

THE GENERA *LEPTOLAMINA* AND *MAACYNIPS*,  
N. GEN., FROM THE PAPUAN SUBREGION  
(Hymenoptera: Cynipoidea, Eucoilinae)<sup>1</sup>

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*Abstract*: Four species and 1 genus are described as new: *Leptolamina papuensis*, *Maacynips* (n. gen.) *papuana*, *M. distincta*, and *M. parva*. Keys, descriptions and distribution records are included.

The genus *Leptolamina* Yoshimoto was first described from Micronesia (Yoshimoto, 1962), based on a species from the island of Ponape in the Caroline Islands. While the Micronesian study was in press, I found both sexes of *Leptolamina ponapensis* Yshm. in our New Guinea collection. A description of the male *L. ponapensis* and new species from New Guinea are hereby presented. I express my sincere appreciation to T. C. Maa, D. Elmo Hardy, J. L. Gressitt, and E. J. Ford, Jr. for their efforts in making this paper possible through their collecting, and also to HSPA for loan of their specimens.

Genus *Leptolamina* Yoshimoto

*Leptolamina* Yshm., 1962, Ins. Micronesia (Bishop Mus.) 19 (3): 93-94 (type: *Leptolamina ponapensis* Yshm.; orig. design.).

*Leptolamina ponapensis* Yoshimoto

*Leptolamina ponapensis* Yshm., 1962, Ins. Micronesia 19 (3): 94.

*Male*: Body length 1.0-1.3 mm long; forewing 1.0-1.3 mm. Similar to ♀ except as follows: Antenna 15-segmented, filiform; segment slightly bent at base, shorter than 4.

*DISTRIBUTION*: Micronesia (Ponape I.), New Guinea (NE), Bismarck Arch., Java.

*SPECIMENS EXAMINED*: Holotype ♀ (US 66361), VI-IX.1950, Ponape I., Caroline Is., Airfield, Adams. 2 ♀ ♀, Wampit V., nr. Gurakor village, 950 m, nr. Wau, NE New Guinea, 7. VII. 1957, Hardy; ♀, Lae, 10 m, NE New Guinea, 10. VII. 1957, Hardy (BISHOP); ♀, Vudal, SW of Keravat, New Britain, Bismarck Arch., 13. XII. 1959, Maa (BISHOP); 2 ♂ ♂, Buitenzorg (Bogor), Java, III. 1907, F. Muir (HSPA).

*Leptolamina papuensis* Yoshimoto, n. sp. Fig. 1.

*Female*: Body length 1.5-1.7 mm; forewing 1.5-1.7.

1. Much of the field work which supplied the new material was financed by grants from the National Science Foundation (Systematic Biology) and the National Institutes of Health (Allergy and Infectious Diseases).

Brownish red, head, antennal club and abdomen slightly darker, legs brownish to brownish yellow. Malar space  $1/3$  height of eye. Antennal segment 1 obconical,  $2\times$  as long as broad; 2 subcylindrical,  $2\times$  as long as broad, shorter than 1; 3,  $1.5\times$  as long as 4, elongated, apex a little broader than base; 4-9 subequal in length, segments gradually thickened to segment 9; 10 slightly reduced in thickness than segments 11-13; 13 sharply acuminate at apex; antennal club striate, ellipsoidal and 4-segmented (fig. 1). Radial cell  $2.5\times$  as long as broad. Pronotal plate,  $2.5\times$  as wide as deep, dorsal margin entire. Mesonotum and mesopleuron polished. Scutellar disc and cup similar to *ponapensis* but cup slightly broader in width. Propodeum and base of tergite 2 thickly covered with woolly hairs. Abdomen  $1.4\times$  as long as broad; tergites 3-5 not concealed under tergite 2 and visible at apex.

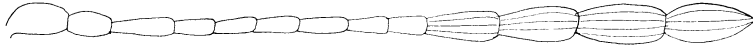


Fig. 1. *Leptolamina papuensis* Yshm., ♀ antenna.

DISTRIBUTION: New Guinea (SE).

