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Scolytidae and Platypodidae of the Mangarevan Expedition¹

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PLATYPODIDAE

Crossotarsus externedentatus Fairmaire.

Platypus externedentatus Fairmaire, Rev. Mag. Zool., II, 2:51, 1850.

Society Islands, Tahiti: Papeari, March 31, 1934, on Inocarpus edulis (mape), one female, E. C. Zimmerman.

For food plants and distribution see Beeson, Insects of Samoa 4(4):218, 1929.

SCOLYTIDAE

The Scolytidae collected by the Mangarevan expedition comprise 16 species in 6 genera; all but one species belongs to the subfamily Cryphalinae. Nine species are additions to the fauna of Polynesia, and 8 are described as new. A few specimens taken by the Pacific Entomological Survey and identified after publication of my previous reports are included.

Two species of *Hypothenemus* collected on Henderson Island were previously known, one from the east Atlantic and the Mediterranean regions, the other from India to Java. As for *Ptilopodius ramosus* Beeson and *Hypocryphalus mangiferae* Stebbing, such discontinuous distribution is due to incomplete exploration.

¹ Mangarevan Expedition Publication 30.

Hylesinus insularum, new species (fig. 1).

Female: length 2.52 mm. Dark brown with pale vestiture.

Front convex above flattened in lower half, the sides obtusely extended laterally over bases of scapes, rugose-punctate, opaque, vertex punctate on a shagreened ground.

Pronotum about 1.3 times as wide as long, widest in the posterior quarter, base bisinuate and obtusely produced opposite scutellum, sides broadly curved (less strongly than in male, fig. 1) and definitely margined for almost the posterior half, narrowed and evenly curved into the transversely arcuate anterior margin; the edge of the anterior margin is subcarinate with the tubercles obsolete, the junction of the anterior and lateral margins bears 3 or 4 recurved asperities increasing in size outwards so as to simulate an anterior angle, the lateral margins are without projecting asperities. Above, irregularly planoconvex, slightly depressed across the anterior quarter, reticulate-asperate, the carinulae stronger and sharper at the sides, median line evident.

Elytra twice as long as pronotum, outline as in figure 1, base slightly elevated and tuberculate, striae sulcate with large, round, deeply impressed punctures; interspaces, particularly the 2d, considerably broader than striae but narrowing postero-laterally, not carinate, with transverse rugulae and tubercles.



FIGURE 1.—Hylesinus insularum, new species, male.

Declivity with 1st and 9th interspaces meeting at the sutural angle, 2d shortened, 3d touching 9th, 4th narrowed to a fine carina and joined with the narrowed and shortened 5th and 6th, the 7th prolonged to meet 4th and 9th, the 8th shortened.

Vestiture: pronotum with short, recumbent, thick hairs, rather dense. Elytra, strial punctures with scarcely visible micro-hairs, interspaces with a ground-vestiture of short, recumbent, thick hairs, and series of longer, semi-erect, narrow, lanceolate setae; these are on the sutural interspace uniseriate throughout, on 2d interspace irregularly biseriate becoming uniseriate on declivity, on 3d to 5th irregular but mainly biseriate in basal half becoming uniseriate on approaching declivity, on the remaining interspaces more or less uniseriate throughout.

Male: length 2.48 mm. Similar in nearly all respects to female but the sides of the pronotum more strongly curved at the base. Front deeply impressed between eyes and antennae, the impression rugulose-punctate, its sides raised in carinate bosses over the bases of the scapes, its median line smooth, shining; upper level of eyes to vertex convex, punctate on a shagreened ground.

Tuamotu Islands: Makatea, October 1932, one female (holotype), G. P. Wilder.

Society Islands: Tahiti, Tiupi Bay, Papeari, May 3, 1934, sweeping grasses and low herbage, one male (allotype), Zimmerman. Moorea: Maramu Valley, 100-300 ft., Sept. 26, 1934, one female (paratype), Zimmerman.

