

**REVIEW OF THE GENUS *HINDA* MULSANT
(COLEOPTERA, COCCINELLIDAE, HYPERASPINAE,
BRACHIACANTHADINI)¹**

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Abstract

The genus *Hinda* Mulsant is revised and illustrations of pertinent characters are provided. A **new species**, *Hinda joeli* is described. *Hyperaspis terminata* Gorham, *Hyperaspis humerata* Mulsant and *Hyperaspis decemverrucata* Mulsant are **new combinations**. *Hinda guttipennis* Weise is transferred to *Cyra* Mulsant as *Cyra guttipennis* Weise, **new combination**. A key to the species is added.

The genus *Hinda* Mulsant was originally proposed by Mulsant (1850) for the inclusion of only one species, *H. designata* Mulsant. Crotch (1874) placed this species in the genus *Hyperaspis* Redtenbacher because he found no characters that allowed its separation into another genus. Chapuis (1876) included *Hinda* in “Hyperaspites” separating it from *Hyperaspis*. In Korschefsky (1931) and Blackwelder (1945), the genus *Hinda* was discussed as including seven species. Duverger (1989) placed the genus *Hinda* in the tribe Brachiacanthadini. Milléo *et al.* (1997), using an identification key, redefined the genera *Hinda* and *Cyra* Mulsant and formed the new combination of *Hinda uncinata* (Mulsant). One of the Weise species, *Hinda guttipennis* does not belong in this genus; we provisionally transfer it to *Cyra*.

The specimens examined in this study were provided by the following institutions: Museu Nacional, Universidade Federal do Rio de Janeiro (**MNRJ**), Museu de Zoologia da Universidade de São Paulo (**MZSP**), Coleção Entomológica Pe. J. S. Moure, Curitiba (**DZUP**), The Natural History Museum, London (**BMNH**) and University Museum of Zoology, Cambridge (**UMZC**), England, and Museum für Naturkunde der Humboldt-Universität (**ZMHU**), Berlin, Germany.

Hinda Mulsant
Figs. 1–14

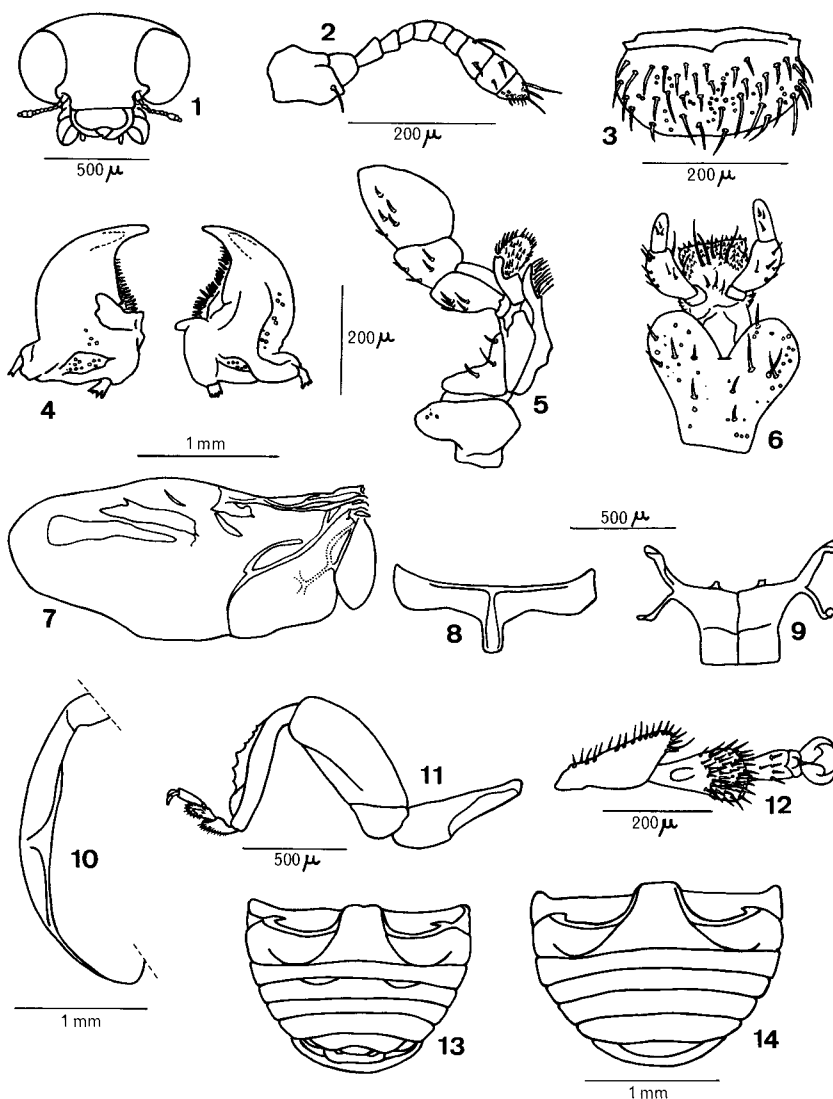
Hinda Mulsant 1850:518–520. Crotch 1874:213; Chapuis 1876:232; Weise 1910:59–60; Korschefsky 1931:177; Blackwelder 1945:446; Chapin 1966:280; Gordon 1987:26; Fürsch 1989:6–14, 1990:4–11; Duverger 1989:143–146; Milléo *et al.* 1997:392.

Hynda: Weise 1895:127.

Type-species. *Hinda designata* Mulsant, by monotypy.

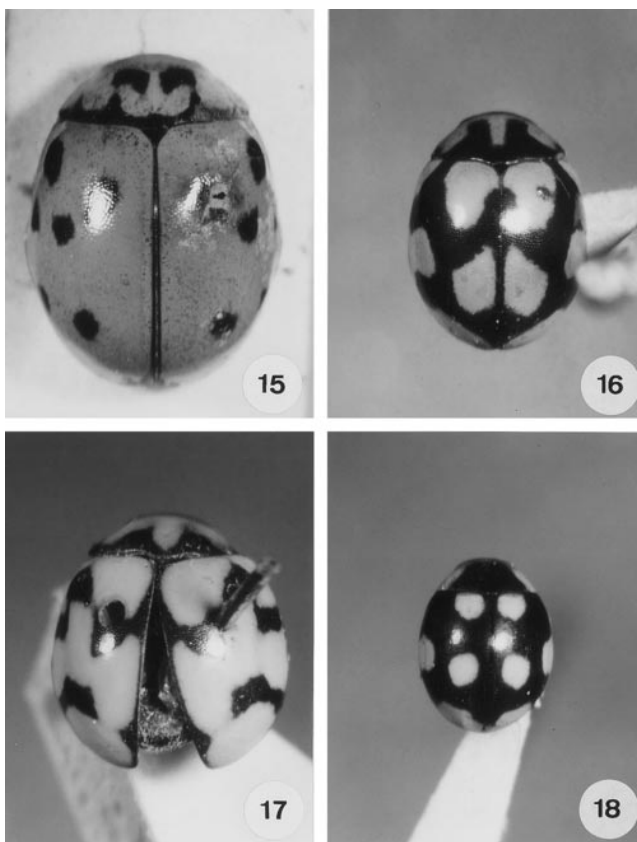
Redescription. Body oval, convex (Fig. 18); integument black or dark-brown,

