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## THE GENUS *LYGRUS* FAHRAEUS, 1872 (COLEOPTERA, CERAMBYCIDAE)

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### ABSTRACT

*A revision of the genus Lygrus Fahraeus, 1872 is presented and its position among the Methiini discussed. Alloeme Lameere, 1893 and Nosoeme Kolbe, 1894 are considered synonyms of Lygrus. L. angolanus, sp. n., is described from Angola. Catalogue and key for Lygrus' species are presented. Neolygrus, gen. n., is erected for Lygrus bicinctus Jordan, 1903 (type-species) and L. trifasciatus Waterhouse, 1898. Tallyrama, gen. n. is established for Lygrus testaceus Gahan, 1904.*

This paper deals with the African genus *Lygrus* Fahraeus, 1872 which involves a miscellaneous group of species and a subdivision in three genera, two of which are new, is proposed. *Lygrus* is provisionally maintained among the Methiini but it is related to the Callidiopini.

The shape of anterior coxae and larval characters (Duffy, 1957) are strange to the Methiini. Similar coxae were noticed by Martins & Monné (1973: 23, fig. 8) in the South American genus *Niophis* Bates. Jordan (1894: 156) suggested affinities between *Ceresida* (= *Lygrus*) and the Callidiopini: "to be placed before *Ceresium* Newman". The position of the genus, however, must be left undecided until a comparison with other African Callidiopini is undertaken. 1959: 108 (Cat.).

### *Lygrus* Fahraeus, 1872

*Lygrus* Fahraeus, 1872: 55; Distant, 1904: 109; Ferreira, 1953: 189; Gilmour, 1954: 130 (key for species); Ferreira & Veiga-Ferreira, 1957: 29, 42; 1959: 108 (Cat.).

*Zoolygrus* Fahraeus, 1872: 194 (new name for *Lygrus*).

*Alloeme* Lameere, 1893: 40; Ferreira & Veiga-Ferreira, 1959: 105 (Cat.); Ferreira, 1965: 964 (Cat.), *syn. n.*

*Ceresida* Jordan, 1894: 156.

*Nosoeme* Kolbe, 1894: 55; 1897: 296; Ferreira & Veiga-Ferreira, 1959: 99 (Cat.), *syn. n.*

Type-species: of *Lygrus*, *L. apicalis* Fahraeus, 1872 (monobasic); of *Alloeme*, *A. murrayi* Lameere, 1893 (monobasic, a synonym of *Corethrogaster ruber* Thomson, 1858); of *Ceresida*, *C. suturalis* Jordan, 1894 (monobasic, a synonym of *Corethrogaster ruber*); of *Nosoeme*, *N. clavipes* Kolbe, 1894 (monobasic).

The synonymy between *Nosoeme* and *Lygrus*, besides morphological characters of adults, is reinforced by Duffy (1957: 89, 91) who wrote on the larvae of *Alloeme rubra*: "Head with genae bearing numerous long, strongly curved setae (as in *Nosoeme clavipes* Kolbe)".

GENERIC CHARACTERS

Distance between ocular lobes, on frons, smaller than distance between antennal insertions (except *rubrus* ♂); distance between superior ocular lobes much larger than diameter of one lobe; superior ocular lobes narrow, scarcely developed to vertex; antenniferous tubercles projected; maxillary palpi little longer than labial ones. Antennae longer than body in both sexes. Scape subcylindrical, shorter than segment III, with abundant asperate punctures. Segment III subequal in length to IV, scarcely projected in the inferior side of apex and scarcely longitudinally depressed on upper side. Prothorax (♂) a little longer than wide (except *clavipes*), scarcely constricted anteriorly and posteriorly, a little swollen at sides; (♀) as long as wide. Sides of prothorax (♂) with sexual punctuation. Prosternal process laminiform between coxae. Mesosternal process triangular, reaching the middle of coxae. Elytra finely pubescent, more flattened at apical half, rounded at tips; costae not indicated. Anterior coxae (see Martins & Monné, 1973: 23, fig. 8) with articular surface. Femora fusiform (except in *rubrus* where they are more pedunculate and clavate); posterior ones not reaching elytral tips. Segment I of posterior tarsi longer or as long as the following segments together.

As defined above, the following species do not fit into the genus: *Lygrus bicinctus*, *L. trifasciatus* and *L. testaceus*. For the reception of *bicinctus* and *trifasciatus* the new genus *Neolygrus* is erected and for *testaceus* the new genus *Tallyrama*.