Allied to *H. subopacus* Eggers (Fiji) but separable by its larger size, more numerous, biseriate, erect setae on the elytral interspaces, and evident median line on pronotum.

Types in Bishop Museum.

Ptilopodius marquesanus Beeson, B. P. Bishop Mus. Bull. 142, art. 6: 101, fig. 2,² 1935.

Mangareva Islands: Aukena, northwest side, May 28, 1934, dead branches of *Hibiscus tiliaceus*, 33 specimens, E. C. Zimmerman.

Ptilopodius ramosus Beeson, B. P. Bishop Mus., Bull. 142, art. 7: 115, fig. 1, 1935.

Mangareva Islands: Aukena, northwest side, May 28, 1934, dead branches of *Hibiscus tiliaceus*, 3 specimens, Zimmerman.

Hypothenemus eupolyphagus, new species.

Length 1.4-1.5 mm., width 0.6 mm.

Light or dark brown with the pronotum lighter than elytra. Mature coloration appears to be pronotum dark reddish brown, elytra fuscous or piceous.

Front depressed behind epistome, between and up to the eyes, the depression limited behind by a curved coarsely punctate edge; middle of depression shining from epistome to posterior edge and appearing in some aspects to have a slightly elevated median line; head in posterior half convex. Eyes entire.

Antennal funicle 4-segmented.

Pronotum: short, sides not parallel, apical margin broadly rounded; marginal teeth usually six, the pairs of lateral teeth more widely spaced than the middle pair; one or more externo-lateral teeth may be much reduced or absent.

Elytra: striae with large punctures scarcely impressed; interspaces with very fine punctures.

Vestiture: striae with fine recumbent hairs, conspicuous throughout; interspaces dorsally with a single series of narrow subtriangular scales (squamiform

² In the original description, loc. cit., figures 1 and 2 are transposed; figure 2 is Ptilopodius marquesanus and figure 1 is Hypothenemus capitalis.

bristles) obliquely erect, which become longer and narrower (not subtriangular) on the declivity where they are flanked on each side with a more or less complete row of recumbent hairs similar to those of the striae.

India: United Provinces, Dehra Dun, Jan. 13, 1929, from Spatholobus roxburghii (holotype in my collection), a series, M. Bose. Jhajra, Dehra Dun division, Feb. 20, 1916, from twig of Cedrela toona, Beeson. Dehra Dun, Dec. 25, 1923, Beeson. New Forest, Dehra Dun, Aug. 28, 1929 (12.441.445), from Bombax malabaricum bark, Forest Economist. Ihajra, Dehra Dun division, April 1, 1934, from Fleminga congesta (S.E. 1874), J. C. M. Gardner. Dehra Dun, Jan. 24, 1934, from Ficus sp. (S.E. 1831), Gardner; Jan. 25, 1933, from Mangifera indica twigs, Balwant Singh. Phanduwala, Dehra Dun division, Nov. 7, 1928, from Kydia calycina bark, Beeson. Asan, River, Dehra Dun, Oct. 4, 1928, from Ougeinia dalbergioides bark (S.E. 531), Bose. Dobhalwala, Dehra Dun, Nov. 27, 1929 (S.E. 834), A. K. Sharma. Jharja, Dehra Dun division, from miscellaneous timbers, Apr. 5, 1929 (S.E. 577) and Jan. 5, 1930, from dry stems (S.E. 877), Gardner. Dehra Dun, Sept. 13, 1933, from Butea frondosa (S.E. 1540), Gardner. New Forest, June 22, 1930, from Luffa aegyptiaca (S.E. 193), Sher Bahadur.

Punjab: Pirawala, Montgomery division, Feb. 12, 1928, from bark of *Calotropis procera*, Beeson.

Bengal: Calcutta, 1910, Paris Museum. Dacca, Oct. 6, 1930, from Lannea grandis and Aegle marmelos, Bose. Jalpaiguri division, Dec. 1, 1914, from Cassia orientalis, Beeson.

Assam: Cachar division, Jiri, May 23, 1924, S. N. Chatterjee.