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Figs. 1–14. *Hinda modesta*. 1) head, frontal view; 2) antenna; 3) labrum; 4) mandibles; 5) maxilla; 6) labium; 7) wing; 8) prosternal process; 9) metendosternite; 10) epipleuron; 11) anterior leg; 12) tarsus, ventral view; 13) abdomen, male; 14) abdomen, female.

with yellow spots, or light yellow with brown spots. Head with sexually dimorphic spots. Eyes finely faceted and glabrous, emarginate near antennal insertions (Fig. 1). Antennae short, composed of eleven antennomeres; scape twice as long as wide; pedicel quadrangular; antennomeres 3–8 slender; 9–10 longer; 11 triangular (Fig. 2). Antennal insertion exposed. Clypeus with apical margin almost rectilinear and with lateral margins almost straight (Fig. 1). Labrum ap-



Figs. 15–18. 15) *Hinda buqueti*; 16) *Hinda decas*; 17) *Hinda designata*; 18) *Hinda modesta*.

parently rectangular in shape, separated from cephalic capsule by straight, membranous clypeus (Fig. 3). Mandible large and robust, strongly sclerotized, with two incisive teeth, apical and subapical, with pointed median molar on right mandible, squared (less pointed) on left (Fig. 4). Maxillae sclerotized; palpomere 4 securiform with sides that diverge slightly (Fig. 5). Labium having anterior margin of ligula densely covered with small spines, having ventral median portion of ligula with several long bristles; each labial palp with three articles, the basal being shorter, and the last being narrower in the distal region. Mentum cordiform, with rounded apical projections; prementum truncate, with long bristles in median region between palps (Fig. 6). Pronotum transverse, with or without spots; prosternal carinae convergent and terminating together at base of prosternum; prosternal process with nearly parallel sides (Fig. 8). Metendosternite trapezoidal, with straight lateral borders and very shallow V-shaped anterior borders, with smaller angle between proximal tendons; anterior arms with nearly straight apex (Fig. 9). Wings with reduced alar venation; radial sector disappearing and junction of subcosta and radius, terminating separately; first and

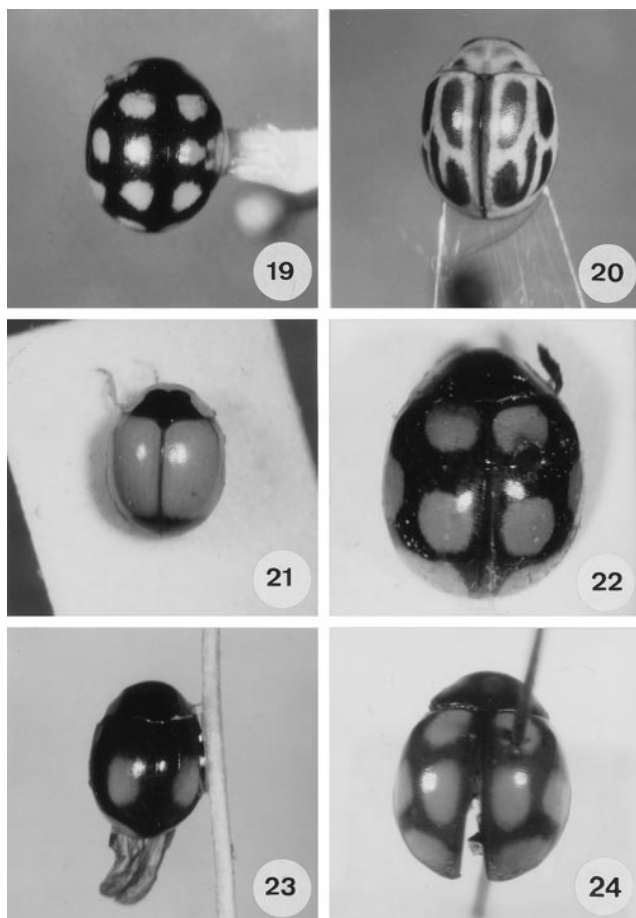
second anal veins evident but with the empusal veins Ea and Eb vestigial (Fig. 7). Elytra oval with raised humeral callosity and with lateral margin not flattened (Fig. 18); epipleuron with strong excavation to receive apex of the posterior femur (Fig. 10). Femur deeply excavated to receive tibia. Anterior tibia thin, with strongly serrated anterior border and with small foliate projections with marginal microbristles; strongly excavated to receive tarsus (Fig. 11). Second tarsomere triangular in ventral view; tarsal claws appendiculate (Fig. 12). Abdomen with incomplete post-coxal lines on the first visible sternite; six visible segments present in the female, seven in the male (Figs. 13, 14); males of some species with modifications in sixth visible sternite. Male genitalia: Median lobe asymmetrical, except in *H. decas* and *H. designata*, widened at base, with apex either straight or truncated. Parameres foliate, articulate in basal region, longer than median lobe, with dense marginal file of long bristles, sometimes with small, sparse internal bristles. Siphon strongly sclerotized, curved, modified apex and variable siphonal capsule. Female genitalia: Spermatheca cylindrical, arched, with rounded cornus, generally with one small ramus; infundibulum present; coxites wide with slender bristles, without stylus.

Type Material. The lectotype (Gordon 1987) was studied, and is located in the Reich Collection of the University Museum of Zoology, Cambridge University, Cambridge, England.

Remarks. The genus *Hinda* is at present in the tribe Brachiacanthadini together with the genera *Brachiacantha* Chevrolat in Dejean and *Cyra*. *Hyperaspis* and *Corystes* Mulsant, in the related tribe Hyperaspini, may be compared (Milléo and Almeida, 1999). *Hinda* is distinguished principally by the anterior tibia with serrated external margins (Fig. 11). It differs from *Cyra* by the presence of strong excavations in the epipleura (Fig. 10). It differs from *Corystes* and *Hyperaspis* in that *Hinda* has an oval-shaped body, male genitalia with parameres connected directly to the median lobe and female genitalia with an infundibulum and C-shaped spermatheca. The geographic distribution of *Hinda* includes nearly all of South America.

Key to the Species of *Hinda* Mulsant

- | | | |
|----|--|---------------------|
| 1 | Pronotum and elytra light yellow with brown to black spots | 2 |
| 1' | Pronotum and elytra black with yellow spots, these spots sometimes coalescing to form irregular pattern | 4 |
| 2 | Pronotum and elytra light yellow with triangular apical black spots (Fig. 21) | <i>H. terminata</i> |
| 2' | Each elytron with more than one spot | 3 |
| 3 | Each elytron with four elongate brown spots, and with sutural stripe of the same color (Fig. 20) | <i>H. uncinata</i> |
| 3' | Each elytron with six small round black spots, and with narrow sutural stripe of the same color as the spots (Fig. 15) | <i>H. buqueti</i> |
| 4 | Each elytron with three yellow spots, one on the disk, one very small near humeral callus, and one transverse and apical (Fig. 23) | <i>H. joeli</i> |
| 4' | Each elytron with more than three yellow spots | 5 |
| 5 | Each elytron with four yellow spots | 6 |
| 5' | Each elytra with five or more yellow spots | 7 |
| 6 | Elytral spots rounded, light yellow, small, with space between spots mostly equal to or greater than diameter of a spot (Fig. 18) | <i>H. modesta</i> |
| 6' | Elytral spots large, brown, with the space between the spots smaller than the diameter of a spot (Fig. 22) | <i>H. humerata</i> |



Figs. 19–24. 19) *Hinda regularis*; 20) *Hinda uncinata*; 21) *Hinda terminata*; 22) *Hinda humerata*; 23) *Hinda joeli*; 24) *Hinda decemverrucata*.

