REVIEW OF THE NEW WORLD SPECIES OF MYIOMMA WITH DESCRIPTIONS OF EIGHT NEW SPECIES
(HEMIPTERA: MIRIDAE: ISOMETOPINAE)

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Abstract.—The genus Heidemannia Uhler is reaffirmed as a synonym of Myiomma Puton. Myiomma cixiiforme (Uhler) is redescribed; and M. brasillianum, M. capitatum, M. rubrooculatum, M. schuhi, and M. semipallidum from Brazil, M. fusiforme and M. mexicanum from Mexico, and M. ornatum from Panama are described as new. All adults, except M. fusiforme and M. surinamense (Carvalho and Rosas), are illustrated. Male genitalia of M. cixiiforme and M. mexicanum are figured, and a key to the New World species is provided.

Recent studies have shown that the Isometopinae are not nearly as rare as early investigators once suggested (Wheeler and Henry, 1978). With the increasing interest in biology and the recent descriptions of several new species (Brailovsky, 1977; Henry, 1977; Henry and Herring, 1979), it is apparent that continuing studies are needed if future workers are to successfully identify and study unknown forms. Concern over replacing pesticides with biological control agents certainly justifies more detailed work on these largely scale-feeding predators, especially those found in the southwestern United States, Mexico, and South America where tree bugs appear to be most prolific, but very little known.

Uhler (1891) described the first Nearctic isometopine, Heidemannia cixiiforme, in his paper "Observations on some remarkable forms of Capsidae" but overlooked the presence of ocelli. Heidemann (1908) clarified the position of this unusual mirid by placing it in the Isometopinae and described the 5th-instar nymph. After comparing Heidemannia with Myiomma Puton, Reuter (1912) synonymized Uhler's genus under Myiomma. McAtee and Malloch (1924) still regarded Heidemannia as a distinct genus and stated: "We are not unmindful of what Reuter said . . . ." but they concluded that the "nearly holoptic condition" of Heidemannia compared to Puton's (1872) figures of Myiomma fieberi (type of the genus) was evidence enough
to retain both genera. Bergroth (1925) abrasively attacked McAtee and Malloch’s efforts and rather tactlessly pointed out that Heidemannia was an obvious synonym of Myiomma. Blatchley (1926) followed Reuter’s opinion and redescribed the Nearctic cixiiforme. McAtee and Malloch (1932), apparently convinced of this synonymy and without further explanation, used Myiomma and listed Heidemannia as a junior synonym. However, Eyles (1971) in his checklist of the Isometopidae of the World again used Heidemannia. Because of the inconsistent usage of these two names, I feel it is important to clarify the status of Heidemannia.

In this paper, I am considering the Nearctic genus Heidemannia a synonym of the Palearctic genus Myiomma and am describing five new species from Brazil, two from Mexico, and one from Panama. Adults of M. brasilianum, M. capitatum, M. cixiiforme, M. mexicanum, M. ornatum, M. rubrooculatum, M. schuhii, and M. semipallidum are illustrated. Male genitalia of M. cixiiforme and M. mexicanum are figured and a key to the New World species is provided.

The following abbreviations are used for institutions cited in this paper: AMNH, American Museum of Natural History, New York; BM, British Museum (Natural History), London; PDA, Pennsylvania Department of Agriculture, Harrisburg; TAM, Texas A&M University, College Station; UC, University of Connecticut, Storrs; USNM, U.S. National Museum of Natural History, Washington, D.C.

Myiomma Puton

Type-species Myiomma fieberi Puton.

Heidemannia Uhler, 1891:119. NEW SYNONYM.

Paramyiomma Carvalho, 1951:381.