Bombay: Kirwatti, east Kanara division, June 6, 1919, from Lannea grandis bark, B. M. Bhatia. Nagargalli, Belgaum division, Jan. 22, 1930 (41.155.231), from Vangueria spinosa, Bhatia.

Madras: Nilambur division, Feb. 8, 1925, from midrib of leaf of *Tectona grandis*, Chatterjee.

Mysore: Bangalore, Sept. 1, 1930, on *Erythrina* twig, Government Entomologist. Lab. compound, Oct. 29, 1931, on *Erythrina*, Mysore Ent. coll., mounted Oct. 30, 1931, T. V. Subramaniam; October 2, 1936, on cotton fruit stock, Mysore Ent. coll., Subramaniam, R. K. Pur, Sept. 25, 1936, same date.

Andamans: Sound Island, North Andaman, Mar. 10, 1930, from

cucurbitaceous climber, Beeson; Mar. 10, 1930, Bhatia. South Andaman, Port Blair, Mar. 1930, from *Tamarindus indica*, Beeson.

Burma: Gwethe Reserve, North Toungoo division, Feb. 16, 1930, D. J. Atkinson.

Ceylon: Elpitya, alt. 200 ft., British Museum.

Tonkin: Reg. de Luc-Nam, coll. Ph. Francois, coll. L. Bedel, 1922, L. Blaise, Paris Museum.

Java: Aug. 1919, L. Kalshoven. Rembang, Feb. 1923, Kalshoven. Walckoeken, Fr. Verbeek, 1928.

Henderson Island: northwest side, 0.5 mile inland, June 19, 1934, beating shrubs; alt. 100 ft., June 19, 1934, beating shrubs and *Bidens*; alt. 100 ft., June 21, 1934, in all 4 specimens, Zimmerman.

Closely allied to a cotype of *Stephanoderes erythrinae* Eggers labelled "Lab. compound, 29.10.1931, on Erythrina, T. V. Subramaniam, Mysore Ent. coll., mounted 30.10.31"—from which it differs thus: pronotum lighter in color than elytra (darker in *S. erythrinae* cotype); form more robust, front with semicircular depression.

Although the cotype of *Stephanoderes erythrinae* bears a determination label by Eggers dated 1930 (sic) it does not agree with the description which runs "Zwischenraume . . . abstehend ziemlich lang und deutlich behaart"; its interspaces actually bear squamiform setae similar to those of *Hypothenemus eupolyphagus*.

The head of *Stephanoderes erythrinae* Eggers is described as "fein punktiert mit schmaler Mittellinie, die nicht besonders erhaben ist." It is desirable to describe the following species here.

Hypothenemus asaroriensis, new species.

Similar in all features to *H. eupolyphagus* except that the front of the head is convex, rugulose-punctate, with a median longitudinal smooth line that appears elevated in some aspects.

United Provinces: Asarori, Dehra Dun division, Dec. 27, 1928, from dry twigs (holotype), Gardner. Dehra Dun, Jan. 13, 1929, from *Spatholobus roxburghii*, Bose; Nov. 6, 1930, from creeper, S. Bahadur; Feb. 16, 1934. from climber (S.E. 1846), Chatterjee; Aug. 23, 1932, from *Girardinia heterophylla* (S.E. 1208), Gardner. Golatappar, Dehra Dun division, Feb. 21, 1931, from *Bischoffia javanica*, Beeson.

Bengal: Kalimpong division, Samsingh, alt. 1,800 ft., Oct. 5, 1933, Beeson.

Mysore: Belagoodu, on coffee berry, Nov. 1930, Mysore Ent., coll., Subramaniam.

Java: Bangelan, Nov. 1925, Kalshoven.

Doubtfully the other sex of *Hypothenemus eupolyphagus* but the Asarori type series contained none of this species and the two forms have rarely been collected or bred together.

It is probable that either H. eupolyphagus Beeson or H. asaroriensis Beeson is identical with H. erythrinae Eggers, but an examination of the holotype is necessary to decide.