KEY FOR THE SPECIES OF LYGRUS

- 1. Elytra with brownish areas or spots..... 2  
    Elytra unicolored or darker only along suture..... 3
- 2(1). (Based on Gilmour, 1954: 13). Underside dark ferruginous; elytra vaguely brownish, particularly laterally, but without distinctly marked fasciae or spots, the apex yellowish. South Africa (Transvaal, Natal).....  
    ..... *apicalis* Fahraeus
- Underside testaceous or brownish testaceous; elytra pale testaceous with distinct dark brown markings. South Africa (Natal).....  
    ..... *marleyi* Gilmour
- 3(1). Prothorax (♂) distinctly longer than wide; elytra reddish or reddish orange, brownish along suture and margins; female prothorax without granules, with very short pubescence, not covering the surface. Ghana to Zaire..... *rubrus* (Thomson)
- Prothorax (♂) wider than long; elytra unicolored; female prothorax with lateral granules or densely pubescent..... 4
- 4(3). Densely pubescent on head, pronotum and anterior half of elytra; antenna segments pale with brownish apices. Uganda, Tanzania.....  
    ..... *clavipes* (Kolbe)
- Body finely and sparsely pubescent; antennae unicolored. Angola.....  
    ..... *angolanus*, sp. n

***Lygrus angolanus*, sp. n.**  
 (Fig. 1)

General color reddish brown, clearer at ventral side of body. Frons finely and densely punctured; vertex (50x) very finely granulated. Antennae reaching elytral tips approximately at the middle of segment VII (♂), or at the middle of

segment VIII (♀). Scape granulated. Prothorax wider than long in both sexes. Pronotum (♂) smoother and shiner at central region, with fine punctation to the sides and some granules (50x) which reach the posterior two thirds of prosternum; prosternum smoother and shiner than the sides of prothorax. Prothorax (♀) relatively shorter and wider; pronotum finely punctured; mesosternal process wider, triangular, truncated at apex. Elytra very finely and sparsely pubescent, finely punctured. Femora finely and sparsely pubescent.

Dimensions, in mm. ♂: total length, 7.7; prothorax length, 1.5; prothorax width, 1.6; elytral length, 5.4; humeral width, 2.1. ♀: total length, 8.5; prothorax length, 1.3; prothorax width, 1.6; elytral length, 6.5; humeral width, 2.3.

Material. ANGOLA. *Huambo*: Nova Lisboa, 1♂, 1♀, 28.IX.1949, B. Malkin col. Holotype ♂ in the California Academy of Sciences, San Francisco; paratype ♀ in the Museu de Zoologia, Universidade de São Paulo.

#### Catalogue of *Lygrus* species

1. *angolanus*, sp. n.

Distribution: Angola.

2. *apicalis* Fahraeus, 1872

*Lygrus apicalis* Fahraeus, 1872: 56; Distant, 1898: 369; 1904: 109, pl. 10, fig. 15; Ferreira, 1953: 189; Gilmour, 1954: 130; Ferreira & Veiga-Ferreira, 1957: 43; 1959: 108 (Cat.).

Distribution: Angola, Rhodesia, South Africa.

3. *clavipes* (Kolbe, 1894), *comb. n.*

*Nosoeme clavipes* Kolbe, 1894: 55; 1897: 269, pl. 3, fig. 38; Hintz, 1911: 426; Duffy, 1955: 203; 1957: 17, 91, fig. 59; Ferreira & Veiga-Ferreira, 1959: 99 (Cat.); Breuning & Villiers, 1972: 250.

Distribution: Uganda, Tanzania.

4. *marleyi* Gilmour, 1954

*Lygrus marleyi* Gilmour, 1954: 128, pl. 1, fig. 6; Ferreira & Veiga-Ferreira, 1957: 43, 45; 1959: 109 (Cat.).

Distribution: South Africa (Natal).

5. *rubrus* (Thomson, 1858), *comb. n.*

*Corethrogaster? ruber* Thomson, 1858: 161.

*Alloeme rubra*; Aurivillius, 1912: 32 (Cat.); Lepesme & Breuning, 1952: 49; 1956: 655; Lepesme, 1953a: 17, pl. 5, fig. 3, 1953b: 52; 1955: 841; Quentin, 1954: 107, fig. 1 b (male genitalia, abdomen); Duffy, 1957: 89 (larva, host plants); Villiers, 1959: 28; Ferreira & Veiga-Ferreira, 1959: 105 (Cat.); Villiers, 1968: 1673; Fuchs, 1969: 345; 1974: 219, 222.

*Alloeme murrayi* Lameere, 1893: 40.

*Ceresida suturalis* Jordan, 1894: 156, pl. 9, fig. 1.

Distribution: Ivory Coast to Angola.

#### *Neolygrus*, gen. n

Type-species: *Lygrus bicinctus* Jordan, 1903.

