

## The Longicorn Genus *Tethionea* (Coleoptera: Cerambycidae)

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The genus *Tethionea* is comprised of small to medium-sized beetles of the tribe Callidiopini of the subfamily Cerambycinae. The tribe Callidiopini is moderately represented in the Oriental and Ethiopian Regions, but is concentrated particularly in Madagascar and the Philippine-Wallacean-Papuan-Polynesian area. The greatest concentration may prove to be in New Guinea. *Tethionea* is entirely Papuan. To date it is known only from New Guinea, islands immediately to the west of New Guinea, and the Solomon Islands.

### Genus *Tethionea* Pascoe

*Tethionea* Pascoe, 1869, Trans. Ent. Soc. Lond. (3) 3: 543; Gressitt, 1951, Ann. Ent. Soc. Amer. 44 (1): 19.

This genus is characterized by a more or less parallel-sided body, short head, large, coarsely faceted eye, last maxillary palpal segment with one or two cavities, antenna rarely much longer than body with fifth segment longer than third or fourth, prothorax roughly about as long as broad, elytra generally toothed or spined apically, and femora flattened. It differs from its close relative *Ceresium* in having the third and fourth antennal segments subequal and shorter than fifth, the elytra generally spined apically, and the body non-pubescent above and nearly glabrous beneath.

Type: *Tethionea unicolor* Pascoe is here designated generotype.

### Key to the Species of *Tethionea*

- |        |  |                             |
|--------|--|-----------------------------|
| 1.     | Elytral apices rounded, not acuminate or obtuse.....   | 2                           |
|        | Elytral apices each with one or more spines, or obtuse.....  | 3                           |
| 2 (1). | Prothorax distinctly broader than long, almost impunctate; elytral punctures mostly smaller than interspaces; No. New Guinea.....  | <i>brevicollis</i> Gressitt |
|        | Prothorax distinctly longer than broad, subfinely and deeply punctured; elytral punctures deep, about as large as interspaces; NW. New Guinea; Waigeo.....   | <i>cheesmanae</i> n. sp.    |
| 3 (1). | Elytral apices each with two or three spines or teeth; if two, they are not very greatly different in size.....  | 4                           |
|        | Elytral apices each with a single spine, or one spine and a brief tooth, or merely obtuse.....   | 6                           |
| 4 (3). | Elytral apices each with two distinct spines or teeth.....   | 5                           |
|        | Elytral apices each with three spines, the median one much longer than the lateral ones, the outer one set rather far back from the apex; prothorax subevenly rounded at side; elytra generally unicolorous; No. New Guinea..... | <i>tridentata</i> Pascoe    |
| 5 (4). | Elytral apices deeply emarginate with both teeth acuminate; prothorax stout, with several obtuse swellings at side, and posterior portion of median line raised; New Guinea.....   | <i>strumosa</i> Pascoe      |

- Elytral apices each moderately emarginate, with the teeth fairly short, the outer tooth longer than sutural tooth; prothorax even, without distinct lateral or discal swellings; Hollandia..... **bidentata** n. sp.
- 6 (3). Elytral apices each obtuse or subacute, without a distinctly acuminate spine; prothorax barely broader than long, without swellings or ridges..... 7  
Elytral apices each with a strong acuminate tooth or spine, sometimes with one or two slight accessory teeth..... 8
- 7 (6). Elytral apices each narrowed and with a single short tooth, which is obtuse, or nearly forming a right angle; Hollandia..... **obtusidens obtusidens** Gressitt  
Elytral apices each with tooth slightly produced and acute; Waigeo to E. Papua..... **obtusidens subacuta** n. subsp.
- 8 (6). Elytral apices each with one or two small teeth besides median spine, often in form of slightly dentate sutural angle..... 9  
Elytral apices each with a single median spine..... 10
- 9 (8). Elytral apices each with a suggestion of a small tooth on each side of median spine; prothorax distinctly convex at side, fully as broad as head, interspaces as large as punctures; Hollandia..... **tenuimembris** Gressitt  
Elytral apices each with sutural angle slightly dentate, making apex obliquely emarginate; prothorax feebly convex at side, slightly longer than broad, narrower than head, and closely punctured, the interspaces smaller than punctures; Hollandia; Cyclops Mts..... **hollandiae** Gressitt
- 10 (8). Prothorax distinctly convex at side, about as broad as head, barely, or not longer than broad, with one or more lateral swellings or projections..... 11  
Prothorax feebly convex at side, narrower than head, longer than broad, without lateral swellings or projections..... 12
- 11 (10). Prothorax fully as broad as long, irregularly punctured, with several low tubercles on side and side of disc, and a raised impunctate median line on posterior half of disc; Waigeo to Hollandia..... **hoogstraali** Gressitt  
Prothorax slightly longer than broad, finely and subuniformly punctured, a slight projection at side near base; Aru Is..... **unicolor** Pascoe
- 12 (10). Elytral apices each distinctly acuminate, and emarginate on each side of spine; body bicolorous..... 13  
Elytral apices each briefly acuminate, the tooth oblique and hardly emarginate on sutural side, unevenly emarginate externally; body unicolorous, castaneous; Waigeo..... **waigeonis** n. sp.
- 13 (12). Reddish yellow with sides of prothorax and elytra pitchy brown; abdomen impunctate; Batchian I..... **apiculata** Pascoe  
Reddish brown with nearly basal half of elytra blackish; prothorax not darkened at side; abdomen partly punctate; Japen; Wareo, New Guinea..... **bicolor** n. sp.