- | | | |
|----|---|--------------------------|
| 7 | Elytral spots coalescent | 8 |
| 7' | Elytral spots not coalescent | 9 |
| 8 | Pronotum without defined spots, with black area near base (Fig. 17) | |
| | | <i>H. designata</i> |
| 8' | Pronotum with three large, oval, longitudinal, yellow spots (Fig. 24) | |
| | | <i>H. decemverrucata</i> |
| 9 | Elytra with five large irregular spots (Fig. 16) | <i>H. decas</i> |
| 9' | Elytra with six small rounded spots (Fig. 19) | <i>H. regularis</i> |

Hinda buqueti (Mulsant)

Figs. 15, 25

Cleothera buquetii Mulsant 1850:542.

Hyperaspis buqueti: Crotch 1874:213.

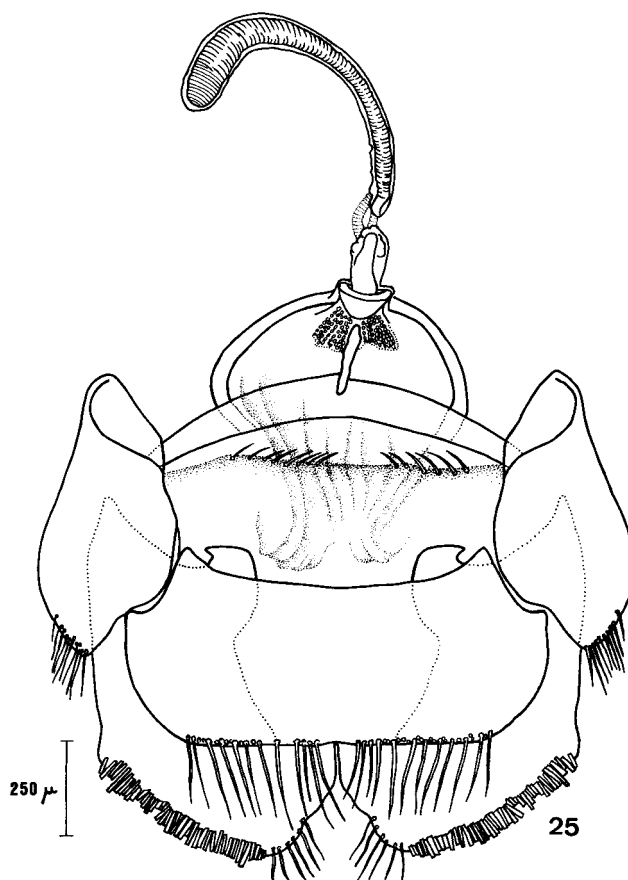


Fig. 25. *Hinda buqueti*. Female genitalia.

Hynda buqueti: Weise 1895:127.

Hinda buqueti: Korschefsky 1931:177; Blackwelder 1945:446; Gordon 1987: 26.

Diagnosis. Body oval-convex. Integument yellow with black spots on pronotum and elytra (Fig. 15). Base of pronotum with transversal black band having four projections extending anteriorly half length of pronotum, and with two apical trapezoidal spots. Scutellum black. Each elytrum with six maculae: the first small, round, over the humeral callus; the second through fourth positioned around the dorsal callus, approximately the same size but with the second largest, the second next to the suture, the third below the humeral callus, the fourth next to the external margin; the fifth and sixth in the posterior half of the elytron, the fifth being centrally located on the disc, the sixth being smaller and nearer the external margin. Elytra also with straight sutural stripe, the same color as the spots, extending from the scutellum to the elytral apex. Length 5.58 mm; width 4.33 mm.

Male. Unknown.

Female. Genital plate wide, pointed at apex, with one small style; spermatheca cylindrical, forming an arc with rounded cornus and small ramus. Last sternite with dense file of bristles along apical border (Fig. 25).

Remarks. *Hinda buqueti* is the largest species in the genus. It, along with *H. uncinata* and *H. terminata*, has a yellow background integument, and the three of these have a similar geographic distribution in the Atlantic Coastal Forest of Brazil.

Type material. One specimen of *H. buqueti*, located in the BMNH has the following labels: [Type], [57–71], [Buqueti—Dej.—Brésil], [named by Mulsant]. Gordon (1987) indicated, with doubt, that the type material should be located in the Muséum Histoire Naturelle, Lyon. Mulsant (1850) in the original description of *Cleothera buqueti* wrote: “Patrie, Brésil (collect. Buquet, Dejean, Germar e Schaum).”

Material examined. Brasil: Santa Catarina, FCC 1057, one specimen (DZUP); one specimen [Type] (BMNH); [Brazil] two specimens (BMNH); [Chevr.] two specimens (BMNH).

Hinda decas Weise
Figs. 16, 26, 27

Hinda decas Weise 1902:171; Korschefsky 1931:177; Blackwelder 1945: 446.

Diagnosis. Body oval-convex. Integument black with yellow spots on pronotum and elytra (Fig. 16). Pronotum black at base, with two projections towards apex forming letter “M”. Scutellum black. Each elytron with five large spots: the first oval and basal; the second, smallest, on humeral callus; the third, below first, close to suture, approximately same size as first, quadrangular, with oblique base and truncate apex; the fourth linked to external elytral border, with small central constriction and with rounded internal borders; fifth spot apical, oval, linked to external border. Length 3.92–4.08 mm. Width 3.08–3.50 mm.

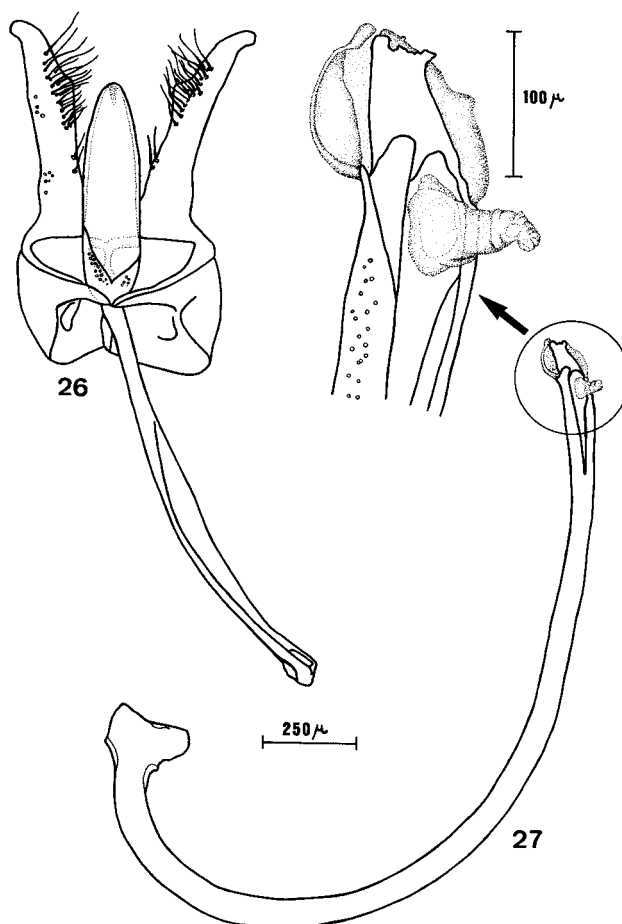
Male. Median lobe symmetrical, with rounded apex, shorter than parameres. Parameres wide at base and constricted at apical where they narrow and turn outward to end in rounded point (Fig. 26). Siphon curved, with truncate apex and membranous projections (Fig. 27).