Eyes finely granulated. Distance between ocular lobes on frons larger than distance between antennal insertions; distance between upper ocular lobes much larger than width of one lobe; upper ocular lobes narrow, scarcely developed to vertex; antenniferous tubercles projected, situated on a transversal elevation; maxillary palpi short. Antennae longer than body in both sexes. Scape swollen to inner side at base, much shorter than segment III, with abundant asperate punctures. Segment III cylindrical, a little shorter than IV, with aspe-

rate sculpture. Antennae of male reaching elytral tips at apex of segment V. Prothorax longer than wide, subcylindrical, constricted anteriorly and posteriorly; in males longer than in females. Sides of male prothorax with a differentiated irregular area, well developed, with sexual punctuation. Prosternal process narrow, curved. Mesosternal process sub-rounded at apex, as wide as a half of the width of an intermediate coxa. Elytra glabrous, densely punctate over all surface, rounded at apex; costae not indicated. Anterior coxae without articular surface. Femora pedunculate and clavate; the peduncle very long; posterior ones not reaching elytral tips. Segment I of posterior tarsi longer than following segments together.

The eyes are finely granulated and the position of this genus is unknown to me. Following Lacordaire's (1869: 42) key, *Neolygrus* has intermediate coxal cavities open; anterior coxae projected, angulated laterally, exceeding prosternal process; posterior coxae separated; antennae inserted on ocular emargination; scape short; anterior coxal cavities open behind and male abdomen not constricted at base. Two tribes have these characters: Psebiini and Bimiini. I am sure that the genus cannot belong either to Psebiini (Quentin & Villiers, 1971) or Bimiini. Some genera of South American Methiini have eyes finely granulated (*Chromoeme*, *Necydalosaurus*, etc.) so, *Neolygrus* is doubtfully maintained in the tribe.

#### Catalogue of the species of *Neolygrus*

1. *bicinctus* (Jordan, 1903), comb. n.  
*Lygrus bicinctus* Jordan, 1903: 139; Gilmour, 1954: 130; Ferreira & Veiga-Ferreira, 1959: 108 (Cat.).  
 Distribution: Cameroon.
2. *trifasciatus* (Waterhouse, 1898), comb. n.  
*Lygrus trifasciatus* Waterhouse, 1898: 261; Gilmour, 1954: 130; Ferreira & Veiga-Ferreira, 1959: 109 (Cat.).  
 Distribution: Tanzania.

#### **Tallyrama**, gen. n.

Type-species, *Lygrus testaceus* Gahan, 1904 (fig. 2).

*Tallyrama* has affinities with *Metallyra* and related genera, which were reviewed by Lepesme & Breuning (1956). By unarmed prothorax, segment III of antennae scarcely shorter than IV and upper ocular lobes of eyes approached (fig. 2), *Tallyrama* is related to *Metallyra* and separated from the other genera cited in Lepesme & Breuning's key (*l.c.*, p. 208). It differs from *Metallyra*: upper ocular lobes strongly developed, almost covering all dorsal head surface; prothorax wider in front than at base; pronotum (♂) strongly asperate; mesosternal process sharply acuminate to apex; elytra without longitudinal elevations and depressions; segment I of posterior tarsi very long, much longer than following segments together.

Eyes strongly granulated. Distance between ocular lobes on frons smaller than the distance between antennal sockets; distance between upper ocular lobes very narrow (subequal to the diameter of the base of the scape); upper ocular lobes very large, with *ca.* 8-9 rows of ommatidia. Antenniferous tubercles not projected, widely separated. Maxillary palpi as long as labial ones. Antennae pubescent, reaching the middle of elytra in the middle of segment VI (broken in the specimen studied). Scape shining, gradually swollen to apex, without asperate punctures. Segment III scarcely shorter than IV, not longitudinally depres-

sed on superior surface. Prothorax ( $\sigma$ ) wider in front, narrowed posteriorly, as long as wide; sides unarmed. Pronotum with asperate punctures, more concentrated near the anterior margin. Prosternal process laminiform; the apex not exceeding the coxae. Mesosternal process triangular, acutely pointed posteriorly, reaching the middle of coxae. Anterior coxae strongly transverse, without articular surface. Elytra sparsely pilose, without longitudinal depressions or elevations, rounded at tip. Femora fusiform; posterior ones not reaching elytral tips. Segment I of posterior tarsi very long, longer than following segments together.

Originally described from South Africa, Transvaal, Waterburg District, *Tallyrama testacea* seems to be very rare. I studied one male from N. Transvaal, Zoutpan, Zoutspanberg (Soutspanberg), 15-30.XI.1932, G. van Son. col., M. C. Ferreira det. (Transvaal Museum).

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Fig. 1, *Lygrus angolanus*, n. sp., holotype ♂.



Fig. 2. *Tallyrama testacea* (Gahan, 1904), ♂.