Holotype ♀ (BISHOP 3205), Daradae Plantation, 500 m, 80 km N of Port Moresby, SE New Guinea, sweeping, T. C. Maa. Paratype, same data as holotype. Male unknown.

#### Genus *Maacynips* Yoshimoto, n. gen.

This new genus appears quite remote in characters from all other known genera of Eucoilinae (in Weld 1952). Based on the Eucoilinae collections in Bishop Museum, members of this genus occur in New Guinea and surrounding areas. A total of 30 specimens were examined and 3 species are here described as new.

Antenna of ♀ filiform, 13-segmented; segment 3 longer than 4; segments 6-13 striate; segment 13 ellipsoidal, apex sharply acuminate. Antenna of ♂ filiform, striate, 15-segmented; inner side of segment 4 swollen or thickened from middle to apex. Head more or less triangular in profile. Pronotal plate deeply emarginate on dorsal margin. Lateral bar with minute punctations. Scutellar disc striate posteriorly and subtruncate behind. Wings hyaline, pubescent with ciliate margin; radial cell closed. Tergite 2 with thick whitish hairy ring. Abdomen subpetiolate to sessile.

Type: *Maacynips papuana* n. sp.; present designation.

This genus is largely confined to the Papuan subregions. *Maacynips* keys to "New Genus?" in Weld's (1952) key to genera but the mesoscutum is finely rugulose instead of being coriaceous in "New Genus", and differs from other genera of Eucoilinae by the unique characters of the antennae, scutellar cup and head. This genus is named in honor of Prof. T. C. Maa of Bishop Museum.

#### KEY TO NEW GUINEA SPECIES OF MAACYNIPS

1. Surface of antennal segments 1 and 2 distinctly and heavily punctate ..... **papuana**  
Surface of antennal segments 1 and 2 smooth, rugulose or indistinctly punctate ..... 2
2. Terminal segments 2 and 3 of antenna testaceous ..... **distincta**  
Antennal segments all fuscous ..... **parva**

**Maacynips papuana** Yoshimoto, n. sp. Figs. 2.

*Female*: Body length 1.8–2.6 mm; forewing 1.8–2.5.

Ferrugineous; head black, eyes golden, antennae fuscous, segments 1 and 2 blackish, legs brownish.

Malar space 1/2 height of eye (fig. 2 b, d). Postocular and gena rugulose. Antennal segment 1 obconical, 2× as long as broad, surface minutely punctate, shorter than 1; 3 slender, shorter than 4; 4–7 equal in length to 3; 13, 2× as long as 12, apex sharply acuminate; 6–13 striate. Radial cell 2.8–3.0× as long as wide. Pronotal plate subtriangulate, 2× as broad as deep, dorsal margin crescent-shape in middle. Surface of thorax finely rugulose. Mesopleuron bare. Anterior part of scutellar disc narrower than cup, posterior 1/2 with little striation, subtruncate behind. Scutellar cup ovate-triangular, not covering entire disc, lateral margin sharply curved inward toward body, thus saddle-shaped, and 2 pairs of hairs located anterolateral to posterior pit; small orifice of posterior pit facing backward and parallel with body (fig. 2c). Abdomen polished, 2× as long as broad. Dense hairs on lateral part of propodeum and middle lower 1/2 of base of tergite 2 (fig. 2b).