Description.—Generally oblong-oval mirids, length 1.90–3.00 mm. Color pale brownish to black. Head much wider than long; eyes covering large part of head, distinctly separated to largely contiguous in front; vertex always possessing ocelli, sometimes larger in males; front broadly rounded, gena widely produced laterally (forming cheeks); antennal bases set below eyes at lateral angles (not visible from dorsal aspect). Antennal segment I usually shortest, II longest, thickest, cylindrical, generally thicker in males, clothed with short recumbent setae in females, clothed with longer more erect setae in males, segments III and IV very slender, subequal in length, segment IV somewhat fusiform. Rostrum 4-segmented, generally reaching hind coxae or beyond. Pronotum trapezoidal, basal width about 2.5 × length, anterior margin with a narrow but distinct collar, lateral margins weakly rounded, distinctly and, usually entirely, carinate, frequently flattened and weakly reflexed; posterior margin sinuate; surface smooth, finely granulate or distinctly punctate, calli only moderately distinct, sometimes separated
from disc by a weak impression: mesoscutum broadly exposed, lateral \( \frac{1}{3} \) often raised and flattened, median area usually depressed; scutellum equilateral, reaching to middle of clavus, transversely rugose to distinctly punctate, basal \( \frac{1}{2} \) frequently raised. Hemelytra entire, generally punctate on clavus and corium: embolium wide and flattened, often reflexed, radial vein reaching at least to middle of corium, cuneus about as long as wide, membrane with 1 closed cell. Hind femora saltatorial. Male genital parameres simple, left paramere largest with the base swollen, slender, and curved beyond; right paramere short, simple, usually acutely produced.

Remarks.—The genus *Myiomma* is somewhat difficult to delimit but generally can be separated from other genera by the oval form, the relatively large head with a narrow vertex, a wide frons, projecting genae and large encompassing eyes that may be nearly contiguous, and the trapezoidal pronotum that is flattened and distinctly carinate laterally and about 2.5 times as wide as long.

**Key to the New World Species of Myiomma**

1. Dorsum and legs largely fuscous or black ........................................ 2

   - At most, head, pronotum, and scutellum fuscous or black, hemelytra lighter brown or with pale areas on clavus ................................. 4

2. Length 2.00 mm or less; only apical \( \frac{1}{3} \) of mesofemora fuscous ....

   - Length 2.5 mm or more; femora uniformly fuscous .......... 3

3. Second antennal segment of female strongly inflated, diameter 0.12 mm (Fig. 12): male unknown but 2nd segment probably at least as thick; apex of scutellum white .................. *fusiforme*, new species

   - Second antennal segment of female slender, diameter 0.06 mm (Fig. 11): male segment thickened, diameter 0.10 mm (Fig. 10) but not as greatly as Fig. 12; apex of scutellum sometimes paler brown, but not white .................. *cixiforme* (Uhler)

4. Eyes bright red and spread or flattened over anterior margin of pronotum (in males at least) (Figs. 22, 24) ........................................ *rubrooculatum*, new species

   - Eyes not bright red (although they may be tinged with red) and not flattened or spread over anterior margin of pronotum .................. 5

5. Eyes contiguous or only separated by a width less than the diameter of an ocellus on frontal aspect (Figs. 5, 20) ........................................ 6

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Eyes not contiguous in front, width between equal to or much greater than diameter of an ocellus

6. Rostrum nearly reaching genital segment; gena well developed (Fig. 20): lateral margins and base of pronotum pale, scutellum pale with the median line black \( \text{ornatum, new species} \)

- Rostrum reaching only 3rd or 4th abdominal segment; gena reduced (Fig. 5): pronotum and scutellum uniformly black or fuscous \( \text{capitatum, new species} \)

7. Second antennal segment pale at apex; membrane smoky brown or fumate

8. Second antennal segment fuscous at apex; membrane clear

9. Hemelytra uniformly dark brown; coxae mostly pale \( \text{brasilianum, new species} \)

- Hemelytra largely pallid with fuscous on embolium, base of clavus and outer margin and apical \( \frac{1}{3} \) of corium; coxae largely fuscous \( \text{semipallidum, new species} \)

9. Hemelytra brown, embolium, cuneus, and apical area of corium transparent, base of cuneus with ivory white patch; femora fuscous, tibiae fuscous except at apex: rostrum reaching only 3rd or 4th abdominal segment \( \text{schuhi, new species} \)

- Hemelytra pale yellow, inside base of clavus and outer margin of embolium darkened, cuneus apparently without an ivory white patch: legs pale; rostrum reaching genital segment \( \text{surinamense (Carvalho and Rosas)} \)

