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NEW SPECIES OF ENITHARES (Hemiptera, Notonectidae)

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While preparing a forthcoming monograph of the genus **Enithares** Spinola under the direction of Dr. H. B. Hungerford, I discovered several species heretofore undescribed.

The color pattern for the species of this genus in highly variable, there being forms ranging from light to dark in the majority of species. Though in some instances only one color pattern is described, others may exist, as my color descriptions are based only on specimens at my disposal.

The first tarsal segment used throughout this paper in structural characterization is actually tarsal segments one plus two. The basal tarsal segment is very small and not always evident. Tarsal segment two is actually the third.

The specimens studied came from many different museums and these museums will be indicated according to the following legend: Snow Entomological Collections—S. E. C., United States National Museum—U. S. N. M., Paris Museum—P. M., Harvard Museum of Comparative Zoology—H. M., Carnegie Museum—C.M., Naturhistorisches Museum at Basel, Switzerland—B. M., Indian Museum at Calcutta, India—I. M., and the British Museum—Br. M.

The new species are described below.

Enithares stridulata n. sp. Plate 1, figure 1

Size: Large robust species; length 11.4 mm. to 13.2 mm.; width of pronotum 4.5 mm. to 5.4 mm.

Color: Variable, light and dark forms. Dark form: eyes dark brown; vertex light brown; pronotum same color as vertex with a dark brown transverse band immediately behind the head, posterior margin appearing black as it is hyaline and overlies the black anterior margin of the scutellum; scutellum black, with or without a light brown triangular stripe on each side of the apical half; hemelytra dark brown or black with longitudinal hyaline bands extending for indefinite lengths from the base. Light form: eyes light brown or dark brown; vertex light brown; hemelytra light brown and faintly hyaline; clear zone of hemelytral membrane may be dark brown. Legs of both forms testaceous. Abdominal venter of both forms dark brown or testaceous; if the former, the keel and lateral margins are testaceous.

Structural Characteristics: As viewed from above the anterior margin of the head is almost straight with its anterio-lateral corners rounded; head short and its width much narrower than that of the pronotum; vertex with

^{*} Contribution from the Department of Entomology, University of Kansas.

its anterior width slightly more than its length; synthlipsis wide, more than one-half as wide as the anterior width of the vertex; along the median longitudinal axis the head is shorter than the pronotum. Pronotum more than three times as wide as its median length with its anterior lateral margins broadly rounded; posteror margin of pronotum concave; dorsal margin of pronotal fovea slanting laterally from behind the eyes. Nodal furrow may be slanting or curved forward and equal to or slightly more than its length removed from the membranal suture. Males with the apex of the clavus slightly raised and roughened by numerous pits. Mesotrochanter angulate. Metaxyphus with its basal lateral margins curved and converging; apical lateral margins almost straight and parallel; apex of metaxyphus truncate with the apical margin at right angles to the apical lateral margins. Anterior tibia of males with a slightly concave indentation on its anterior margin just below the middle. A row of small black transverse ridges extends along the apical posterior margin of the middle tibia and posterior margin of the tarsus of the males. Male genital capsule as shown on Plate I, figure 1. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	122	32	15
Male middle leg	100	81	40	17
Female front leg	100	109	37	20
Female middle leg	100	81	39	18

Location of Types: Holotype δ , allotype $\mathfrak P$, 4δ and $5 \mathfrak P$ paratypes, Indo-China, Luang Prabang, Ban Sambang, November 20, 1918, R. V. de Salvaza, in the British Museum. One δ and $1 \mathfrak P$ paratypes, same collector, place, and date, in the Snow Entomological Collections.

Comparative Notes: Similar to E. lineatipes Horvath but much larger. Males of E. lineatipes lack the raised claval apex and ridges of middle tibia and tarsus.

Data on Distribution: In addition to the type series.

Indo-China

Luang Probang, Muong You, Nov. 13, 1917, R. V. de Salvaza; 1 ♀ (Br. M.) Tonkin, Chapa, June 1916, R. V. de Salvaza; 1 ♀ (Br. M.) Laos, Xieng Khouang, Dec. 23, 1918, R. V. de Salvaza; 2 ♂ ♂ (Br. M.) Laos, Xieng Khouang, Ben Sai, March 1919, R. V. de Salvaza; 1♀ (Br. M.) Luang Prabang, Sala Man Pik, Mar. 27, 1918, R. V. de Salvaza; 1 ♂ (Br.M.)

Enithares metallica n. sp. Plate I, figure 2

Size: Length 10.2 mm. to 11.5 mm.; width of pronotum 3.9 mm. to 4.1 mm. Color: Variable, light and dark forms. Light form: eyes grayish brown; vertex light brown; pronotum same color as vertex, may have a slightly darker transverse band immediately behind the eyes; scutellum light brown; hemelytra light brown with longitudinal hyaline areas extending from base

and these may appear darker due to the dark body surface underneath, clear zone of membrane dark brown; legs testaceous; ventral abdominal sclerites light brown with keel and lateral margins testaceous. Dark form: Eyes light brown or brown; vertex stramineous, anterior margin may be tinged with red; pronotum with anterior portion light gray, separated from white posterior portion by a line of dense punctations, posterior margin may be hyaline and if so, appears black as it overlies the black anterior margin of the scutellum; scutellum stramineous with anterior margin black; hemelytra dark brown, almost black with uneven longitudinal flavus stripes radiating from the base along the lateral margins and outer margins of clavus, lateral margins of hemelytra may be hyaline; legs testaceous, ventral abdominal sclerites dark brown with keel and lateral margins light brown.