Female. Unknown.

Remarks. *Hinda decas* resembles *H. designata* in color and in position of the spots, and in the symmetrical lobes of the male genitalia. However, *H. decas* does not have the central spot of the elytral disc, and other aspects of the male genitalia are different. In *H. decas* the parameres are narrow near the apex, while in *H. designata* they are wide and concave at the apex. It (and that of *H. designata*) are restricted to Colombia.

Type Material. One specimen of *H. decas*, indicated by Weise as from Thieme, Colombia, Manizales (Patino), with a hand-written label *Hinda decas* m., possesses two additional labels: one printed “Zool. Mus. Berlin” and the other with: “Lectotype, *Hinda decas* Weise Gordon 1971,” the designation of which was unpublished. This material is deposited in the ZMHU.

Material Examined. Colombia. Thieme col., lectotype, one specimen (ZMHU); locality not indicated, one specimen (ZMHU).



Figs. 26–27. *Hinda decas*. 26) tegmen; 27) siphon.

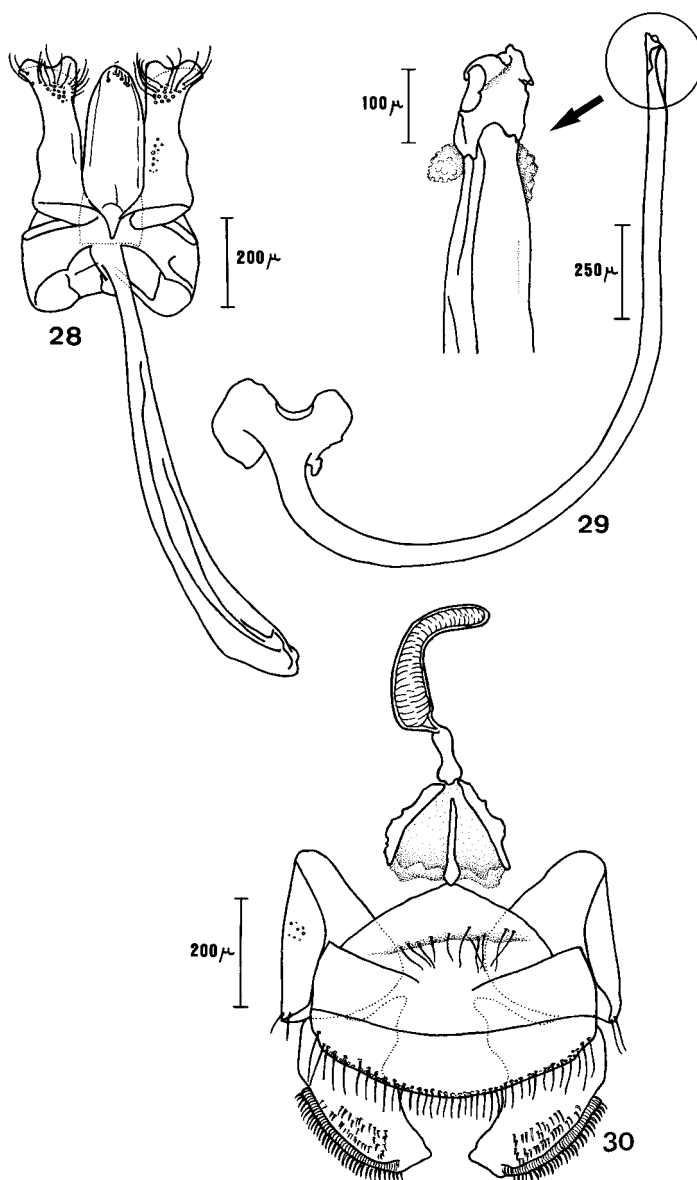
Hinda designata Mulsant

Figs. 17, 28–30

Hinda designata Mulsant 1850:518; Korschevsky 1931:177; Blackwelder 1945:446; Gordon 1987:26.

Hinda quinquedecimmaculata Weise 1895:127; Korschevsky 1931:177; Blackwelder 1945:446.

Diagnosis. Body oval-convex. Integument black with yellow spots on pronotum and elytra (Fig. 17). Pronotum with black area in base with two large triangular projections towards apex. Scutellum black. Each elytron with six more or less coalescent spots: the first rounded, close to base and suture, linked to second at base which is on humeral callus; third below first, close to suture; fourth, in central disc, nearly rectangular; fifth spot linked to external border;



Figs. 28–30. *Hinda designata*. 28) tegmen; 29) siphus; 30) female genitalia.

third, fourth and fifth spot connected to each other; sixth spot apical, oval and transverse. Length 3.50–4.25 mm. Width 2.83–3.50 mm.

Male. Median lobe asymmetrical, with rounded, slightly pointed apex, smaller than parameres. Parameres wide at base, constricted in third apical,

apically forming two outward curving tips (Fig. 28). Siphon elongate, curved, with truncated apex and membranous projections (Fig. 29).

Female. Genital plate wide, with small style; spermatheca cylindrical, forming an arc with rounded cornus, ramus poorly evident; infundibulum elongate. Last sternite with dense array of elongate bristles on the apical border (Fig. 30).

Variation. The pronotum may have three black projections, one oval in the center, and two lateral, rounded and reaching the margin. The elytral spots may not be connected to each other.

Remarks. This species is similar to *H. decas* in coloration and symmetry of the male genitalia. However they differ in the larger number of yellow spots in *H. designata* and in the paramere which in this species is wide with a concave apex. The species, like *H. decas*, is limited to Colombia.

Type Material. *Hinda designata* was described by Mulsant from Santa Fé de Bogotá (collect. Dejean, Reiche). The lectotype was designated by Gordon in 1987 and contains that label, plus a blue label [TYPE] and another with the following: [TYPE, designata, Reich]. This specimen was studied and is deposited in UMZC. The type of *H. quinquedecimmaculata* was described by Weise as from Colombia (Bang-Haas). It has a label with the following: [*Hinda quinquedecimmaculata* m. 1895]. It has also another label: [Lectotype *Hinda quinquedecimmaculata* Weise Gordon 1971]; however this designation was not published. This material was studied and is deposited in ZMHU.

Material Examined. Colombia. Santa Fé de Bogotá, lectotype, one specimen (ZMHU); one specimen, lectotype (ZMHU); Thieme col., two specimens (ZMHU); Staudinger col., two specimens (ZMHU).