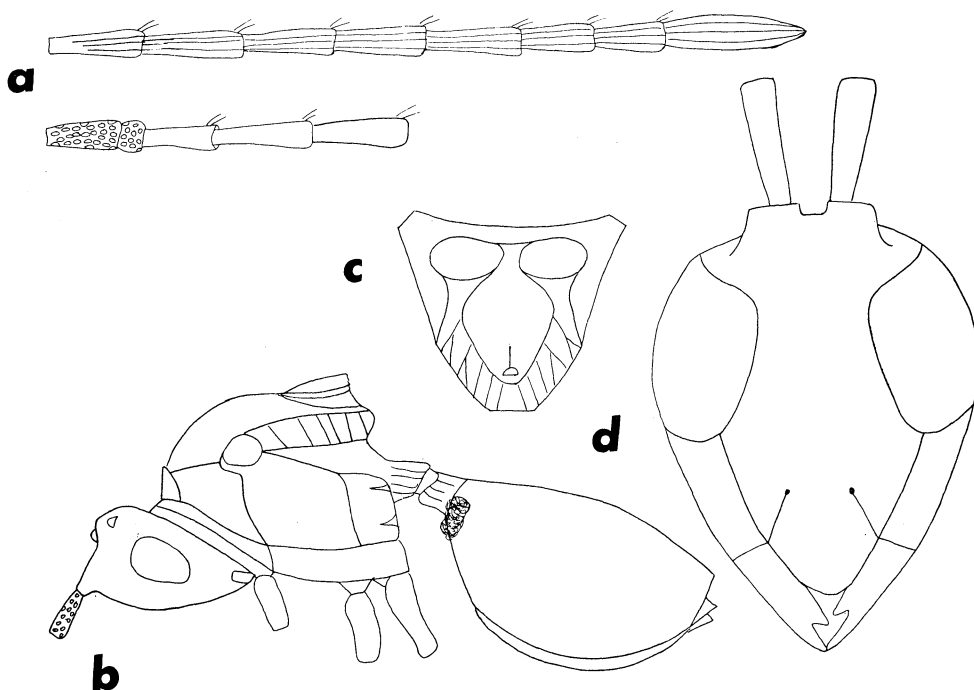


Fig. 2. *Maacynips papuana* Yshm. a, ♀ antenna; b, profile; c, scutellum; d, face.

*Male*: Body length 1.5–2.0 mm; forewing 1.5–2.0. Similar to ♀ except as follows: Antenna 15-segmented, striate, filiform; segment 4 with thickened part of wart-like protuberance just beyond middle of segment with a single spine projecting inward. Abdomen nearly as long as broad.

**DISTRIBUTION**: New Guinea (NW, NE, SE), Bismark Arch. (New Britain).

Holotype ♀ (BISHOP 3063), Waris, S of Hollandia, 450–500 m, NW New Guinea, 17. VII. 1959, Maa. Allotype ♂, Bodem, 100 m, 11 km SE of Oerberfaren, NW New Guinea, 7–17. VII. 1959, Maa (BISHOP). Paratypes: 2 ♀♀, 5 ♂♂, Bodem, 100 m, 11 km SE of Oerberfaren, NW New Guinea, 7–17. VII. 1959, Maa; ♀, Ransiki, 10 m, Vogelkop, NW New Guinea, 9. VIII. 1957, Hardy; ♀, Amok, 165 m, NE New Guinea, Maa; ♂, Wampit V., nr. Gurakor village, 950 m, nr. Wau, NE New Guinea, 7. VII. 1957, Hardy; ♂, Daradae Plantation, 500 m, 80 km N of Port Moresby, SE New Guinea, 5. IX. 1959, Maa; 2 ♀♀, Vudal, SW of Keravat, New Britain, Bismark Arch., 13. XII. 1959, Maa; ♂, Wamena, 1700 m, NW New Guinea, 10–25. II. 1960, Maa (BISHOP).

*Maacynips papuana* is separated from other members of this genus by the small orifice of the posterior pit which faces directly backward.

***Maacynips distincta* Yoshimoto, n. sp.** Fig. 3b.

*Female*: Body length 1.5–1.6 mm; forewing 1.7–1.8.

Ferrugineous to fuscous; legs brownish, head black, antennal segments 11–13 testaceous.

Malar space  $1/3$  height of eye. Postocular and gena not distinctly rugulose. Antennal segment 1 obconical,  $2\times$  as long as broad, without definite markings; 2 subcylindrical, as long as broad, shorter than 1; 3 shorter than 4; 4–7 equal in length; 8–9 equal in length, shorter than 7; 10–13 subequal in length, slightly shorter than 9; segments 6–13 or 5–13, striate. Radial cell  $2.8\text{--}3.0\times$  as long as wide (fig. 3b). Pronotal plate and surface of thorax and mesopleuron similar to *M. papuana*. Scutellar disc and cup similar to *papuana*, except lateral margin of posterior part of cup not curved inward toward body, surface more or less flattened, orifice of posterior pit large, facing vertically rather than backward. Abdomen polished,  $1.7\times$  as long as broad, petiole sessile. Hairs on propodeum and base of tergite similar to *papuana*.