Structural Characteristics: As viewed from above the head is short with the anterior outline rounded; vertex with its width greater than its length; synthlipsis wide, over one-half the anterior width of the vertex; along the median longitudinal axis the head is shorter than the pronotum. Pronotum with width more than three times its median length; posterior margin concave; dorsal margin of pronotal fovea directed laterally from behind the eyes. Nodal furrow curved forward or slanting forward and less than its length removed from the membranal suture. Metaxyphus with basal lateral margins slightly curved convexly and apical oblique lateral margins meeting in a short pointed apex. Male genital capsule as on Plate I, fig. 2. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	113	46	23
Male middle leg	100	84	33	17
Female front leg	100	108	44	24
Female middle leg	100	84	34	18

Location of Types: Holotype $\, \lozenge \,$, allotype $\, \lozenge \,$, and $\, 1 \, \, \lozenge \,$ paratype, Siam, 1924, Hugh Smith, in the United States National Museum; $\, 1 \, \, \lozenge \,$ and $\, 1 \, \, \lozenge \,$ paratypes, same place, collector, and date, in Snow Entomological Collections.

Comparative Notes: Although somewhat smaller than E templetoni (Kirby), this species resembles it very closely. Both have short broad heads and their lateral body outlines converging from the posterior margins of the pronotum. These two species can be readily separated, however, as the metaxyphus of E. metallica has its basal lateral margins slightly curved convexly and these curve gradually into the apical oblique margins whereas in E. templetoni the basal lateral margins are raised and curved concavely; these bend abruptly into the apical oblique margins and the angle there formed is thickened and appears nodule-like.

Data on Distribution: In addition to the type series.

Malay Peninsula

Perak, 7 miles south Taiping, waterfall in still sandy pool, July 3, 1937, 1 δ , 2 \circ \circ (Br. M.).

Teku River, 4500 ft., Dec. 13, 1921, 2 & & , 1 \, (Br. M.). Wraip Camp, 3300 ft., Dec. 10, 1921, 1 \, (Br. M.)

Siam

Bulsit Besar, 2 ♀♀ (Br. M.).

Indo China

Tonkin, Hoabinh, Jan. 1917, R. V. de Salvaza, 2 & &, 2 ♀♀ (Br. M.).

Enithares bakeri n. sp. Plate I, figure 3

Size: Small robust species; length 7.8 mm. to 8.1 mm.; width of pronotum 2.7 mm.

Color: Eyes dark brown or brown; vertex and remainder of dorsal surface of body light brown; legs and abdominal venter testaceous; abdominal venter may be dark brown with keel and lateral margins testaceous.

Structural Characteristics: Head long and broad with its anterior margin rounded; vertex with its anterior width less than its length; synthlipsis wide, at least one-half as wide as the anterior width of the vertex; along the median longitudinal axis the head is longer than the pronotum. Pronotum with its width more than three times its length; posterior margin of pronotum almost straight; pronotal fovea with its dorsal margin curving laterally from behind the eyes. Nodal furrow directed dorsad and more than its length removed from the membranal suture. Mesotrochanter angulate. Metaxyphus with basal lateral margins almost straight and parallel; apical oblique lateral margins straight and converging, meeting in a pointed apex. Male genital capsule as shown on Plate I, figure 3. The relative lengths of the parts of the legs are as folloows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	101	43	16
Male middle leg	100	82	32	12
Female front leg	100	103	38	19
Female middle leg	100	82	33	22

Location of Types: Holotype $\, \lozenge \,$, allotype $\, \lozenge \,$, $\, \lozenge \, \lozenge \,$ and $\, \lozenge \, \lozenge \, \lozenge \,$ paratypes, Surigao, Mindanao, Baker, in the United States National Museum; $\, \lozenge \, \lozenge \,$ and $\, \lozenge \,$ paratypes, same place and collector, in the Snow Entomological Collections.

Comparative Notes: This species resembles E. sinica Stål in general body contours though somewhat smaller. The males of this species lack the femoral spur as found on the hind femur of E. sinica. Also in this species the head is distinctly longer than the pronotum whereas in E. sinica the head is shorter than the pronotum.

Data on Distribution: Known only from type series.

Enithares malayensis n. sp. Plate I, figure 4

Size: Length 9 mm. to 9.3 mm.; width of pronotum 3.3 mm. to 3.6 mm.

Color: Eyes brown, vertex light brown; pronotum same color as vertex; scutellum dark brown with a lateral triangular dark brown patch on each side, meeting in the apex to form a "V". Hemelytra dark brown or black with hyaline areas that appear black due to the dark body surface underneath. Legs and abdominal venter testaceous, the latter may be unevenly colored dark brown.

Structural Characteristics: As viewed from above the head is short with its anterior margin rounded; vertex with its anterior width greater than its length; synthlipsis wide, equal to one-half the anterior width of the vertex; along the median longitudinal axis the head is much shorter than the pronotum. Pronotum less than three times as wide as its median length; posterior margin concave; dorsal margin of pronotal fovea curving laterally from behind the eyes. Nodal furrow curved forward and less than its length removed from the membranal suture. Anterior tibia curved forward being concave on its anterior margin and convex on its posterior margin, also heavily haired along lower anterior margin. Middle tibia of males swollen to form a convex arch along the dorsal surface; expanded at its apex to form a short triangular eminence along the anterior basal fifth of the tarsus, this expansion also provided with a short ventrally directed spur at its base. Mesotrochanter forms a distinct spur at the inner ventral angle. Metaxyphus with basal lateral margins straight and converging, apical oblique margins straight and meeting in a point. Male genital capsule as on Plate I, figure 4. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	102	43	18
Male middle leg	100	98	67	21

Location of Types: Holotype &, Kedah Peak 2900 ft., Malay Peninsula, Dec. 2, 1915, in the British Museum; 1 & paratype, same place and date, in the Snow Entomological Collections.

Comparative Notes: This species strongly resembles E. abbreviata (Kirby) but can be quickly separated from the latter as the males have a mestotrochanteral spur which is lacking on E. abbreviata. The males of this species also lack the patch of small black spicules on the anterior surface of the mesotrochanter and the first tarsal segment of the middle leg is distinctly longer than the second whereas E. abbreviata has the above mentioned mesotrochanteral spicules and has the first tarsal segment much shorter than the second.