Hypothenemus mangarevanus, new species.

Length 1.05 mm. Uniform brown, rugose area of pronotum not appreciably lighter.

Front convex, coriaceous, opaque except for a shining rugulose-punctate space behind epistome and a vague median line with a central elevation; eyes entire.

Pronotum subnitid, a little wider than long (8:7), sides curved and narrowed gradually into the less broadly curved apical margin; marginal teeth 5 larger and 1 or 2 smaller, widely spaced; rugosities of the anterior area fairly large and not crowded; posterior area and sides rugulose-coriaceous-punctate with a few granules.

Elytra rugulose, 1.9 times as long as pronotum, sides parallel, apex rather narrowly rounded; striae wide, impressed, punctures large, subocellate, very close; interspaces narrow, convex on the declivity (1 to 4) with a very close series of weak granules which become larger towards and on the declivity.

Vestiture: front of head with erect hairs; pronotum with erect subtriangular scales and a ground of short recumbent hairs; strial microhairs not visible (except under higher magnification); interspaces with a single row from base to apex of long, erect scales (squamiform setae) narrowly triangular near the base and becoming linear, setae not thickened distally on declivity and sides.

Mangareva Islands: Aukena, northwest side, May 28, 1934, dead branches of *Hibiscus tiliaceus*, 2 specimens, Zimmerman. Type in Bishop Museum.

This species is well characterized and possibly runs down to section d2 of Hopkins' key in Classification of Cryphalinae (U. S. Nat. Mus. Proc., 1915).

Hypothenemus aspericollis (Wollaston).

Cryphalus asperiocollis Wollaston, Ann. Mag. Nat. Hist., 5:365, 1860.

Austral Islands: Raivavae, Ahuoivi Point, under dead leaves, 1 specimen, Aug. 9, 1934, C. M. Cooke, Jr.

Previously recorded from Madeira, Teneriffe, Morocco, Algeria, Spain, and France.

The single specimen from the Austral Islands is in very good condition and agrees exactly with several individuals in a long series of H. aspericollis taken by me in Madeira. A few specimens have been collected in India.

H. aspericollis must now be regarded as a widely distributed species probably with many synonyms.

Fauvel (1897) and Peyerimhoff (1935) regard Hypothenemus ehlersi Eichhoff as a synonym.

Stephanoderes pacificus, new species.

Stephanoderes, new species, Beeson, B. P. Bishop Mus., Bull. 142, art. 7: 117, 1935.

Length 1.35-1.65 mm. Piceous brown, center of pronotum reddish, legs light brown or testaceous.

Front convex, finely sparsely punctate on a shagreened ground, impressed behind epistome, median line smooth, hairs sparse, short.

Pronotum subglobose widest in the posterior third, base transverse with an incised margin, posterior angles obtuse, sides strongly arcuate and continuously curved to the apex; middle of apical margin with a pair of nearly contiguous projecting teeth and traces of a minute tubercle on each side, the anterior asperities are larger, coarse, recurved teeth, about 8-13 forming the first two rows, the remainder contiguous and concentric round the postmedian boss, lateral and posterior areas with sparse weak granules; long thick hairs among the asperities and at lateral margins, short hairs in the posterior area.

Elytra, twice as long as pronotum, cylindrical, sides parallel, apex obtusely rounded, and broadly obtusely emarginate from below; in longitudinal section rising appreciably from the scutellum, then almost horizontal to the last quarter which is steeply convex, almost oblique; striate-punctate, the punctures close, small, scarcely impressed, interspaces uniseriate-punctate, the punctures close, small, inconspicuous bearing short thick semi-erect hairs; declivity sharply limited by dense scaling, plano-convex, interspaces with a close series of small granules from above the summit bearing short, broad, triangular, overlapping scales, striae not traceable, the whole surface between the rows of granules closely punctate, the punctures bearing very short, recumbent, thick hairs which become longer and erect at the sides of the declivity, its apical margin fringed with scales.