**Myiomega brasilianum** Henry, NEW SPECIES

Figs. 1-3

Holotype female.—Length 2.48 mm, width 1.12 mm, generally black with the hemelytra lighter colored, clothed with short, recumbent, golden setae (Fig. 1). *Head:* Width 0.60 mm, vertex 0.12 mm, ocelli 0.08 mm apart, dark brown, sides fuscous, frons roughened, eyes brownish, tinged with red (Figs. 2-3). *Rostrum:* Broken, stylets 1.16 mm, reaching 3rd abdominal segment. *Antennae:* I, length 0.06 mm, slightly longer than broad, brown; II, 0.56 mm, fuscous, pale at apex and on basal \( \frac{3}{5} \) of ventral aspect, setae short, recumbent; III and IV, broken. *Pronotum:* Length 0.38 mm, width at base 0.96 mm, shiny black with a clear spot near posterior angles, calli and disc punctate, lateral margins widely flattened and recurved, basal margin sinuate, clothed with recumbent, golden setae; mesoscutum shiny black, punctate; scutellum shiny black, apex pale, transversely rugose. *Hemelytra:* Uniformly dull or satiny dark brown, base of embolium and paracuneus pale, clothed with recumbent, golden setae; membrane smoky brown or fumate, finely pubescent, veins indistinct. *Venter:* Fuscous to black, pro-
pleura shiny black with a narrow pale mark across posterior end, punctate. anterior lobe of ostiolar plate white, remainder fuscous, abdomen fuscous, sparsely set with short, recumbent setae. Legs: Broken, coxae pale, brownish at bases.


Remarks.—Myionoma brasilianum is most similar to M. schulii but can be separated by the larger size (although I only have one female to compare to a male of M. schulii), the pale second antennal segment with the basal two-thirds of the dorsal aspect fuscous, the more strongly punctate pleura, protruding frons, and the dark membrane.

Myionoma capitatum Henry, NEW SPECIES

Figs. 4–6

Holotype male.—Length 2.04 mm. width 0.88 mm. head and pronotum black, hemelytra paler, clothed with semierect golden setae (Fig. 4). Head: Width across ocelli 0.50 mm. vertex 0.10 mm. ocelli 0.06 mm apart, contiguous with compound eyes; fuscous, eyes large, rounded, touching in front and nearly touching at base, covering most of head (Figs. 5–6). Rostrum: Partly broken, but glued to point (in part), about 0.94 mm. reaching 3rd or 4th abdominal segment (based on estimated length). 1st segment testaceous, remaining segments darker brown. Antennae: I. length 0.06 mm. testaceous, lightly infuscated; II. 0.64 mm. pale or testaceous. apical 4th fuscous. clothed with erect pale setae: III and IV. broken. Pronotum: Length 0.30 mm. width at base 0.82 mm. shiny fuscous to black with a pale spot at posterior angles, clothed with recumbent, golden setae, calli slightly raised, smooth. shiny. disc distinctly punctate, lateral margins narrowly flattened and weakly recurved: mesoscutum fuscous, depressed at middle; scutellum fuscous, pale (color of hemelytra) on apical 1/3, transversely rugose. Hemelytra: Pale brownish, outer edge of embolium and cuneus pale yellowish brown, clothed with semierect, pale to golden setae: membrane translucent, smoky brown, finely pubescent, veins barely detectable, greatly reduced. Venter: Shiny fuscous, propleura finely punctate with a large pale spot posteriorly, ostiolar plate pale on anterior raised lobe, remainder fuscous. Legs: Coxae pale testaceous: femora pale or testaceous, fuscous on apical 1/4 to 1/3, hind femora pale at apex; tibiae fuscous, paler apically; tarsi and claws testaceous.


Remarks.—This species is most easily distinguished by the large encompassing eyes which cover most of the head and are contiguous in front. The
pale femora with the fuscous apical band will also help to separate *M. capitatum* from other species of *Myiomma*.