Data of Distribution: Known only from type series.

Enithares hungerfordi n .sp. Plate I, figure 5

Size: Length 13.2 mm. to 16.8 mm.; width of pronotum 5.4 mm. to 6mm. Color: Variable, light and dark forms. Light form: eyes grayish brown,

brown or dark brown; vertex stramineous; pronotum same color as vertex with posterior margin hyaline and appearing brown as it allows the brown color of the underlying portion of the scutellum to be seen; scutellum and hemelytra light brown or stramineous; the hemelytra may be partly or wholly hyaline. Dark form: eyes grayish brown; vertex light brown; pronotum immediately behind the eyes dark brown, followed by a transverse band the same color as the vertex, which may be hyaline on its posterior margin and appear black due to the underlying black portion of the scutellum; scutellum black with a lateral flavus stripe on each side; hemelytra black with basal half of corium and clavus irregularly colored with brown. Both forms have legs testaceous and ventral abdominal segments dark brown with keel and lateral margins light brown.

Structural Characteristics: As viewed from above the anterior outline of the head is rounded; head short; vertex with its anterior width greater than its length; synthlipsis wide, more than one-half as wide as the anterior width of vertex; along the median longitudinal axis the head is shorter than pronotum. Pronotum at least three tmes as wide as long; posterior margin only slightly concave, almost straight; dorsal margin of pronotal fovea curving laterally from behind the eyes. Nodal furrow curved forward and less than its length removed from the membranal suture. Hind femur of males with a black nodule on lower posterior margin. Mesotrochanter angulate. Metaxyphus with basal lateral margins almost straight, only slightly curved; apical oblique lateral margins straight and meeting in a point. Male genital capsule as shown on Plate I, figure 5. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	110	38	14
Male middle leg	100	86	38	22
Female front leg	100	105	41	17
Female middle leg	100	84	40	24

Location of Types: Holotype \Im , allotype \Im , a small stream below Jumma Cottage, Kodaikanal, Palni Hills, S. India, October 7, 1925, S. L. Hora, in the Indian Museum at Calcutta; 1 \Im and 1 \Im paratypes, same place, collector, and date, in the Snow Entomological Collections.

Comparative Notes: Of the same shape and size as E. triangularis (Guérin-Meneville) and resembles it very closely. However, the males of E. hungerfordi have a more pronounced tubercle on the hind femur and it is located more on the ventral surface than the similar tubercle of E. triangularis. Also the males of the latter species possess a short triangular eminence on the ventral surface of the anterior femur. This eminence is lacking on the anterior femur of the males of E. hungerfordi.

Data on Distribution: In addition to the type series.

India

Kodaikanal, S. India 7000 ft., March 27, 1936, 1 $\, \delta \,$, 6 $\, \circ \, \circ \,$ (Br. M.)

Pulvachi River, Palni Hills, S. India, S. Kemp, 1 Q (I.M.).

Inde Mere, Madura, Jos Dubreuil, $2 \ \delta \ \delta$, $1 \ Q \ (I.M.) \ 1 \ \delta$, $2 \ Q \ Q \ (S.E.C.)$.

India or Shembaganur, exchange fr. Horvath 2 & & (S.E.C.)

Inde Mere, Trichinopoly, Jos Dubreuil, 2 9 9, 2 & & (U.S.N.M.).

Trichinopoly, S. India, A. L. Montn, 1 & (U.S.N.M.)

Naraikkadu, 2500 to 3000 ft., Tinnevelly Dt, S. India, March 9, 1936, 3 δ δ , 5 \circ \circ (Br. M.).

Enithares chinensis n. sp. Plate II, figure 1

Size: Length 10.2 mm. to 10.8 mm.; width of pronotum 3.3 mm. to 4 mm. Color: Variable, light and dark forms. Light form: entire dorsal surface testaceous with eyes brown. Dark form: eyes brown; vertex light brown; pronotum and hemelytra dark brown with the anterior lateral margins of the latter testaceous and faintly hyaline. Legs of both forms testaceous; ventral abdominal segments dark brown with keel and lateral margins testaceous.

Structural Characteristics: As viewed from above the head is broad with its anterior outline rounded; vertex with its anterior width greater than its length; synthlipsis wide, at least one-half the anterior width of the vertex; along the median longitudinal axis the head is slightly shorter than the pronotum. Pronotum at least three times as wide as its median length; posterior margin almost straight, only slightly concave; dorsal margin of the pronotal fovea curving laterally from behind the eyes. Nodal furrow straight and directed dorsad, more than its length removed from the membranal suture. Mesotrochanter rounded. Metaxyphus with basal lateral margins straight and almost parallel, apical oblique lateral margins curved concavely and meeting in a pointed apex. Male genital capsule as shown on Plate II, figure 6. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	107	37	18
Male middle leg	100	83	33	18
Female front leg	100	111	38	18
Female middle leg	100	91	32	17

Location of Types: Holotype &, Datchulan, China, 1939, T. H. Cheng, in the United States National Museum; allotype ♀ and 1 & paratype, Foochow, China, Chenfu F. Wu, in the Imperial Museum in Japan.

Comparative Notes: This species is about the same size and shape as E. lineatipes Horvath. However, the anterior outline of the head is rounded whereas the anterior outline of the head of E. lineatipes is more or less straight with only the anterior lateral corners rounded. The first tarsal segment of the front leg of both sexes is twice the length of the second whereas in E. lineatipes this is not true.

Data on Distribution: Known only from type series.

Size: Length 9 mm. to 10.5 mm.; width of pronotum 3.6 mm. to 4.2 mm.