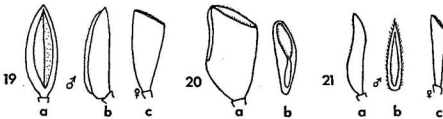
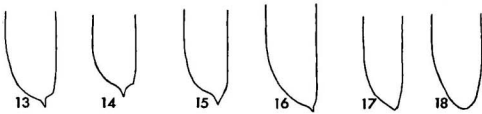
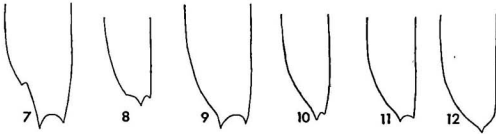
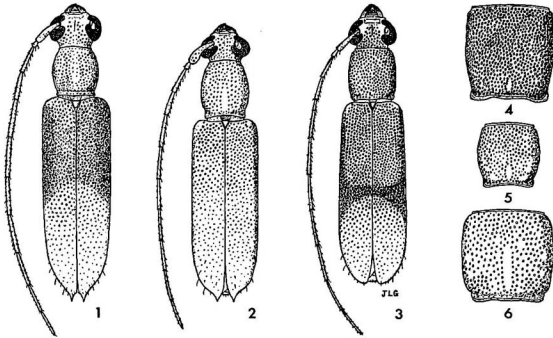
**Tethionea tridentata** Pascoe, 1869, Trans. Ent. Soc. London (3) 3: 545 (Batchian; type in British Mus.); Gressitt, 1951, Ann. Ent. Soc. Amer. 44 (1): 19 (Papua, Hollandia, Malaita I.). Fig. 7.

Shiny castaneous; appendages slightly paler; external elytral tooth less prominent than sutural tooth. Length 7.6-10 mm.

#### EXPLANATION OF FIGURES

Figures 1-3, dorsal views of body; Figs. 4-6, dorsal views of prothorax; Figs. 7-18, outlines of apex of left elytron; Figs. 19-21, terminal maxillary palpal segments.

Fig. 1, *Tethionea bicolor*; Fig. 2, *T. waigeona*; Fig. 3, *T. cheesmanae*; Fig. 4, *T. hollandiae*; Fig. 5, *T. bidentata*; Fig. 6, *T. obtusidens subacuta*; Fig. 7, *T. tridentata*; Fig. 8, *T. tenuimembris*; Fig. 9, *T. strumosa*; Fig. 10, *T. hollandiae*; Fig. 11, *T. bidentata*; Fig. 12, *T. hoogstraali*; Fig. 13, *T. unicolor*; Fig. 14, *T. apiculata*; Fig. 15, *T. waigeona*; Fig. 16, *T. obtusidens subacuta*; Fig. 17, *T. obtusidens obtusidens*; Fig. 18, *T. brevicollis*; Fig. 19 a, last maxillary palpal segment of male of *T. bidentata*; b, side view of same; c, of female; Fig. 20 a, *T. hoogstraali*, male (?); b, oblique end view of same; Fig. 21 a, *T. strumosa*, male; b, side view of same; c, female.



Three (British Mus.), Camp Nok, 750 m., Waigeo I., Apr. 1938, Camp 2, 600 m., Mt. Eiori, Japen I., Sept. 1938; and Sabron, 600 m., Cyclops Mts., June 1936, Miss L. E. Cheesman; three (Lepesme coll.) Wareo, NE. New Guinea; three (Mus. Comp. Zool.), Dobodura, Papua, Mar.-July 1944, P. J. Darlington; one (U. S. N. M.), Munda, New Georgia, Solomon Is., June 1944, J. G. Franclemont.