*Myiomma cixiiforme* (Uhler). NEW COMBINATION
Figs. 7-11. 27-28

*Heidemannia cixiiforme* Uhler, 1891:121

Adult male.—Length $\bar{x} = 3.02$ mm (5). 2.88–3.20 mm. width 1.28 mm, generally black, clothed with recumbent black setae (Fig. 7). *Head*: Width 0.50 mm. vertex across ocelli 0.12 mm. dorsal width of eye 0.16 mm. fuscous, vertex and narrow margin around eyes pale or white. frons frequently with a central whitish patch, posterior margin of eyes set with several pilose setae (Figs. 8–9). *Rostrum*: Length 1.36 mm. fuscous reaching 3rd abdominal segment. *Antennae*: Fuscous. I. length 0.20 mm; II. 0.78 mm. diameter at middle 0.10 mm. thickly clothed with erect, black setae (Fig. 10); III. 0.20 mm; IV. 0.20 mm. *Pronotum*: Length 0.38 mm. width at base 1.04 mm, uniformly black, finely roughened, calli weakly raised; mesoscutum and scutellum black, finely granulate, extreme apex of scutellum occasionally paler. *Hemelytra*: Uniformly black, base of cuneus pale or white, clothed with semierect black pubescence; membrane fumate to black, with a single distinct closed cell. *Venter*: Fuscous to black, thorax with only a few scattered setae, abdomen thickly set with suberect pale setae. *Legs*: Uniformly fuscous or black, extreme apex of hind femora and apical $\frac{1}{3}$ of tibiae pale yellowish. *Genitalia*: See Figs. 27–28.

Adult female.—Length $\bar{x} = 2.82$ mm (5). 2.80–2.88 mm. width 1.32 mm, very similar to males in color and pubescence and differing mainly by the broader form and more slender 2nd antennal segment. *Head*: Width 0.50 mm. vertex 0.10 mm. dorsal width of eye 0.20 mm. *Rostrum*: Length 1.44 mm. reaching 4th or 5th abdominal segment. *Antennae*: I. length 0.20 mm; II. 0.58 mm. diameter at middle 0.06 mm (Fig. 11); III. 0.24 mm; IV. 0.16 mm. *Pronotum*: Length 0.32 mm. width at base 1.04 mm.

Remarks.—Many authors have argued to retain *M. cixiiforme* in the genus *Heidemannia*. but I agree with Reuter (1912) and other authors that this genus is congeneric with the type of the genus, *Myiomma fieberi*. Actually the question should not be if the genera are distinct; instead, it should be how to separate *M. cixiiforme* and *M. fieberi*.

I have a single female of *M. fieberi* from Hyères [France] Bell. 21 th., Saunders Coll., Brit. Mus. 1910-357 (BM) that has the following measurements: length 2.64 mm, width 1.24 mm; head width 0.52 mm. vertex 0.12 mm. dorsal width of eye 0.20 mm; rostrum imbedded in glue, appearing to reach just beyond hind coxae; antennal segment I. length 0.22 mm; II. 0.72 mm; III and IV broken; pronotum length 0.42 mm. width at base 1.10 mm. This species differs from *M. cixiiforme* mainly by the lighter brown color,
the pale anterior and posterior marks on the median line of the pronotum, the pale apical 1/3 of the scutellum and the distinctly punctate calli, disc of the pronotum and scutellum.

*Myiomma cixiiforme* also resembles *M. fusiforme* and to a lesser extent, *M. mexicanum*. It can be separated from *M. fusiforme* by the more slender 2nd antennal segment and from *M. mexicanum* by the larger size, white-marked vertex, and the uniformly fuscous femora (except for the apex of the hind femora).

Wheeler and Henry (1978) described the 5th-instar nymph and showed that this species is clearly a predator of obscure scale, *Melanaspis obscura* (Comstock), on *Quercus* spp. in Pennsylvania. In addition to previous records of this species from Delaware, Washington, D.C., New York, Pennsylvania, Virginia, West Virginia, and Quebec, I have examined the following specimens: 2 males. Florida, Putnam Co., III-19-30, D. B. Webb collector (USNM); 1 female, Texas, Brazos Co., Bryan, April 11, 1976, J. D. Moody collector (TAM).

*Myiomma fusiforme* Henry, NEW SPECIES

Fig. 12

Holotype female.—Length 2.68 mm, width 1.32 mm. black, clothed with recumbent black setae. *Head*: Width 0.48 mm, vertex across ocelli 0.10 mm, dorsal width of eye 0.18 mm, fuscous, narrow border around eyes white, central area of frons with a white patch, ocelli surrounded by fuscous, posterior margin of eyes with a row of 4 or 5, erect, black setae. *Rostrum*: Fuscous, glued to triangle, appearing to reach near base of ovipositor. *Antennae*: I, length 0.06 mm, fuscous; II, length 0.72 mm, diameter at middle 0.12 mm, swollen (Fig. 12), black, extreme apex testaceous, clothed with rather stout, recumbent, black setae; III, 0.18 mm, brown; IV, 0.16 mm, brown. *Pronotum*: Length 0.34 mm, width at base 1.06 mm, black, roughened, indistinctly punctate; mesoscutum black; scutellum black, apex white, basal 1/2 raised. *Hemelytra*: Uniformly black, base of cuneus narrowly white or pale; clothed with suberect black setae; membrane fuscous, with a single distinct cell. *Venter*: Fuscous, abdomen clothed with suberect pale setae. *Legs*: Broken, coxae fuscous.