Enithares buhleri n. sp. Plate II, figure 7

Color: Variable, light and dark forms. Light form: eyes brown; vertex pale brown; pronotum, scutellum and hemelytra the same color as the vertex, the hemelytra may have hyaline areas that appear darker due to the underlying dark body surface; frons with two brown spots, one on each side of the median line; legs testaceous; ventral abdominal segments light brown with keel and lateral margins testaceous. Dark form: eyes grayish brown; vertex stramineous; pronotum with its anterior portion dark brown, hind portion same color as vertex; posterior margin of pronotum may be hyaline and appear black as it overlies the black anterior margin of the scutellum; scutellum black, may have two lateral flavus stripes, one on each side of apical half; hemelytra black, may have its lateral margins and basal half light brown and hyaline; frons with the brown spots as found on the light forms; legs testaceous; abdominal venter brown or dark brown, with keel and lateral margins testaceous.

Structural Characteristics: As viewed from above the head is short with its anterior outline rounded; vertex with its anterior width greater than its length; synthlipsis wide, at least one-half as wide as the anterior width of the vertex; along the median longitudinal axis the head is slightly shorter than the pronotum. Pronotum slightly more than three times as wide as its median length; posterior margin concave; dorsal margin of the pronotal fovea curves laterally from behind the eyes. Nodal furrow curves forward and is less than its length removed from the membranal suture. Base of the labrum with its lateral margins thickened, appearing almost rectangular. Anterior tibia of male slightly concave along its anterior margin and prolonged into a very short triangular process at the base of the first tarsal segment. Middle tibia of males with similar more pronounced prolongation at its anterior apical margin. These processes are present on the front and middle tibiae of the females but very much reduced. First tarsal segment of the middle leg of the male roughly triangular in shape, the base being almost twice as wide as the apex. Mesotrochanter of males with its free periphery set with short black bristles; mesotrochanter angulate. Hind trochanter of males with a dark brown nodule at its base next to the base of the femur. Femur of both sexes with a depression on its anterior surface, near the base, deeper in the males than in the females. Small black nodule on the lower posterior margin of the hind femur of the males; lower posterior margin of hind femur of males provided with long hairs. Metaxyphus with lateral margins medianly concave, apical margin rounded. Male genital capsule as shown on Plate II, figure 7. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	104	37	23
Male middle leg	100	91	36	26
Female front leg	100	97	42	25
Female middle leg	100	84	37	26

Location of Types: Holotype δ , allotype \mathfrak{P} , 1 δ and 1 \mathfrak{P} paratypes, Soe, Timor, June 1935, C. Buhler and Meyer, in the Naturhistorisches Museum at Basel, Switzerland; other paratypes as follows: 1 δ , Baaguia, Timor, Aug. 1935, C. Buhler and Meyer, in Naturhistorisches Museum at Basel, Switzerland; 1 δ , Baaguia, Timor, August 1935, C. Buhler and Meyer; 2 \mathfrak{P} , Soe, Timor, June 1935, C. Buhler and Meyer; 1 δ , Molle, Timor, 1935, Buhler, in the Snow Entomological Collections.

Comparative Notes: Although much larger than E. gibbera n. sp. the shape of the legs give it a close resemblance to this species. The triangular process on the anterior leg of the male of E. gibbera is longer than that of E. buhleri and the anterior margin of the first tarsal segment of the middle leg of the male is not convex as in E. gibbera, but straight. The apex of the metaxyphus of E. buhleri is rounded while that of E. gibbera is acuminate.

Data on Distribution: Known only from type series.

Enithares loria n. sp. Plate II, figure 8

Size: Length 6 mm. to 6.9 mm.; width of pronotum 2.4 mm.

Color: Eyes reddish brown or brown; vertex light brown; pronotum with its anterior half same color as vertex, posterior half hyaline and appearing brown due to the brown underlying portion of the scutellum; scutellum brown; hemelytra tan and partly or wholly hyaline; legs stramineous; abdominal venter dark brown with keel and lateral margins testaceous.

Structural Characteristics: As viewed from above the anterior outline of the head is rounded, with its anterior width equal to its length; synthlipsis narrow, slightly less than one-half the anterior width of the vertex; along the median longitudinal axis the head is equal to or slightly longer than the pronotum. Pronotum at least three times as wide as its median length; posterior margin of pronotum straight or only slightly concave; dorsal margin of pronotal fovea curves laterally from behind the eyes. Nodal furrow directed more or less dorsad and less than its length removed from the membranal suture. When viewed ventrally the frons has two depressions, one on each side next to the eyes; immediately below these are two more medianly located depressions. Mesotrochanter angulate. Metaxyphus with its basal lateral margins convexly curved, apical oblique margins almost straight and meeting in a point. Male genital capsule as shown on Plate II, figure 8. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	100	37	16
Male middle leg	100	84	32	24
Female front leg	100	100	36	18
Female middle leg	100	83	36	19

Location of Types: Holotype &, allotype 1 9, 2 & & and 1 9 paratypes, New Guinea, Rigo, Luglio, 1889, L. Loria, in the United States National Museum; 1 δ and 1 \circ paratypes, same place, collector and date, in the Snow Entomological Collections.

Comparative Notes: This species is about the same size as E. mandalayensis Distant and the light forms of the two species make them all the more similar. However, E. loriai has a vertex with its anterior width equal to its length, whereas E. mandalayensis has the anterior width of the vertex less than the length. The latter species also has the outer (or posterior) claw of the middle leg of the male thickened and decidedly bent inward. This condition is lacking on the males of E. loriai.

Data on Distribution: In addition to the type series.

Papua, Mafulu 4000 ft., December 1933, L. E. Cheeseman, 2 & & and 4 9 9 (Br. M.).

Australia, Adelaide River, 1 & (Er. M.). J. J. Walker, 1 and 1 9 (Br. M.).

Enithares fusca n. sp.

Plate II, figure 9

Size: Length 8.7 mm. to 9 mm.; width of pronotum 3.6 mm.