Distribution: Waigeo I.; Japen I.; northern and eastern New Guinea; Solomon Is.: New Georgia, Malaita.

**Tethionea tenuimembris** Gressitt, 1951, Ann. Ent. Soc. Amer. 44 (1): 18 (Hollandia; type in Cal. Ac. Sci.). Fig. 8.

Pitchy red brown; appendages paler; elytra broadened in middle; sutural and external teeth small, the latter obtuse. Length 7.3 mm.

Distribution: Northern New Guinea: Hollandia (known only from type).

**Tethionea strumosa** Pascoe, 1869, Trans. Ent. Soc. London (3) 3: 544 (Ceram, Amboyna; type in British Mus.); Gressitt, 1951, Ann. Ent. Soc. Amer. 44 (1): 18 (Mt. Mabion and Palmer R., Papua). Figs. 9, 21.

Castaneous with a slightly oblique postmedian dark band on each elytron; prothorax with obtuse swellings at side of disc; each elytron with two strong apical spines. Length 10.5-17 mm.

One (British Mus.), Camp Nok, 750 m., Waigeo I., Apr. 1938, L. E. Cheesman; two (Mus. Comp. Zool.), Dobodura, Papua, Mar.-July 1944, P. J. Darlington; one (A. M. N. H.) Fly River, 8 km. below Palmer River, Papua, May 14-22, 1936, Archbold Exped.

Distribution: Ceram; Amboyna; Waigeo, Papua.

**Tethionea hollandiae** Gressitt, 1951, Ann. Ent. Soc. Amer. 44 (1): 16 (Hollandia; type in Chicago N. H. Mus.). Figs. 4, 10.

Similar to *strumosa*; smaller, with legs darker, prothorax less nodose, and elytral teeth less acuminate. Length 5.6-8.5 mm.

One (British Mus.), Sabron, 350 m., Cyclops Mts., northcentral New Guinea, May 15, 1936, L. E. Cheesman.

Distribution: Northern New Guinea: Hollandia and Cyclops Mts.

**Tethionea bidentata** Gressitt, new species. Figs. 5, 11, 19.

**Male:** Pale castaneous, darker on basal three-fourths of elytra; antenna and legs testaceous. Body subglabrous above, with a few short hairs posteriorly on elytral discs and a few bristle-hairs on apical margins; remainder of body with sparse suberect pale hairs.

Head fully as broad as prothorax, finely and in part closely punctured; frons small, slightly convex in center; vertex shallowly concave; eye nearly reaching genal margin; maxillary palpus long, terminal segment large, open longitudinally below, hollow, with a membrane-like lining with erect microscopic hair-like sensory structures. Antenna about as long as body; scape as long as next two segments combined; third and fourth equal; fifth distinctly longer, following gradually decreasing slightly in length. Prothorax barely longer than broad, feebly convex, and feebly sinuate at side; slightly constricted basally; disc with slight irregularities near side, feebly raised on median line just behind center, distinctly and closely punctured. Elytra subparallel-sided; each with apex narrowed, bidentate, the outer tooth slightly longer; disc coarsely punctured almost to apex, the punctures slightly larger than interspaces. Metasternum closely punctured. Legs slender; femora subcompressed. Length 6.5 mm.; breadth 1.75 mm.

**Female:** Antenna three-fourths as long as body; prothorax widest behind middle; outer tooth of elytral apex much larger than inner. Length 6 mm.; breadth 1.7 mm.

**Holotype, male** (Chicago Nat. Hist. Mus.), Hollandia, northern New Guinea, February 20, 1945, Harry Hoogstraal; **allotopotype, female** (Calif. Acad. Sci.), November 21, 1944, Hoogstraal.

Differs from *T. strumosa* Pasc. in having the prothorax more even at side, the apical elytral teeth short and not acuminate, the size smaller, and the elytra unbanded.

***Tethionea unicolor*** Pascoe, 1869, Trans. Ent. Soc. London (3) 3: 543 (Aru Is.; type in British Mus.). Fig. 13.

Brownish testaceous; legs paler; prothorax finely punctured, with a projection on each side near base; each elytral apex singly acuminate. Length 11 mm.

**Distribution:** Aru Is.

***Tethionea hoogstraali*** Gressitt, 1951, Ann. Ent. Soc. Amer. 44 (1): 16 (Hollandia and Fly R. near Palmer R.). Figs. 12, 20.

Reddish testaceous; prothorax feebly nodose at side; elytral apex singly acuminate. Length 6.3-12.2 mm.