*Male*: Body length 1.2–1.3 mm; forewing 1.6–1.7. Similar to ♀ except as follows: Antenna 15-segmented, striate; segment 4 without spine on inner side; segments 4–15 subequal in length. Abdomen  $1.3\text{--}1.4\times$  as long as broad.

DISTRIBUTION: New Guinea (NE, SE), Bismark Arch. (New Britain, New Ireland), Australia (N. Queensland).

Holotype ♀ (BISHOP 3064), Vudal, New Britain, SW of Keravat, Bismark Arch., 13. XII. 1959, Maa. Allotype ♂, same data as holotype. Paratypes: 3 ♀♀, 2 ♂♂, Vudal, New Britain, SW of Keravat, Bismark Arch., 13. XII. 1959, Maa; ♂, Amok, 165 m, NE

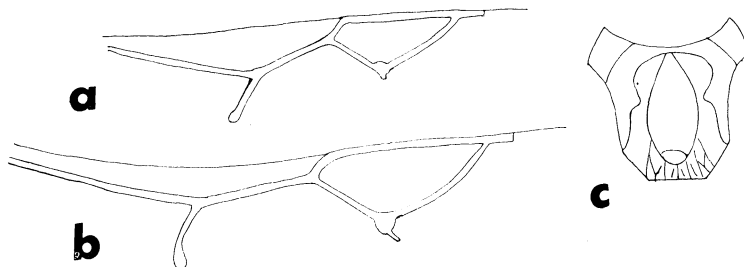


Fig. 3. a, *Maacynips parva* Yshm., venation; b, *M. distincta* Yshm., venation; c, *M. parva* Yshm., scutellum.

New Guinea, 6. I. 1960, Maa; ♂, Catalina Estate, 48 km N of Port Moresby, 500 m, SE New Guinea, 3. IX. 1959, Maa; ♀, Ridge above "Camp Bishop", 15 km up Kait River, 250–750 m, New Ireland (SW), 14. VII. 1956, Gressitt, light trap; ♂, "Camp Bishop", 16 km up Kait River, 125 m, New Ireland (SW), 6. VII. 1956, Ford; ♀, Kuranda, North Queensland, Australia, 11. III. 1956, Gressitt (BISHOP).

This species is closely related to *M. papuana* but differs by the surface of the scutellar cup being more or less flattened and postocular and gena not distinctly rugulose.

**Maacynips parva** Yoshimoto, n. sp.      Fig. 3 a, c.

*Male*: Body length 0.9–1.2 mm; forewing 1.0–1.2.

Fuscous; legs brown to brownish yellow.

Malar space 1/3 height of eye. Postocular and gena not rugulose. Antennal segment 1 obconical, 2× as long as broad, surface smooth and shiny; 2 subcylindrical, as long as broad, shorter than 1; 3 striate, shorter than 4, ratio=1.25–1.50; 4 slightly emarginate at inner side, narrow at base and thickened toward apex; 4–13 subequal in length, filiform and striate. Radial cell 2.5–3.0× as long as wide (fig. 3a). Thorax, pronotal plate, and mesopleuron similar to *M. distincta*. Scutellar disc and cup similar to *distincta* except cup ovate to ellipsoidal (fig. 3c). Profile of abdomen subtriangular.

**DISTRIBUTION**: New Guinea (NW, NE, SW).

Holotype ♂ (BISHOP 3065), Bomberi, Vogelkop, 700–900 m, SW New Guinea, 6. VII. 1959, Maa. Paratypes: 4♂♂, Bodem, 100 m, 11 km SE of Oerberfaren, NW New Guinea, 7–17. VII. 1959, Maa; ♂, Mangrowawa, Biak I., 50–100 m, NW New Guinea, 31. V. 1959, Maa; ♂, 6 mi. NW, Lae Rain Forest, NE New Guinea, 15, 9. V. 1957, Hardy (BISHOP).

This species differs from *M. distincta* by the ovate and ellipsoidal scutellar cup.

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