Color: Variable, light and dark forms. Light forms: eyes dark brown; vertex, pronotum, scutellum and hemelytra flavus; clear zone of the membrane dark brown; frons with two brown spots on anterior margin, one on each side of the median line and with a dark brown spot above the labrum; legs testaceous. Dark form: eyes dark brown; vertex light brown; anterior portion of pronotum dark brown, posterior portion stramineous with its hind margin hyaline and appearing black as it overlies the black anterior margin of the scutellum; scutellum dark brown or black with two lateral flavus bands, one on each side, hemelytra dark brown or black with faintly gray hyaline stripes extending from base along lateral margins of hemelytra and corium; frons with same brown areas as the light form; legs testaceous; abdominal venter dark brown with keel and lateral margins testaceous.

Structural Characteristics: As viewed from above the head is short with its anterior outline only slightly rounded; vertex with its anterior width greater than its length; synthlipsis wide, at least one-half as wide as anterior width of vertex; along the median longitudinal axis the head is shorter than the pronotum. Pronotum more than three times as wide as its median length; posterior margin concave; dorsal margin of pronotal fovea curves laterally from behind the eyes. Nodal furrow curved forward and less than its length removed from the membranal suture. Middle tibia of males with a black nodule on its inner surface at the apex. Hind femur of males with a small black nodule on the lower posterior margin. Mesotrochanter angulate. Metaxyphus with its basal lateral margins straight and converging; apical oblique lateral margins slightly concave and meeting in a pointed apex. Male genital capsule as shown on Plate II, figure 9. The relative lengths of the parts of the legs are as follows:

Male front leg	100	109	36	18
Male middle leg	100	92	30	18
Female front leg	100	104	36	18
Female middle leg	100	93	35	21

Location of Types: Holotype $\, \lozenge \,$, allotype $\, \lozenge \,$, 1 $\, \lozenge \,$ paratype, Parambikuiam, Cochin State, India, Sept. 16-24, 1914, in the Indian Museum at Calcutta; 1 $\, \lozenge \,$ and 1 $\, \lozenge \,$ paratypes, same place, collector and date, in the Snow Entomological Collections.

Comparative Notes: Though closely resembling E. intricata Breddin, this species is slightly larger. It is strongly convex across the pronotum both longitudinally and transversely, a condition that is lacking in E. intricata. The males of the latter species lack the nodules as found on the middle tibiae and hind femora of the males of E. fusca.

Data on Distribution: Known only from type series.

Enithares wallacei n. sp. Plate II, figure 10

Size: Length 12.6 mm.; width of pronotum 4.2 mm.

Color: Eyes brown; vertex light brown; pronotum with anterior portion dark brown followed by a transverse stramineous band, posterior margin hyaline and appears dark brown or black due to the underlying dark margin of the scutellum; scutellum dark brown or black; hemelytra with basal half gray and hyaline and appears dark due to the dark body surface underneath, apical half dark brown; legs stramineous, ventral abdominal sclerites dark brown with keel and lateral margins stramineous.

Structural Characteristics: Head short and broad with its anterior outline rounded; vertex with its anterior width greater than its length; synthlipsis wide, over one-half as wide as the anterior width of the vertex; along the median longitudinal axis the head is shorter than the pronotum. Pronotum with its width three times its median length; posterior margin concave; dorsal margn of pronotal fovea curves laterally from behind the eyes. Nodal furrow curved forward at its tip and less than its length removed from the membranal suture. Mesotibia of males slightly concave along its anterior surface just before the apex. Metaxyphus with basal lateral margins almost straight and parallel; apical oblique margine slightly concavely curved and meeting in a pointed apex. Male genital capsule as shown on Plate II, figure 10. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	110	37	20
Male middle leg	100	88	28	23

Location of Type: Holotype &, Mak, Celeb., Wallace, in the British Museum.

Comparative Notes: This species is about the same length as E. triangularis (Guérin-Meneville) and also resembles it very closely in coloration. However, the male of this species lacks the short triangular eminence as found on the ventral surface at the base of the femur of the male of E. triangularis.

Data on Distribution: Known only from type specimen.

Enithares atra n. sp. Plate III, figure 11

Size: Length 9 mm.; width of pronotum 3.6 mm.

Color: Eyes yellowish brown; vertex flavus; anterior half of pronotum of the same color as vertex, posterior half gray with hind margin hyaline, appears black as it overlies the black anterior margin of the scutellum; scutellum black or may be cream colored with only the anterior margin black; hemelytra dark brown with lighter hyaline brown bands on corium and on the suture between the clavus and corium; legs stramineous; ventral abdominal sclerites dark brown, with keel and lateral margins light brown.

Structural Characteristics: As viewed from above the head is short with the anterior outline rounded; vertex with its anterior width equal to its length; synthlipsis wide, at least one-half as wide as the anterior width of vertex; along the median longitudinal axis the head is shorter than the pronotum at least three times as wide as its median length; posterior margin of pronotum concave; dorsal margin of pronotal fovea slants laterally from behind the eyes. Nodal furrow slanting forward and less than its length removed from the membranal suture. Mesotrochanter rounded. Metaxyphus with basal lateral margins concave and diverging; apical oblique lateral margins slightly concave and meeting in a pointed apex. Male genital capsule as shown on Plate III, figure 11. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	100	36	20
Male middle leg	100	87	31	22
Female front leg	100	104	36	23
Female middle leg	100	84	32	22

Location of Types: Holotype δ , allotype $\mathfrak P$, 2 δ δ and 1 $\mathfrak P$ paratypes, New Guinea, Rigo, Luglio, 1889, L. Loria, in the United States National Museum; other paratypes as follows: 2 δ δ and 1 $\mathfrak P$, same place, collector, and date, in the Snow Entomological Collections; 5 $\mathfrak P$ $\mathfrak P$, same place, collector, and date, in the United States National Museum.

Comparative Notes: This species approximately the same size as E. abbreviata (Kirby) but its head is a little shorter and broader in relation to the pronotum than that of E. abbreviata. The males of this species lack the short flattened first tarsal segment of the middle leg and the area of black spicules on the inner surface of the mesotrochanter as found on the males of E. abbreviata. The dorsal margin of the pronotal fovea of E. atra curves laterally from behind the eyes while that of E. abbreviata is directed more or less posteriorly from behind the eyes before turning laterally.