Four (British Mus.), Camp Nok, 750 m., Waigeo I., Apr. 1938, and Camp 2, 600 m., Mt. Eiori, Japen I., Sept. 1938, L. E. Cheesman; two (Lepesme coll.) Wareo, NE. New Guinea.

**Distribution:** Waigeo I.; Japen I.; northern and central New Guinea.

***Tethionea apiculata*** (Pascoe), 1862, Jl. Ent. 1: 357 (*Ceresium*; Batchian I.; type in British Mus.); 1869, Trans. Ent. Soc. London (3) 3:544, Fig. 14.

Shiny reddish testaceous; sides of prothorax and elytra pitchy brown; prothorax longer than broad, subcylindrical; elytral apex singly acuminate. Length 8 mm.

**Distribution:** Batchian I.

***Tethionea bicolor*** Gressitt new species. Fig. 1.

**Male:** Reddish castaneous; elytra with basal half dark, bluish black externally and more pitchy toward suture; antenna and legs ochraceous. Body glabrous above except for a very few pale bristles at elytral apices; ventral surfaces and legs with sparse sub-erect pale hairs; antenna with shorter, denser pale hairs.

Head sparsely punctured on frons and vertex, more densely punctured on occiput; eye large, nearly reaching genal margin; last maxillary palpal segment long, slender, acute, furrowed externally. Antenna slender, one-fifth longer than body; scape fairly slender, punctured, as long as next two segments combined; third and fourth segments subequal; fifth longer than scape, equal to sixth; following slightly shorter. Prothorax slightly longer than broad, evenly, and not very strongly, convex at side; disc finely, deeply, and in part closely, punctured, with median line and a few slight swellings (on side of disc near middle and near base) largely impunctate. Elytra subparallel-sided, slightly depressed at suture behind scutellum and slightly raised at middle of suture; each with apex acuminate, the tooth concave at base on each side; disc deeply and somewhat closely punctured on basal half with the punctures mostly as large, or nearly as large, as interspaces, gradually more sparsely and finely punctured to apex. Metasternum distinctly punctured at side. Femora somewhat compressed, sparsely punctured. Length 6.3 mm.; breadth 1.7 mm.

**Female:** Antenna slightly longer than body; last maxillary palpal segment moderately slender, broadened and concave distally. Length 6.7 mm.; breadth 2 mm.

**Holotype, male** (British Mus.), Camp 2, alt. 600 m., Mt. Eiori, Japen I., Geelink

Bay, northwestern New Guinea, September 1938, Miss L. Evelyn Cheesman; allotype, female (Lepesme coll.), Wareo, NE. New Guinea.

Differs from *T. unicolor* Pascoe in being much smaller, more slender, bicolorous, with narrower and more even prothorax, and less acuminate elytral apices.

***Tethionea waigeona* Gressitt, new species. Figs. 2, 15.**

**Male:** Castaneous, slightly darker on basal portions of elytra; antenna and legs ochraceous. Body glabrous above except for a few scattered hairs on elytral apex; ventral surfaces, legs, and antenna with sparse suberect pale hairs.

Head abbreviated anteriorly, finely and subclosely punctured; vertex very shallowly concave; eye large, reaching genal margin; last maxillary palpal segment open along outer face. Antenna slightly longer than body; scape slightly arched, distinctly thickened beyond middle, as long as next two segments combined; third barely longer than fourth; fifth fully as long as scape, equal to sixth; following gradually shorter. Prothorax slightly longer than broad, evenly and not very strongly rounded at side; disc fairly even, closely punctured except on a few feebly raised areas, including a postmedian longitudinal stripe. Elytra subparallel-sided, slightly broadened behind middle; each with a sharp apical tooth the base of which is obliquely submarginate suturally and strongly emarginate externally; disc with punctures mostly larger than interspaces on basal half, gradually finer and sparser towards apex. Metasternum deeply punctured at side. Femora moderately broad and somewhat flattened. Length 6 mm.; breadth 1.55 mm.

Holotype, male (British Museum), Mt. Nok, Camp 2 (Buffelhorn), Waigeo I., just west of New Guinea, June 1938, Miss L. E. Cheesman; paratopotype (Bishop Mus.), same data; paratype, female (Lepesme coll.), Wareo, NE. New Guinea.

Differs from *T. unicolor* Pascoe in being smaller, with the prothorax more even, but less evenly punctured, and each apical elytral tooth hardly emarginate on sutural side.