Holotype.—♀. Mexico, Durango, 11 mi W of El Salto, VI-29-30, 1964, Paul J. Spangler collector (USNM Type No. 76050).

Remarks.—*Myiomma fusiforme* is very similar to *M. cixiiforme* and would be rather difficult to distinguish if it were not for the strongly inflated or fusiform second antennal segment. Also, none of the 30 specimens of *M. cixiiforme* I have before me have the apex of the scutellum distinctly white as it is in *M. fusiforme*. 
Myiomma mexicanum Henry, NEW SPECIES
Figs. 13-15, 29-30

Holotype female.—Length 1.94 mm, width 0.90 mm, generally fuscous to black, clothed with short, erect bristle-like setae (Fig. 13). Head: Width 0.48 mm, vertex (across ocelli) 0.12 mm, ocelli 0.08 mm apart, fuscous, eyes dark reddish brown (Figs. 14, 15). Rostrum: Length 0.90 mm. reaching 3rd or 4th abdominal segment, fuscous, basal segment more reddish brown. Antennae: I, length 0.06 mm, fuscous; II, 0.46 mm, fuscous at base, apex and dorsal ½, ventral aspect pale between fuscous bands; III, 0.22 mm, fuscous, pale on basal ½; IV. 0.10 mm, fuscous. Pronotum: Length 0.26 mm, width at base 0.78 mm, shiny black, transversely roughened across disc, posterior angles flattened, lateral angles distinctly carinate, clothed with short, semierect, golden setae; mesoscutum black; scutellum convex, shiny black, apical ½ pale cream colored. Hemelytra: Generally dull fuscous, clothed with semierect black, bristle-like setae, embolium, cuneus, and paracuneus more shiny black, base of embolium and corium pale, basal ½ of cuneus enamel white; membrane largely brown or fumate, transparent around margins. Venter: Shiny reddish brown to black, ostiolar plate pale. Legs: Procoxae fuscous, meso- and metacoxae pale; profemora fuscous, narrowly pale at base and on anterior apical spot, mesofemora pale, fuscous on apical ½, metafemora fuscous, narrowly pale at base, strongly saltatorial; tibiae fuscous, pale on apical ½ to ½; tarsi and claws fuscous.

Allotype male.—Length 2.12 mm, width 0.88 mm. Head: Width 0.50 mm, vertex 0.14 mm, ocelli 0.08 mm apart. Rostrum: Length 0.96 mm, reaching 4th abdominal segment. Antennae: Broken (measurements from paratype male, segment I, 0.08 mm; II, 0.50 mm). Pronotum: Length about 0.34 mm, width at base 0.08 mm. Genitalia: See Figs. 29, 30.


Remarks.—The male of M. mexicanum is more slender than the female, has thicker second antennal segments, is less intensely colored, the pale mark on the scutellum is limited to the apex and the mark across the base of the cuneus is pale translucent rather than enamel white.

Myiomma mexicanum, in general, resembles a miniature M. cixiiforme or M. fusiforme but can be separated from these species by its smaller size and pale-marked legs.
Myiomma ornatum Henry. NEW SPECIES
Figs. 19-21

Holotype male.—Length 2.12 mm, width ca 0.88 mm, generally dark with pale areas, clothed with semierect setae (Fig. 19). Head: Width 0.46 mm, vertex across ocelli 0.14 mm, dorsal width of eye 0.18 mm, black, sides brown to reddish brown, eyes red (Figs. 20, 21). Rostrum: Length 1.34 mm, testaceous, nearly reaching genital segment. Antennae: I, length 0.08 mm, testaceous; II, 0.50 mm, testaceous, thickly clothed with erect pale setae; III, 0.16 mm, testaceous; IV, broken. Pronotum: Length 0.16 mm, width at base 0.84 mm, shiny black, narrowly yellow along base and lateral margins, punctate, more finely on calli, lateral margins weakly rounded, base strongly sinuate, clothed with semierect golden setae; mesoscutum punctate, yellowish orange on flattened plates; scutellum pale, black along median line and apex and triangular spots on either side of median, transversely rugose, weakly punctate. Hemelytra: Largely black, base of embolium and apical 3/4 of clavus pale, pale areas black punctured, clothed with semierect dark to light setae; membrane fuscous. Venter: Black, lateral carinae and all marginal areas of propleura pale or yellowish. Legs: Coxae pale brown, mesofemora fuscous or brown, pale on dorsal aspect and apical 1/3 of ventral aspect, mesotibiae brownish, darker on apical 1/2; tarsi and claws brownish (front and hind legs broken).