Data on Distribution: Known only from type series.

Enithares freyi n. sp. Plate III, figure 12

Size: Length 11 mm.; width of pronotum 4.2 mm.

Color: Eyes brown; vertex stramineous; pronotum same color as vertex, with transverse dark brown band immediately behind the eyes, posterior margin of pronotum hyaline, appears dark brown due to the dark brown portion of the underlying scutellum; scutellum dark brown with apex and apical half of lateral margins stramineous; hemelytra dark brown; legs stramineous; abdominal venter dark brown with keel and lateral margins stramineous.

Structural Characteristics: As viewed from above the head is short and broad with its anterior margin rounded; vertex with its anterior width greater than its length; synthlipsis wide, at least one-half the anterior width of the vertex; along the median longitudinal axis the head is slightly shorter than the pronotum. Pronotum more than three times as broad as its median length; posterior margin concave; dorsal margin of pronotal fovea curves laterally from behind the eyes. Nodal furrow slanting forward and less than its length removed from the membranal suture. Mesotrochanter rounded. Metaxyphus with basal lateral margins convexly curved and converging slightly; apical oblique lateral margins concavely curved and meeting in a pointed apex. Male genital capsule as shown on Plate III, figure 12. The relative lengths of the parts of the legs are as follows:

•	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	97	36	21
Male middle leg	100	87	33	· 22

Location of Type: Holotype 3, Mt. Prov. P. I. Benguet, July 15, 1946, Dr. G. Frey, in the British Museum.

Comparative Notes: This species resembles E. lineatipes Horvath being about the same length and width. However, the head is more rounded on its anterior margin and is wider in relation to the width of the pronotum than that of E. lineatipes. The nodal furrow in E. freyi is less than its length removed from the membranal suture, whereas in E. lineatipes the nodal furrow is more than or at least equal to its length removed from the membranal suture.

Data on Distribution: Known only from type specimen.

Enithares fruhstorferi n. sp. Plate III, figure 13

Size: Length 10.2 mm.; width of pronotum 3.6 mm.

Color: Eyes brown; vertex light brown; pronotum with anterior half same color as vertex, followed by a darker band, posterior margin of pronotum hyaline and appears dark brown as it overlies the dark anterior portion of the scutellum; scutellum dark brown; hemelytra tan and hyaline; legs testaceous; ventral abdominal sclerites brown.

Structural Characteristics: As viewed from above the anterior outline of the head is rounded; head broad; vertex with its anterior width greater than its length; synthlipsis wide, slightly more than one-half the anterior width of the vertex; along the median longitudinal axis the head is slightly shorter than the pronotum. Pronotum three times as wide as its median length; posterior margin almost straight, only slightly concave; dorsal margin of pronotal fovea directed more or less caudad before turning laterally. Nodal furrow curved forward and less than its length removed from the membanal suture. Mesotrochanter angulate. Metaxyphus with basal lateral margins slightly convex; apical oblique lateral margins concave and meeting in a pointed apex. Male genital capsule as shown on Plate III, figure 13. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	117	46	22
Male middle leg	100	86	34	23

Location of Type: Holotype &, Tenegger-Gebrig, Java, H. Fruhstorfer, in the United States National Museum.

Comparative Notes. This species is about the same size as E. abbreviata (Kirby) and resembles the light forms of the latter. However, this male specimen lacks the area of black spicules as found on the mesotrochanter of the latter. The first tarsal segment of the middle leg is not shortened and flattened as in E. abbreviata. Also the small tubercle as found on the hind femur of the males of E. abbreviata is not present in this species.

Data on Distribution: Known only from type specimen.

Enithares timorensis n. sp. Plate III, figure 14

Size: Length 9.2 mm.; width of pronotum 3.5 mm.

Color: Variable, light and dark forms. Light form: Eyes brown; vertex and remainder of dorsal surface of body light brown; frons may be tinged with green; legs and abdominal venter testaceous, the latter may be dark brown with only the keel and lateral margins testaceous. Dark form: eyes dark brown; vertex stramineous; hind margin of pronotum hyaline and appears dark brown due to the dark brown color of the underlying scutellum; scutellum dark brown or black; hemelytra dark brown or black; legs testaceous; abdominal venter may be testaceous or dark brown.

Structural Characteristics: As viewed from above the anterior outline of the head is rounded; vertex with its anterior width less than its length; synthlipsis wide, equal to or more than one-half the anterior width of the vertex; along the median longitudinal axis the head is equal to the length of the pronotum. Pronotum three times as broad as its median length, posterior margin almost straight; dorsal margin of pronotal fovea curves laterally from behind the eyes. Nodal furrow slightly curved forward and equal to its length removed from the membranal suture. Mesotrochanter angulate. Metaxyphus with basal lateral margins almost straight, only slightly convex and converging; apical oblique lateral margins concave and meeting in a pointed apex. Male genital capsule as shown on Plate III, figure 14. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	112	41	20
Male middle leg	100	88	33	24
Female front leg	100	102	42	23
Female middle leg	100	85	35	23

Location of Types: Holotype δ , allotype \mathfrak{P} , Soe, Timor, 1935, Buhler in the Naturhistorisches Museum at Basel, Switzerland; paratypes are as follows: 1 \mathfrak{P} , Soe, Timor, June 1935, C. Buhler and Meyer; 1 δ , Bowo, Timor, in the Snow Entomological Collections; 1 δ , Timor, in the British Museum.

Comparative Notes: This species resembles E. bergrothi Montandon very much and can best be distinguished from it by an examination of the male genital capsule. The male genital capsule of this species has a more or less oval shaped clasper, whereas the clasper of the male genital capsule of E. bergrothi has an ovally swollen base with the lateral margins tapering to form an extended acuminated apex.

Data on Distribution: Known only from type series.

Enithares gibbera n. sp. Plate III, figure 15

Size: Length 8.8 mm. to 9 mm.; width of pronotum 3 mm. to 3.3 mm.