***Tethionea obtusidens obtusidens* Gressitt, 1951, Ann. Ent. Soc. Amer. 44 (1): 17 (Hollandia and Fly R. below Palmer R.; type in Cal. Ac. Sci.). Fig. 17.**

Shiny castaneous, darker on basal two-thirds of elytra; appendages paler; prothorax rounded squarish, fairly smooth; elytral apex obtuse. Length 6-7 mm.

One (U. S. N. M.), Nadzab, Markham River Valley, near Lae, eastern New Guinea, July 1944, K. V. Krombein.

Distribution: Northcentral, central and eastern New Guinea.

***Tethionea obtusidens subacuta* Gressitt, new subspecies. Figs. 6, 16.**

**Female:** Castaneous, slightly darker on prothorax and basal portions of elytra; antenna ochraceous, dull distally; legs reddish ochraceous; femoral bases, tibiae, and tarsi somewhat testaceous. Body largely glabrous, with a few bristle-hairs on hind elytral margin and abdomen; legs and antenna with sparse oblique pale hairs.

Head short, not quite as broad as prothorax, distinctly but not very closely punctured; frons short and concave; vertex feebly concave; inferior eye-lobe nearly reaching genal margin. Antenna one-sixth longer than body; scape barely longer than next two segments combined; third and fourth equal; fifth distinctly longer, equal to sixth; seventh, and last; eighth to tenth slightly shorter. Prothorax as long as broad, sub-squarish, narrowed basally, feebly bisinuate at side; disc smooth, distinctly and in part rather closely punctured, a feeble postmedian raised line. Elytra subparallel-sided, feebly broadened postmedially; each with apex broadly rounded externally and distinctly, though briefly toothed internally. Metasternum subclosely punctured. Legs slender; femora flattened. Length 8.8 mm.; breadth 2.4 mm.

Paratypes: 7-8 mm.; breadth 2.2-2.4 mm.

Holotype, female (British Museum), Camp Nok, 750 m., Waigeo I., just west of New Guinea, April 1938, Miss L. E. Cheesman; paratopotype, female (Bishop Mus.), same data; two paratypes, Kokoda, 350 m., eastern Papua, August 1938, L. E. Cheesman.

Differs from *T. obtusidens* Gress. in having the prothorax more rectangular and less convex on disc, and the elytral apex distinctly acute rather than obtuse.

***Tethionea cheesmanae* Gressitt, new species. Fig. 3.**

**Male:** Ochraceous, with some faint pitchy brown markings: head, antenna, and prothorax reddish ochraceous; elytra slightly paler, with outer margin, not quite to apex, and a postmedian band, broadened behind externally, of pale pitchy brown; ventral surfaces reddish, paler on abdomen; legs ochraceous. Body sparsely clothed on antenna, legs, ventral surfaces, and elytral apices with pale oblique hairs.

Head hardly broader than prothorax, abbreviated anteriorly, slightly concave on vertex, not very closely punctured; inferior eye-lobe large, nearly reaching genal margin. Antenna nearly two-fifths again as long as body; scape slender, barely longer than third segment; third and fourth equal; fifth and sixth each longer, subequal; following slightly shorter. Prothorax nearly cylindrical, one-fifth longer than broad, deeply, subclosely, but not very coarsely, punctured. Elytra narrow, subparallel, breadth hardly greater than length of prothorax; each with apex narrowed and subobtusely; disc deeply and subclosely punctured almost to apex, punctures mostly fully as wide as interspaces. Ventral surfaces closely punctured on side of metasternum. Legs slender and compressed. Length 6.2 mm.; breadth 1.4 mm.

Paratype: Length 7.5 mm.; breadth 1.8 mm.

Holotype, male (British Museum), Camp Nok, alt. 750 m., Waigeo I., west end of New Guinea, April 1938, L. E. Cheesman; paratype, male (Lepesme coll.), Wareo, NE. New Guinea.

Differs from *T. brevicollis* Gressitt in being much more slender, with the prothorax narrow, cylindrical, and closely punctured, and the elytra more closely punctured. Named in honor of Miss Evelyn Cheesman in appreciation for great accomplishments, and kind favors.

***Tethionea brevicollis* Gressitt, 1951, Ann. Ent. Soc. Amer. 44 (1): 15 (Hollandia; type in Chicago N. H. Mus.). Fig. 18.**

Reddish castaneous; appendages paler; prothorax broader than long, rounded at side, minutely punctured; elytral apex rounded. Length 6.9-7.8 mm. The paratype has the distal two-fifths of elytra paler. This species does not agree closely with the other species of the genus and may have to be separated later.

Distribution: Northern New Guinea.

ACKNOWLEDGMENTS

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