Hinda modesta Weise

Figs. 18, 31–33

Hinda modesta Weise 1910:59; Korschefsky 1931:177; Blackwelder 1945:446.

Diagnosis. Body oval-convex. Integument black, pronotum and elytra with yellow spots (Fig. 18). Pronotum with transverse black trapezoid-shaped spot, bordered antero-laterally with narrow yellow margin. Each elytron with four spots: the first, a round basal spot close to suture and to base of elytron; the second, also round, slightly larger than first and near the suture in center of elytral disc; third, also round, close to lateral margin; fourth, transverse, largest and very close to suture and to external border of elytron. Length 2.58–2.92 mm. Width 1.92–2.25 mm.

Male. Median lobe asymmetrical, smaller than parameres, with wide base and truncate apex; parameres wide, with long bristles (Fig. 31). Siphon long, curved, with modified membranous apex (Fig. 32).

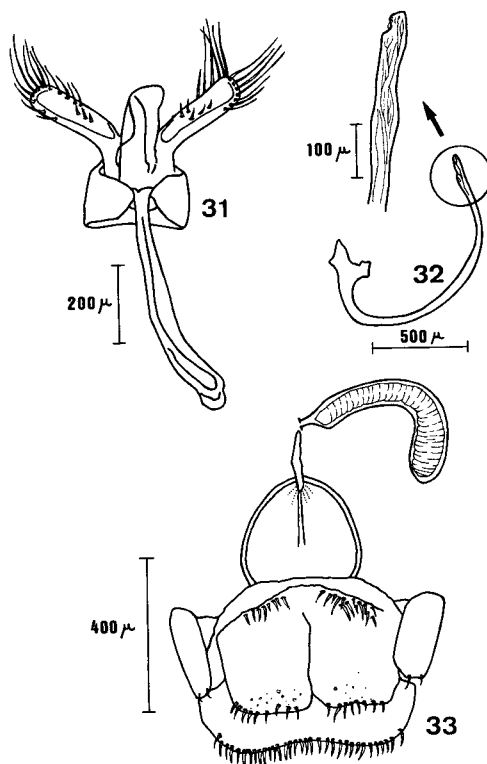
Female. Genital plate wide with small style; spermatheca arched, cylindrical, with rounded cornus and poorly evident ramus; infundibulum elongate. Last sternite with dense elongate bristles on apical border (Fig. 33).

Variation. A lateral spot is sometimes present between the elytral callus and the external border, and is triangular, small or may join the third spot.

Remarks. *Hinda modesta* resembles *H. regularis*, *H. humerata* and *H. joeli* in color, but the spots are distributed differently, and the genitalia differ.

Type Material. The holotype, male, is from Itapura, São Paulo, 1904, of 2.08–3.00 mm, was described by Weise, and was requested from ZMHU but could not be found.

Material Examined. Brazil. Pará: Benfica, Ananindéua, 7.XI.1962,



Figs. 31–33. *Hinda modesta*. 31) tegmen; 32) siphon; 33) female genitalia.

J. Bechyné col., Convênio DZSP-Goeldi, five specimens (DZSP), 23.X.1962, four specimens (DZSP); VIII.1964, Machado & Pereira, one specimen (DZSP); Santa Isabel of Pará, 30.III.1962, J. Bechyné col., Convênio DZSP-Goeldi, six specimens (DZSP); Belém (Icoraci), 3.VIII.1962, J. Bechyné col., five specimens (DZSP); (Utinga), 2.II.1962, J. Bechyné col., two specimens, 10.X.1962, one specimen (DZSP); Jacareacanga, X.1959, M. Alvarenga, one specimen (DZUP); Amazonas: Tapuruquara (Rio Negro), 25–27.XI.1962, J. Bechyné col., Convênio DZSP—Goeldi, six specimens (DZSP); Rio Cauaburi, 7–8.XII.1962, J. Bechyné col., two specimens (DZSP); Rondônia, 29.X.1986, C. Elias leg, one specimen (Polonoeste) (DZUP); unknown origin, one specimen, FCC 18 (MNRJ).

Hinda regularis Erichson

Figs. 19, 34

Hinda regularis Erichson 1847:183; Mulsant 1853:292; Weise 1899: 269; 1902:174; Korschefsky 1931:177; Blackwelder 1945:446.

Diagnosis. Body oval-convex. Integument black with yellow spots on pronotum and elytra (Fig. 19). Pronotum with two lateral round black spots reaching the border, and meeting in anterior region. Scutellum black. Each elytron

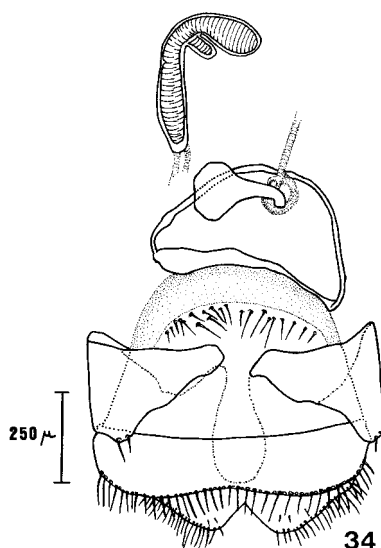


Fig. 34. *Hinda regularis*. Female genitalia.

with seven large spots: the first round, basal; the second elongate, on outer side of humeral callus; the third triangular, below and in line with first, close to elytral suture; fourth in center of anterior half of disc; the fifth close to suture and below first and third spots; the sixth connected to external border; seventh round, apical, connected to external border. Length 3.00 mm. Width 2.58 mm.

Male. Unknown.

Female. Genital plate wide, with style evident; apermatheca cylindrical, arched, with round horn poorly evident ramus. Last sternite with dense array of elongate bristles on apical margin (Fig. 34).

Remarks. *Hinda regularis* is similar to *H. modesta*, *H. humerata* and *H. joeli* in the pattern of elytral spots. They differ, however, in having a different number of spots, and the females have different genitalia patterns. This species is restricted to Peru.

Type Material. The holotype, from Peru, described by Erichson, was requested from the Museum für Naturkunde der Humboldt-Universität (ZNHU), Berlin. We received, however, the only specimen which was not the type specimen, yet presents the same characteristics described by Erichson. Therefore we designated the specimen as lectotype.

Material Examined. Peru. Callanga, lectotype (ZMHU).