Holotype.—♂, Panama, Las Cumbres, 09°06′N, 79°32′W, V-11-1974, light trap. H. Wolda collector (UC).

Remarks.—Myiomma ornatum is very easy to separate from other species by the pale-bordered pronotum, pale clavus and scutellum, long rostrum, and nearly contiguous eyes.

Myiomma rubrooculatum Henry. NEW SPECIES
Figs. 22-24

Holotype male.—Length 1.92 mm, width 1.00 mm, generally, brown to fuscous, eyes red, clothed with semierect, golden pubescence (Fig. 22). Head: Width 0.46 mm, vertex 0.08 mm across ocelli, ocelli about 0.06 mm apart, fuscous, eyes red, indented or wrinkled at middle, nearly touching on frons, posterior margin overlapping anterior margin of pronotum (giving appearance that eyes were melted and poured over head and pronotum) (Figs. 23, 24). Rostrum: Length about 0.82 mm, reaching 3rd or 4th abdominal segment. Antennae: I, length 0.08 mm, dark brown, cylindrical; II, 0.56 mm, brownish, paler at apex, clothed with erect, brownish setae; III and IV broken. Pronotum: Length (from base of eyes) 0.24 mm, width at base 0.88 mm, shiny black with a pale indistinct spot at posterior angles, uniformly punctate, calli not easily discernible, lateral margins flattened, weakly recurved, clothed with rather long, erect and semierect, golden setae;
mesoscutum shiny black, finely punctate, depressed at middle; scutellum shiny black, pale brown at apex, depressed at middle of base, finely punctate, pubescence as on pronotum. Hemelytra: Light brownish with an indication of a reddish-yellow tinge, clavus, cuneus, and apical area of corium darker brown, clothed with long, erect, golden setae; membrane smoky translucent, finely pubescent, veins indistinct and brownish. Venter: Shiny brown to fuscous; propleura shiny black, punctate, posterior apex pale; anterior lobe of ostiolar plate pale, flattened posterior lobe brown. Legs: Broken, coxae brownish, apices paler.


Remarks.—Myiommia rubrooculatum is, perhaps, the most unusual of the New World Myiommia species with the globular red eyes that appear melted onto the head and pronotum. The general body structure and this peculiar formation of the eyes will separate M. rubrooculatum from all other species in our fauna.

Myiommia schahi Henry. NEW SPECIES
Figs. 16–18

Holotype male.—Length 2.20 mm, width 0.92 mm, generally fuscous with hemelytra paler, clothed with recumbent, golden setae (Fig. 16). Head: Width 0.48 mm, vertex 0.10 mm, ocelli 0.06 mm apart, touching compound eyes; eyes reddish, vertex fuscous fading to brownish yellow on frons and lower portion of head (Figs. 17, 18). Rostrum: Length 0.92 mm, reaching 4th abdominal segment. 1st segment brownish yellow, remaining segments more fuscous. Antennae: I, length 0.06 mm, nearly as broad as long, fuscous; II, 0.62 mm, fuscous, pale on basal ½ of dorsal aspect, clothed with long, erect pale setae; III, 0.16 mm, pale, very slender; IV, 0.12 mm, fuscous, slender. Pronotum: Length 0.36 mm, width at base 0.82 mm, shiny black with a pale spot at posterior angles, punctate, calli impunctate, lateral margins narrowly flattened and recurved, basal margin weakly sinuate, clothed with recumbent, golden setae; mesoscutum fuscous, punctate; scutellum fuscous, pale at apex, punctate, pubescence as on pronotum. Hemelytra: Smoky gray or brown, base of clavus fuscous, embolium and most of cuneus clear or translucent, anterior portion of cuneus (paracuneus) white; membrane clear to translucent brown, finely pubescent, veins hardly detectable. Venter: Fuscous, propleura finely punctate with a pale mark posteriorly, ostiolar plate largely yellowish, posterior portion of flattened area fuscous, abdomen clothed with recumbent, golden setae. Legs: Coxae pale, tinged with brown; femora fuscous, pale at extreme apex and on basal ¼; pro- and mesotibiae pale, fuscous on basal ½; metatibiae fuscous, pale on apical ¼; tarsi and claws pale.