Color: Variable, light and dark forms. Light form: completely pale brown with eyes dark brown. Dark form: eyes brown; vertex stramineous; pronotum, immediately behind the eyed dark brown, followed by a transverse stramineous band, posterior margin of the pronotum may be hyaline and appearing black as it overlies the black anterior margin of the scutellum; scutellum black, may have two lateral triangular shaped flavus stripes, one on each side; hemelytra black with hyaline areas on clavus and corium; frons with two brown spots, one on each side of the median line and another brown spot immediately above the labrum; ventral abdominal segments dark brown; legs testaceous.

Structural Characteristics: As viewed from above the head is short and broad with its anterior outline rounded; vertex with its anterior width greater than its length; synthlipsis wide, at least one-half the anterior width of the vertex; along the median longitudinal axis the head is shorter than the pronotum. Pronotum with its width at least three times its median length; posterior margin concave; dorsal margin of pronotal fovea curves laterally from behind the eyes. Nodal furrow curves forward and is less than its length removed from the membranal suture, the nodal furrow may be slanting forward with only its tip curved forward. Apices of front and middle tibiae of the males prolonged into a long triangular shaped eminence of its anterior margin. Anterior tibia of males concavely indented just before the apex. First tarsal segment of the male front leg curved posteriorly with its anterior and posterior margins convex and concave respectively. First tarsal segment of the male middle leg convex on its anterior margin, posterior margin straight. The hind femora of both sexes with an indentation

on its anterior or outer margins near the base. Mesotrochanter angulate. Metaxyphus with basal lateral margins concave and diverging; apical oblique lateral margins concave and meeting in a pointed apex. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	131	38	13
Male middle leg	100	100	31	19
Female front leg	100	104	42	19
Female middle leg	100	93	33	. 20

Location of Types: Holotype 3, allotype 9, 333 and 599 paratypes, Guadalcanal, November 2, 1944, L. J. Lipovsky, in the Snow Entomological Collections.

Comparative Notes: Somewhat smaller but of the same shape and coloration as the darker forms of E. abbreviata (Kirby). However, the males of E. gibbera lack the patch of black spicules as found on the ventral surface of the mesotrochanter of the males of E. abbreviata. The males of E. abbreviata lack the triangular extensions of the anterior margins of the front and middle tibiae as found on E. gibbera.

Data on Distribution: Known only from type series.

Enithares congoensis n. sp. Plate III, figure 16

Size: Length 6.7 mm. to 7.5 mm.; width of pronotum 2.5 mm. to 3 mm.

Color: Variable, reddish brown and dark forms. Dark forms: eyes brown speckled with black; vertex flavus or light brown; pronotum with its anterior half same color as vertex, posterior half appears black as it is hyaline and allows the black color of the underlying anterior margin of the scutellum to be seen; scutellum black, may be tinged with green at its apex; hemelytra black with hyaline longitudinal areas on the basal half of the corium and clavus. Reddish brown form: eyes reddish brown; vertex same color; pronotum with its anterior half black or dark brown, posterior half reddish brown; scutellum black; basal half of hemelytra orange with clavus having thin brown band bordering the scutellum and hemelytral commissure, apical half of the hemelytra dark brown or black with the exception of the clear zone of the membrane which is light brown. Both forms have legs stramineous.

Structural Characteristics: As viewed from above the anterior outline of the head is rounded; anterior width of the vertex less than its length; synthlipsis narrow, less than one-half as wide as the anterior width of the vertex; along the median longitudinal axis the head is equal to or longer than the length of the pronotum. Pronotum at least three times as broad as its median length; posterior margin concave; dorsal margin of pronotal fovea directed laterally from behind the eyes. Nodal furrow slants forward and less than its length removed from the membranal suture. First tarsal segment of the male front leg thickened dorsally at its base. Mesotrochanter

rounded. Metaxyphus with basal lateral margins convexly curved, apical oblique lateral margins concave and meeting in a pointed apex. Male genital capsule as shown on Plate III, figure 16. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	108	32	18
Male middle leg	100	87	33	31
Female front leg	100	111	33	22
Female middle leg	100	80	32	25

Location of Types: Holotype δ , allotype \mathfrak{P} , 1 \mathfrak{P} paratype, Buta, Belgian Congo, purchased fr. Dr. O. Staudinger, Feb. 1912, in the Snow Entomological Collections; other paratype: $2 \delta \delta$, $3 \mathfrak{P}$, Lake Onango, French Congo, A. C. Good, in the Carnegie Museum.

Comparative Notes: This species is about the same size as E. blandula. Signoret. However, it lacks the black spicules as found on the anterior tibia of the latter. The male genital capsules are also greatly different, the clasper of E. congoensis is long, with its base swollen and the lateral margins narrowing to an acuminated apex which lies almost at the level of the dorsal margin of the posterior lobe, the clasper of E. blandula is short and ovoid in shape. E. blandula does not have the base of the first segment of the male front tarsi thickened.

Data on Distribution: In addition to the type series.

Africa

Stanleyville, Congo, August 8, 1909, Land Chopin, 2 \(\text{(S.E.C.)}.

Enithares pellucida n. sp. Plate III, figure 17

Size: Length 9 mm.; width of pronotum 3.3 mm.

Color: Eyes brown, dark brown, or gray; vertex may be white or tan; pronotum with anterior half same color as the vertex, posterior half hyaline and appears black as it overlies the black anterior portion of the scutellum; scutellum black with two lateral triangular shaped stripes, one on each side, meeting in the apex to form a "V", or it may be entirely stramineous with only the anterior margin black; hemelytra white or stramineous and partly or wholly hyaline; legs stramineous; abdominal venter dark brown with lateral margins and keel light brown or the abdominal venter may be gray.