Hinda uncinata (Mulsant)

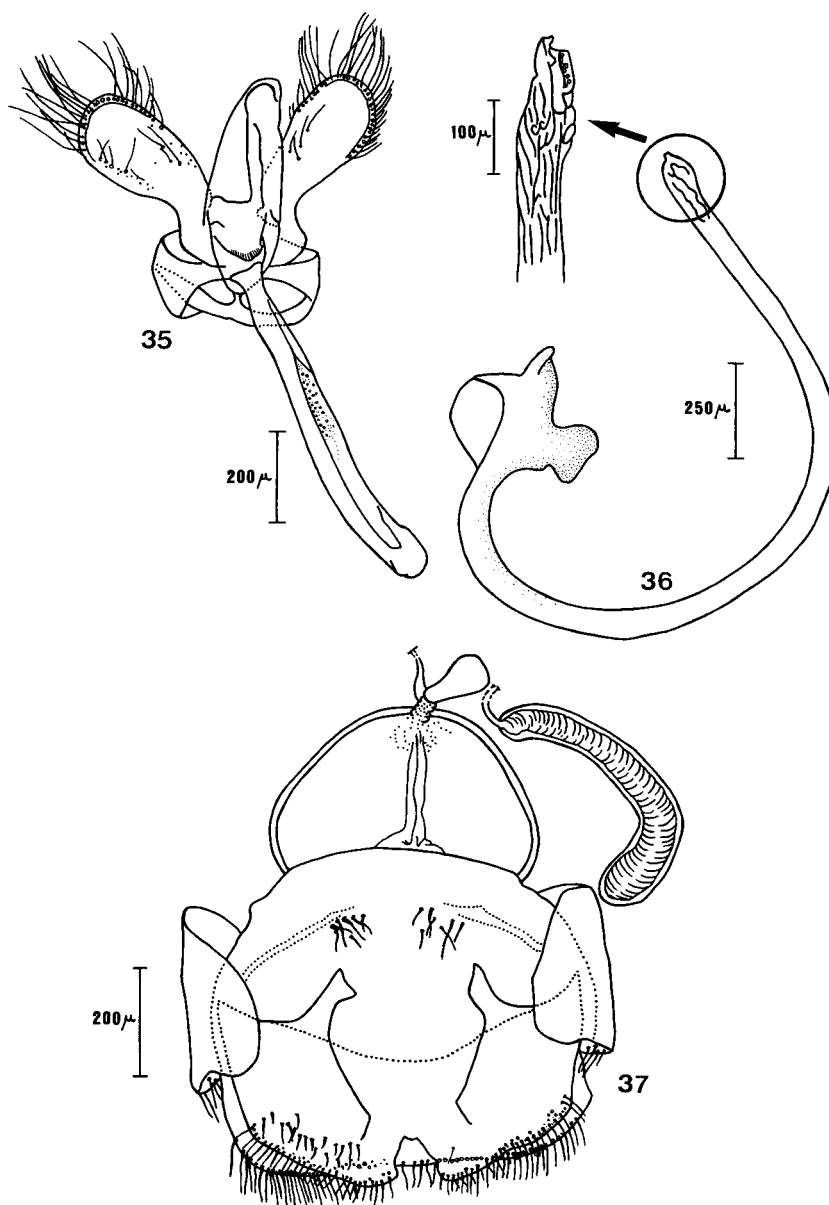
Figs. 20, 35–37

Cleothera uncinata Mulsant 1853:206.

Hyperaspis uncinata Crotch 1874:219; Korschefsky 1931:177; Blackwelder 1945:446; Gordon 1987:26.

Hinda uncinata Milléo *et al.* 1997:392.

Diagnosis. Body oval-convex. Integument yellow, pale, with dark brown



Figs. 35–37. *Hinda uncinata*. 35) tegmen; 36) siphon; 37) female genitalia.

spots on pronotum and elytra (Fig. 20). Pronotum with four spots: two basal, united in center, and two triangular, apical. Each elytron with four spots: two basal, one close to suture, nearly rectangular; parallel to this one elongate spot on humeral callus; third large, oblique, filling posterior half of elytron; fourth elongate, parallel to third and to the epipleural margin, below second. Elytra also sutural stripe, same color as spots, extending from scutellum to apex of elytron. Length 3.00–3.25 mm. Width 2.00–2.42 mm.

Male. Median lobe asymmetrical, smaller than parameres, with base wide, with apex rounded; foliate parameres widened at apex, with long bristles on rounded margins (Fig. 35). Siphon curved; apex wrinkled (Fig. 36).

Female. Genital plate wide, with small style. Spermatheca cylindrical, arched with rounded cornus and small ramus. Last sternite with dense array of elongate bristles on apical margin (Fig. 37).

Variation. The spots of the pronotum often white to form two “C”s back to back. Each elytron may have five spots: *i.e.*, the third spot may be divided, with one part in form of a small comma, and with the other rounded and within the arc of the first.

Remarks. The color of *H. uncinata*, the very characteristic yellow with brown spots, resembles *H. buqueti* and *H. terminata*. As with the majority of the species in this genus, the male has asymmetric genitalia, with parameres very wide at the apex. The geographical distribution is similar to several of these other two species, in the Atlantic Coastal region of Brazil.

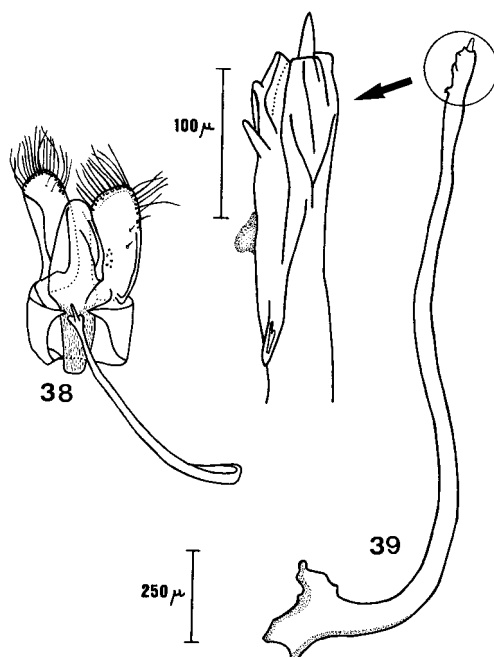
Type Material. The lectotype of *Hyperaspis uncinata*, Santa Catarina, Brazil, labelled by Gordon (1987) UMZC.

Material Examined. Brazil. Minas Gerais: Camanducaia (Villa Monte Verde), 15.XI.1965, J. Halik leg., one specimen (MZSP); Santa Bárbara (Serra do Caraça), 23–25.XI.1960, Araújo & Martins leg., two specimens (MZSP); XI.1961, Kloss, Lenko, Martins & Silva leg., one specimen (MZSP); III.1963, U. Martins, F. Werner & L. Silva leg., two specimens (MZSP); São Paulo: Atibaia, 11.XII.1971, J. Halik leg., one specimen (MZSP); Caraguatubá (Forest Reserve), 2.IV.1962, Martins, Reichardt & Silva leg., one specimen (MZSP); Salesópolis (Estação Biológica Boraceia), one.II.1961, K. Lenko leg., one specimen (MZSP); Paraná: Curitiba, XI.1938, Colégio Claretiano, P. Moure leg., one specimen (MNRJ); Morretes (Serra da Prata), three specimens, former-collection F. Justus (DZUP); Pedreira (?), one specimen, former-collection F. Justus (DZUP); Tijucas do Sul (Vossoroca), 28.XI.1975, P. Moure leg., six specimens (DZUP); Santa Catarina: lectotype, one specimen (UMZC), Garuva, 4.XI.1965, P. Moure leg., two specimens (DZUP); Seara (Nova Teutônia), 15.IV.1935, one specimen (DZUP); IX.1938, one specimen (DZUP); 21.XII.1938, two specimens (DZUP); 24.VIII.1939, one specimen (DZUP); 193?, 17 specimens (MNRJ); 29.VI.1945, three specimens (DZUP); XI.1951, one specimen (DZUP); X. 1961, three specimens (DZUP); X.1965, one specimen (DZUP); IV. 1966, 16 specimens (DZUP); V.1966, four specimens (DZUP); IX.1966, 11 specimens (DZUP); 21.XI.1966, two specimens (DZUP); 4.V.1967, one specimen (DZUP); 11.IV.1967, five specimens (DZUP); 5. IX.1967, one specimen (DZUP); 18.II.1969, one specimen (DZUP); 26.XI.1969, three specimens (DZUP); 20.VIII.1971, one specimen (DZUP); 30.XI.1971, one specimen (DZUP); 21. XII. 1971, one specimen (DZUP); one specimen (MNRJ); sheet FCC 938, F. Plaumann leg., two specimens (MNRJ).