Remarks.—Myiomma schuhi most closely resembles M. brasilianum, but can be separated from this and other species by the second antennal segment being pale on the dorsal two-thirds and fuscous at the apex, the shiny punctate pronotum, the translucent brown membrane and the uniquely colored legs.

I am naming this species after my good friend and collector of this species, Dr. R. T. Schuh, who has generously loaned me several of the new species used in this study.

Myiomma semipallidum Henry, NEW SPECIES
Figs. 25-26

Holotype female.—Length 2.24 mm, width about 1.08 mm, generally fuscous with extensive pallid areas on hemelytra, clothed with recumbent golden setae (Fig. 25). Head: Width 0.54 mm, vertex across ocelli 0.12 mm, dorsal width of eye 0.22 mm, black, eyes reddish, basal margin behind eyes pale (Fig. 26). Rostrum: Broken. Antennae: I, length 0.08 mm, black; II, 0.50 mm, fuscous, apex pale, thickly clothed with recumbent golden setae; III and IV broken. Pronotum: Length 0.34 mm, width at base 0.92 mm, shiny black with a pale spot at posterior angles, lateral angles straight, distinctly but narrowly flattened and recurved, basal margin sinuate, disc strongly punctate, calli more sparsely punctured, weakly raised, clothed with recumbent pale golden setae; mesoscutum black, finely punctate: scutellum shiny black, apical 1/3 whitish, transversely rugose, finely punctate, clothed with recumbent golden setae. Hemelytra: Largely pallid or pale testaceous, base of clavus, embolium, outer margin and apical 1/3 of corium and apex of cuneus dark brown to fuscous, clothed with recumbent pale to golden setae; membrane smoky, veins weakly defined. Venter: Shiny black, abdomen more fuscous, propleura shiny black with a posterior white mark, finely punctate, raised anterior lobe of ostiolar peritreme plate pale or whitish, abdomen clothed with recumbent pale setae. Legs: Coxae fuscous, pale at apices: profemora fuscous, pale at apices and at extreme bases, protibiae fuscous, paler on apical 1/3, protarsi and claws fuscous, remaining legs broken.


Remarks.—Myiomma semipallidum is most similar to M. brasilianum, M. schuhi, and M. surinamense but is easily distinguished by a combination of the fuscous, apically pale second antennal segment, extensive pallid areas on the hemelytra, and the fuscous legs (at least prolegs).
Myiomma surinamense (Carvalho and Rosas)

Paramyiomma surinamense Carvalho and Rosas. 1962:419

Carvalho and Rosas (1962) described this species from the coastal plain of Surinam, South America from more than 50 specimens taken in light traps. The authors characterized this species by the dark head, pronotum and scutellum, pale hemelytra and legs, the long rostrum which reaches the genital segment, and by the male genitalia.

This species appears to be very close to M. brasilianum and M. schuhi. Since no females are known from M. surinamense, it is difficult to suggest its relationship to my M. brasilianum (known only from a single female), but it appears that the differently marked second antennal segment and the darker dorsum will separate the two species. Myiomma schuhi can be separated by the shorter rostrum, the pale mark at the base of the cuneus, and the fuscous femora and tibiae.

Carvalho (1951) erected the genus Paramyiomma on the basis of the formation of the eyes and the position of the ocelli for several African and Asian species and later included M. surinamense. Smith (1967) concluded that these characters were not consistently distinct for all the species involved and synonymized Carvalho’s genus under Myiomma. However, the South American fauna, as with much of the Old World fauna, differs considerably from the “typical” Myiomma fieberi of the Palearctic. Slater and Schuh (1969) suggested that male and female genitalia may have the greatest value for defining genera, although I find these characters at a specific level to be limited. A careful study of the genus Myiomma on a world basis will be required before a sound evaluation of generic limits and species relationships can be made.

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Literature Cited