Structural Characteristics: As viewed from above the anterior outline of the head is rounded with the anterior width of the vertex equal to or less than its length; synthlipsis wide, being at least one-half the anterior width of the vertex; along the median longitudinal axis the head is less than or equal to the median length of the pronotum. Pronotum with its width slightly less than three times its median length; posterior margin concave; dorsal margin of the pronotal fovea curves laterally from behind the eyes.

Nodal furrow slanting forward and less than its length removed from the membranal suture. Anterior tibiae of both sexes with a band of black spicules on the posterior surface. Mesotrochanter rounded. Metaxyphus with basal lateral margins almost straight and parallel; apical oblique lateral margins concavely curved and meeting in a long pointed apex. Male genital capsule as shown on Plate III, figure 17. The relative lengths of the parts of the legs are as follows:

	Femur	Tibia	1st. Tar. Seg.	2nd Tar. Seg.
Male front leg	100	104	36	19
Male middle leg	100	84	34	20
Female front leg	100	113	40	· 22
Female middle leg	100	81	36	19

Location of Types: Holotype \lozenge , allotype \lozenge , 1 \lozenge and 2 \lozenge \lozenge paratypes, Tananarive, Madagascar, 1921, R. Decary, in the Snow Entomological Collections; 2 \lozenge \lozenge and 3 \lozenge \lozenge paratypes, same place, collector and date, in the Paris Museum.

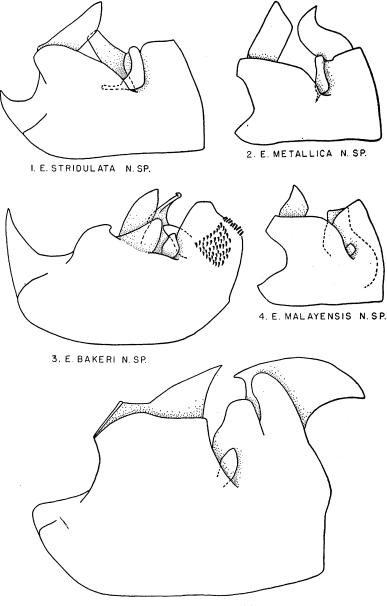
Comparative Notes: This species closely resembles E. rhodopsis Hutchinson, which appears to be confined to the mainland of Africa whereas this species is Madagascan. These two species are so similar that morphologically the male genital capsules are the best means of separating them. The posterior lobe of E. pellucida has its anterior margin slanting downward while that of E. rhodopsis is curved downward. The claspers are also shaped differently. That of E. pellucida has a more or less ovoid base with its apex curved forward while that of E. rhodopsis is ovoid in shape and not differentiated into a basal and apical region.

Data on Distribution: In addition to the type series.

Madagascar

Sikora, 1896, 1 δ , 3 \circ \circ (P.M.).

Madagascar, P. Cambque, January 13, 1914, 1 ♀ (U.S.N.M.), purchased fr. Prof. C. Lamberton, November 1913, 3 ♂ ♂, 3 ♀♀ (S.E.C.).



5. E HUNGERFORDI N. SP.

PLATE I

- Lateral left view of the male genital capsule of Enithares stridulata Brooks.
 Lateral left view of the male genital sapsule of Enithares metallica Brooks.
 Lateral left view of the male genital capsule of Enithares bakeri Brooks.
 Lateral left view of the male genital capsule of Enithares malayensis Brooks.
 Lateral left view of the male fienital capsule of Enithares hungerfordi Brooks.

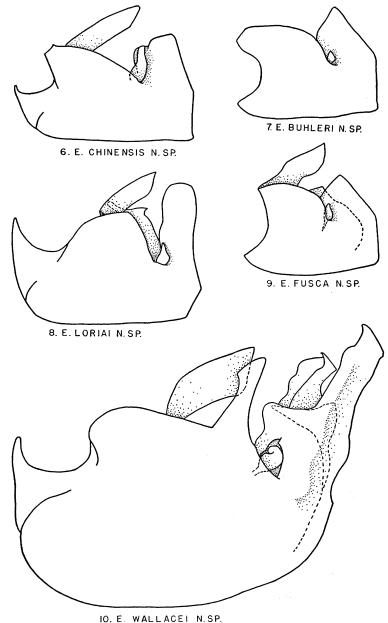


PLATE II

- Lateral left view of the male genital capsule of Enithares chinensis Brooks.
 Lateral left view of the male genital capsule of Enithares buhleri Brooks.
 Lateral left view of the male genital capsule of Enithares loriai Brooks.
 Lateral left view of the male genital capsule of Enithares fusca Brooks.
 Lateral left view of the male genital capsule of Enithares wallacei Brooks.

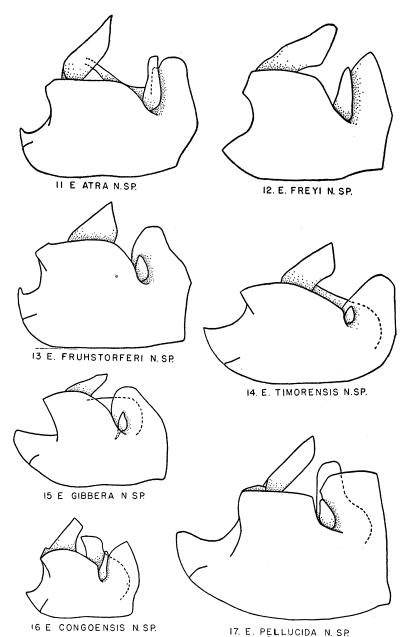


PLATE III

- 11. Lateral left view of the male genital capsule of Enithares atra Brooks.
 12. Lateral left view of the male genital capsule of Enithares freyi Brooks.
 13. Lateral left view of the male genital capsule of Enithares frunstorferi Brooks.
 14. Lateral left view of the male genital capsule of Enithares timorensis Brooks.
 15. Lateral left view of the male genital capsule of Enithares gibbera Brooks.
 16. Lateral left view of the male genital capsule of Enithares congoensis Brooks.
 17. Lateral left view of the male genital capsule of Enithares pellucida Brooks.