Hinda terminata (Gorham), **new combination**

Figs. 21, 38–39

Hyperaspis terminata Gorham 1894:202; Korschefsky 1931:177; Blackwelder 1945:446.



Figs. 38–39. *Hinda terminata*. 38) tegmen; 39) siphus.

Diagnosis. Body oval-convex. Integument pale yellow with black spots on pronotum and elytra (Fig. 21). Pronotum with square central spot with lateral constriction and small invagination in anterior portion. Scutellum black. Elytra yellow, with apical triangular spot one-fourth length of elytra. Length 2.67 mm. Width 2.17 mm.

Male. Median lobe asymmetric, smaller than parameres, very wide base; apex rounded with anterior projection. Parameres foliate and widened with long bristles along rounded borders (Fig. 38). Siphus elongate, curved, with apex wrinkled, with lateral projections and apical projection (Fig. 39).

Female. Unknown.

Remarks. *Hinda terminata* is similar to *H. uncinata* and *H. buqueti* in the yellow background of the elytra, but it differs from them in that only the elytral apex is black. Also, the male genitalia are asymmetrical, and the species has the same geographic distribution in the Atlantic Coastal region.

Type Material. One specimen of *Hyperaspis terminata*, from V. de Chiriqui, 25–4,000. Champion, with the label [*Hyperaspis terminata* Gorham], and having two other labels: one round with orange margins, with the following written information [Type]; the other with the following data: [Lectotype, *Hyperaspis terminata* Gorb. GORDON 1970] (BMNH). This designation was never published however.

Material Examined. Panamá. V. de Chiriqui, Champion leg., lectotype (BMNH). Brazil. Minas Gerais: Camanducaia (Vila Monte Verde), 15.XI.1965, J. Halik leg., one specimen (MZSP); Santa Bárbara (Serra do Caraça), 23–25.XI.1960, Araújo & Martins leg., two specimens (MZSP).

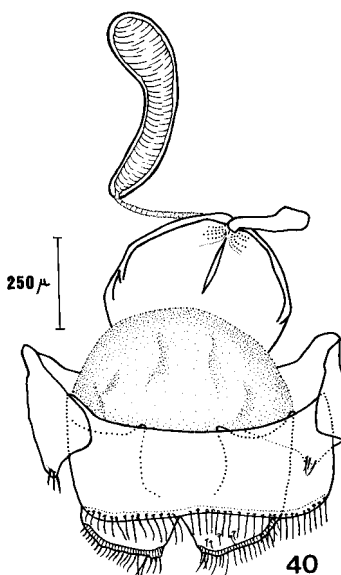


Fig. 40. *Hinda humerata*. Female genitalia.

Hinda humerata (Mulsant), **new combination**

Figs. 22, 40

Cleothera humerata Mulsant 1850:605.

Hyperaspis humerata Weise 1910:59; Korschefsky 1931:190; Blackwelder 1945:447.

Diagnosis. Body oval-convex. Integument black with yellow spots on pronotum and elytra (Fig. 22). Pronotum with two rounded lateral spots. Each elytron with four large spots: the first round, near suture and base; second approximately same size, near the suture and behind the first; the third located laterally, next to second; fourth and largest, transverse, at apex of elytron. Length 3.58 mm. Width 2.83 mm.

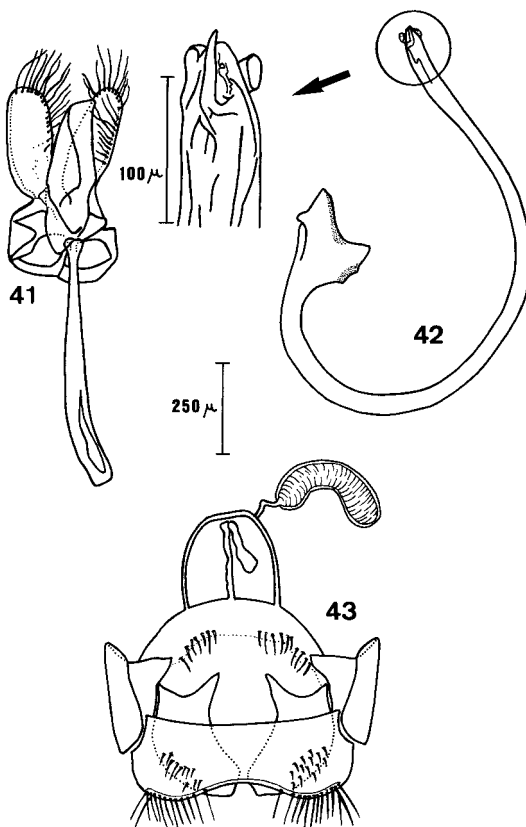
Male. Unknown.

Female. Genital plate wide with small style; spermatheca cylindrical, forming an arc, with round cornus and poorly evident ramus; infundibulum elongate. Last sternite with dense array of elongate bristles on the apical border (Fig. 40).

Remarks. *H. humerata* is similar to *H. regularis*, *H. modesta* and *H. joeli* in general body color, but differs from them in its larger size, smaller number of elytral spots, and pattern of genitalia of the female. This species is restricted to the Amazon basin.

Type Material. *Cleothera humerata* was described by Mulsant as being from Cayenne (collect. Buquet). It is in the BMNH and has the following labels: [Type] round with red margins, [57–71] round and blue, [Humerata Muls.—Cayene: D.Leprieur], [named by Mulsant].

Material Examined. Guiana Francesa. Cayenne, D. Leprieur, one specimen (holotype) (BMNH).



Figs. 41–43. *Hinda joeli*. 41) tegmen; 42) siphus; 43) female genitalia.

Hinda joeli, new species

Figs. 23, 41–43

Diagnosis. Body oval-convex. Integument black with yellow spots on pronotum and elytra (Fig. 23). Pronotum with two small lateral, elongate, black spots that reaches lateral border. Scutellum black. Each elytron with three large spots: the first round, in center of elytral disc and with two small anterior projections; second next to scutellum, triangular; third, transverse, apical, reaching lateral external border of elytron. Length 2.67–2.83 mm. Width 2.00–2.25 mm.

Male. Median lobe asymmetrical, median lobe slightly smaller than parameres, wide base with apex obliquely truncated; parameres wide with long bristles (Fig. 41). Siphus long, curved with modified membranous apex (Fig. 42).

