution of type locality which was Alexandria, Northern Territory, six places in Queensland).

1933, *Gerris euphrosyne* Lundblad, O. Archiv für Hydrobiologie, Suppl. Bd. 12, Tropische Binnengewässer, 370.

1934, *Gerris euphrysone* Hungerford, H. B. Bulletin, Brooklyn Entomological Society, 29: 70 (typographical error).



Dorsal view of a wingless male of *Tenagogerris euphrosyne* (Kirkaldy).

Size: Winged female type: Length 9.11 mm.; width across head 1.64 mm.; width across humeri 2.14 mm.; width across mesoacetabula 3.23 mm. Winged male: Length 7.8 mm.; width

across head 1.55 mm.; width across humeri 1.85 mm.; width across mesoacetabula 2.9 mm. Wingless female: Length 9.53 mm.; width across head 1.76 mm.; width across humeri 1.51 mm.; width across mesoacetabula 3.53 mm. Wingless male: Length 6.55 mm.; width across head 1.47 mm.; width across humeri 1.22 mm.; width across mesoacetabula 2.69 mm.

Color: From Kirkaldy, "Head and pronotum ferrugineous; a broad central longitudinal stripe and a sublateral stripe on vertex, a narrow median longitudinal stripe and a sublateral stripe (greatly widened inwardly on anterior lobe) on pronotum, blackish, lateral margins of pronotum pale yellowish. Elytra ferrugineous fumate, nervures blackish. Femora pale fulvous, black at apex, longitudinally banded with same color; tibiae and tarsi blackish. Sterna black, a sublateral undulate stripe yellowish. Venter fawn colour, spotted laterally with black, covered (except laterally) with silver-grey pubescence. Above covered with golden yellow pubescence."

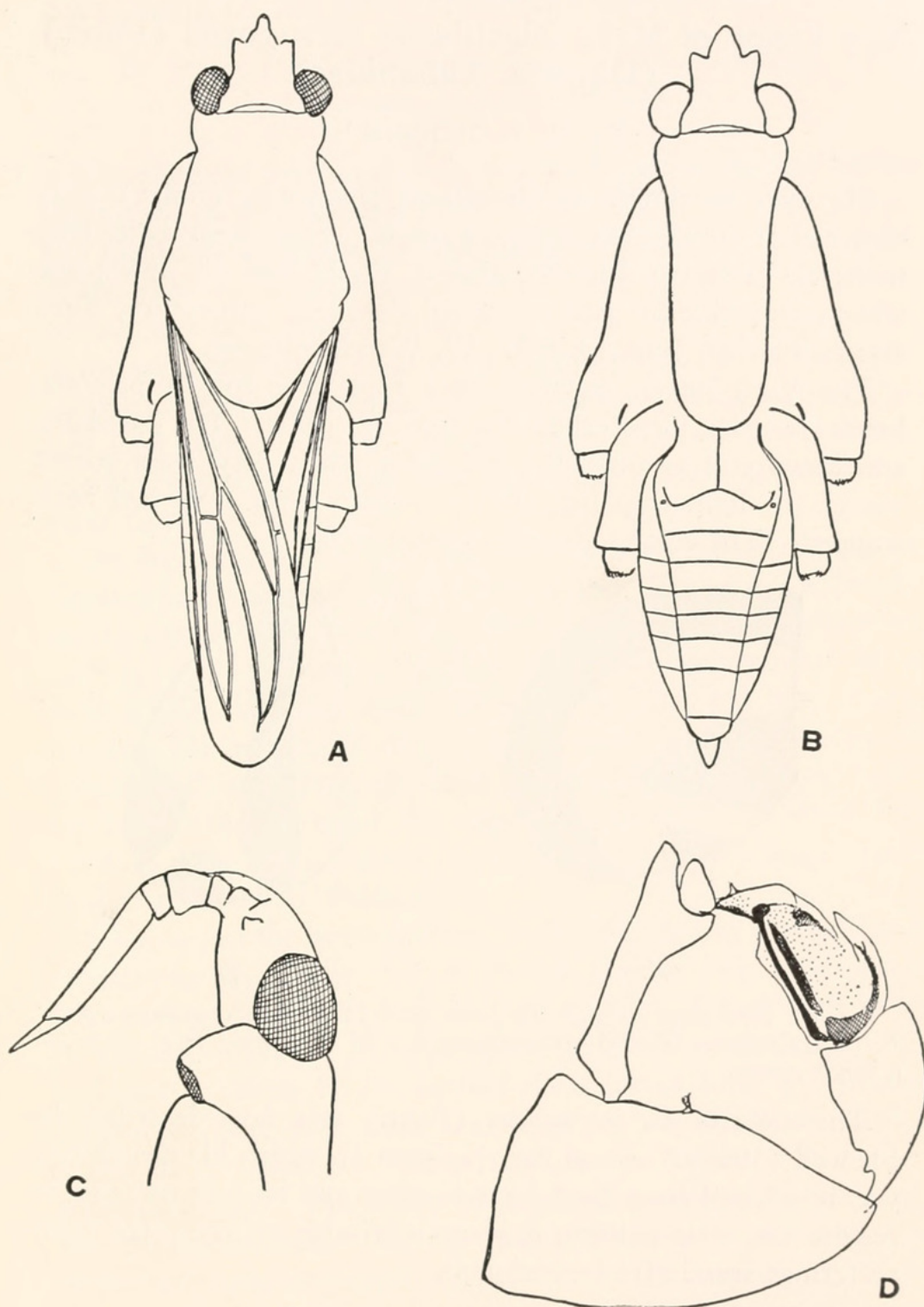
Structural characteristics: Relative lengths of antennal segments of a male: First: second: third: fourth:: 80: 44: 40: 50; of a female:: 114: 63: 55: 58.

TABLE 1. Relative Lengths of Leg Segments of a Male

	Femur	Tibia	1st tarsal segment	2nd tarsal segment	Total of tarsal segment
Front leg	115	110	15	25	40
Middle leg	310	290	120	26	146
Hind leg	295	192	38	20	58

Front femur rather stout, nearly twice the diameter of middle femur. First tarsal segment of front leg shorter than second. Pronotum in winged form with humeri prominent, caudal margin short and broadly rounded; in wingless form caudal margin also broadly rounded and short. Male without connexival spine; pygophore simply rounded on apical margin; paramere vestigial. Female with end connexivum slightly produced.

Location of types. In the Kirkaldy collection at the University of Kansas.



Tenagogerris euphrosyne (Kirkaldy)

- A. Dorsal view of a winged female.
- B. Dorsal view of a wingless female.
- C. Lateral view of the head.
- D. Lateral view of the male genital segment.



Hungerford, Herbert B. and Matsuda, Ryuichi. 1958. "A new genus for *Gerris euphrosyne* Kirkaldy, (Heteroptera: Gerridae)." *Entomological news* 69, 225–229.

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