Female. Genital plate wide, with small style; spermatheca cylindrical, forming arc, with round cornus and small ramus; infundibulum elongate. Last sternite with dense array of elongate bristles on the apical border (Fig. 43).

Variation. The spots of the pronotum may be united toward the apex. Each

elytron may only have the two larger spots, losing the spot next to the scutellum. This variation has been seen only in females.

Remarks. *Hinda joeli* is similar to *H. humerata*, *H. regularis* and *H. modesta*, but differs in being black with only two yellow spots on each elytron, one of which is on the central disc. Both male and female genitalia, present a pattern different from the other species. Restricted to the Amazon Basin, the range of this species is similar to those of the others mentioned above.

Type Material. Holotype, male, from Rio Cauaburi, Amazonas, Brazil, J.Bechyné, 7-8-XII-1962, deposited at the Museum of Zoology of the University of São Paulo.

Material Examined. Brazil. Amazonas: Rio Cauaburi, 7-8-XII-1962, J.Bechyné col., two specimens (holotype and paratype), Convênio DZSP-Goeldi (MZSP); Tapuruquara, Rio Negro, 25-27-XI-1962, J.Bechyné col., one specimen (MZSP); 4-5-II-1963, J.Bechyné col., two specimens (DZUP).

Hinda decemverrucata (Mulsant), **new combination**

Figs. 24, 44–46

Cleothera decem-verrucata Mulsant 1850:603.

Hyperaspis decem-verrucata: Crotch 1874:213.

Hyperaspis decemverrucata: Korschefsky 1931:187; Blackwelder, 1945:446; Gordon 1987:27.

Diagnosis. Body oval-convex. Integument brown to black with yellow spots on the pronotum and elytra (Fig. 24). Pronotum with three large, oval and longitudinal, yellow spots. Scutellum brown to black. Each elytron with six large spots: two basal, the first larger and quadrangular; second and more elongate lateral to basal humeral callus; third, behind, slightly smaller than first, with oblique base and rounded apex; fourth and fifth smaller, elongate, united, with fourth slightly larger than fifth; with the fifth spot near elytral border; sixth large, triangular, occupying entire elytral apex.

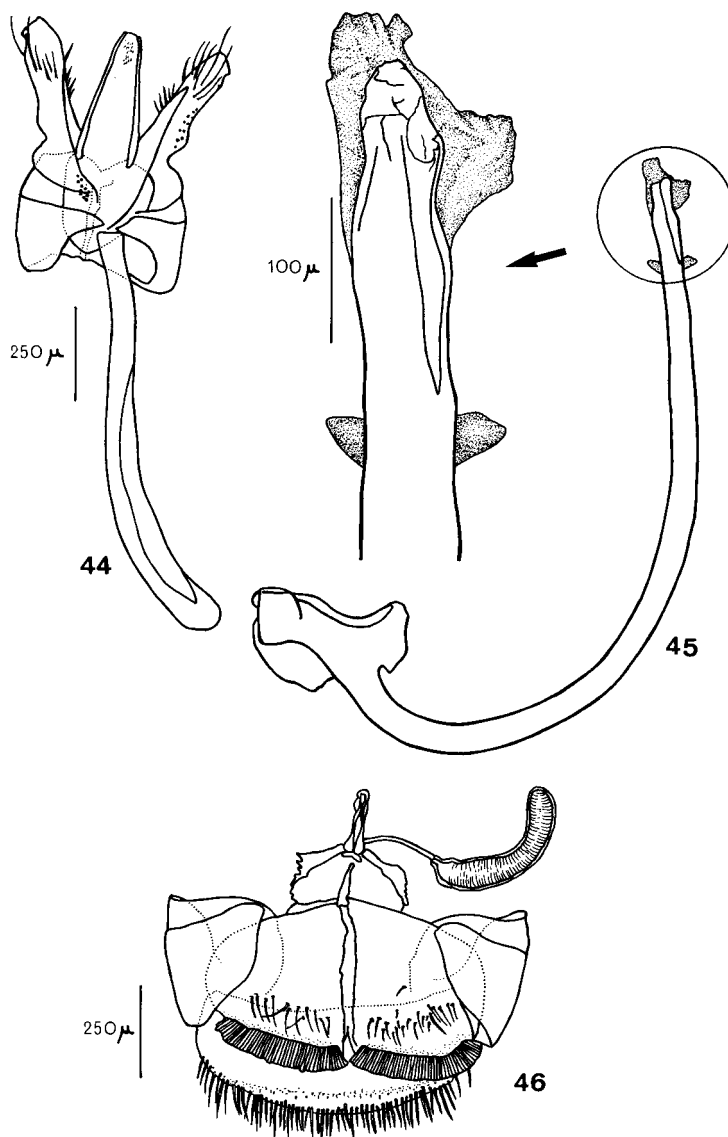
Variation. The central spot of the pronotum may be subdivided, rounded or small. The elytral spots may be partially united: the first and third, and the third and sixth, can be united near the suture. Length 3.92–4.08 mm. Width 3.08–3.50 mm.

Male. Median lobe symmetrical, with truncate apex, approximately the same size as parameres. Parameres wide at base, with strong constriction slightly beyond base, of constant width beyond constriction, and slightly indented near apex (Fig. 44). Siphon elongate, curved, with truncated apex and membranous projections (Fig. 45).

Female. Genital plate wide; spermatheca cylindrical, forming arc, with round cornus and poorly evident ramus; infundibulum elongate. Last sternite with dense array of elongate bristles on the apical border (Fig. 46).

Remarks. *Hinda decemverrucata* resembles *H. decas* and *H. designata* in the color and position of spots, and males have symmetrical genitalia. In *H. decemverrucata*, however, the central spot of the elytral disc is elongate, differing from that of *H. designata*. Also the male genitalia is different. In *H. decemverrucata* the parameres are approximately the same size, while in *H. designata* they are widened and concave at the apex. The geographical distribution of both species are restricted to Colombia.

Type Material. One specimen of *Hyperaspis decemverrucata*, Gordon (1987), from Colombia, with label written [TYPE 10 verrucata Chev], with three additional labels: one, printed in blue [TYPE], and two others with the



Figs. 44–46. *Hinda decemverrucata*. 44) tegmen; 45) siphus; 46) female genitalia.

following: [Lectotype, *Hyperaspis decemverrucata* Muls. R. Gordon 70], (the designation of which was unpublished) and [Lectotype, *Hyperaspis 10-decemverrucata* Muls. 1850 Gordon 1987]. This material was studied (UMZC).

Material Examined. Colombia. Chevr., lectotype, one specimen (UMZC); Bogota, three specimens (UMZC); New Granada, two specimens (UMZC); origin not indicated, Chevrolat, one specimen (UMZC).

Acknowledgments

We thank Dr. Roger G. Booth, The Natural History Museum, London; Dr. Willian A. Foster, University Museum of Zoology, Cambridge; Dr. Manfred Uhlig, Museum für Naturkunde der Humboldt-Universität, Berlin and Dr. Bert Gustafsson, Naturhistoriska Riksmuseet, Stockholm, for loan of the types.

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(Received 23 April 1999; accepted 25 June 1999)