Henderson Island: northwest side, alt. 100 ft., June 21, 1934, beating shrubs, 11 specimens, Zimmerman. Holotype in Bishop Museum.

Society Islands: Tahiti, Papeari, alt. 900 ft., Nov. 9, 1928, on *Freycinetia* (*ieie* vine), 1 specimen, Adamson.

Marquesas Islands: Hatutaa, alt. about 50 ft., April 29, 1931, under bark of *Melochia velutina*, 2 specimens, Le Bronnec and H. Tauraa.

This species may be placed in the group of *Stephanoderes dis*similis Zimmerman although distinct by reason of the steeply planoconvex declivity.

Previously referred to in Beeson (B. P. Bishop Mus., Bull. 142, art. 7: 117, 1935) as *Stephanoderes*, new species.

Stephanoderes vafer Blandford.

Hypothenemus vafer Blandford, Ann. Soc. Ent. Belgique, **40**: 241, 1896.

Henderson Island: northwest side, alt. 100 ft., June 21, 1934, beating shrubs, 11 specimens, Zimmerman.

Society Islands: Tahiti, Tuipi Bay, Papeari, May 3, 1934, freshly cut coconut fronds, 1 specimen, Zimmerman.

Marquesas Islands: Hatutaa, alt. about 50 ft., April 29, 1931, under bark of *Melochia velutina*, 1 specimen, Le Bronnec and Tauraa.

Previously recorded from New Caledonia.

Stephanoderes sp.

Society Islands: Tahiti, Fautaua Valley, March 7, 1934, in legume pods, one specimen, Zimmerman. (Crushed; probably an undescribed species.)

Hypocryphalus mangiferae Stebbing.

Cryphalus (Hypothenemus) mangiferae Stebbing, Indian Forest Insects, 542, fig. 349, 1914.

Dacryphalus (Cryphalus) mangiferae Hopkins, Bull. Ent. Res., 18:28, 1927.

Hypocryphalus mangiferae Eggers, Archiv. Inst. Biol. San Paolo, 1:85, 1928.

Mangareva Island: near convent, alt. 300 ft., May 24, 1934, freshly cut *Mangifera indica*, 6 specimens, Zimmerman.

Previously recorded from India, Burma, Ceylon, Samoa, Brazil.

Xyleborus kraatzi Eichhoff, Berl. Ent. Zeitschr., 12:132, 1868.

Society Islands: Tahiti, Afaahiti, near Vaitaare, Mar. 20, 1934, 5 females; Arihiri, Paré, Mar. 5, 1934, 12 females; Mar. 15, 1934, 4 females; Mar. 17, 1934, 1 female; Blue Lagoon, Papeete, Mar. 1, 1934, seashore, at light, one female; Tiupi Bay, Papeari, Mar. 21, 1934, at light, 3 females; Mar. 28, 1934, at light, 2 females; Mar. 31,

1934, on *Inocarpus edulis*, 11 females; May 3, 1934, at light, 2 females.

Tuamotu Islands, South Marutea Island and Northwest Islet, May 22, 1934, one female (all Zimmerman coll.).

For distribution see Beeson, Insects of Samoa 4(4): 240, 1929; B. P. Bishop Mus., Bull. 142, art. 6: 108, 1935.

Xyleborus mascarensis Eichhoff.

Xyleborus affinis variety β (mascarensis Dohrni coll.) Eichhoff, Ratio Tom., 372, 1879.

Society Islands: Tahiti, Tiupi Bay, Papeari, Mar. 28, 1934, at light, one female, Zimmerman.

For distribution see Beeson, B. P. Bishop Mus., Bull. 142, art. 6:119, 1935.

Xyleborus nigroaffinis, new species.

Length 2.6-2.87 mm. Piceous brown to black, underside of thorax somewhat lighter, legs testaceous brown; shining, the declivity opaque, cylindrical, elongate, sparsely pubescent.

Pronotum oblong, base truncate, posterior angles rounded, sides gently arcuate, apical margin almost semi-circular, middle of disc obtusely tuberculate, asperities not reaching to lateral margins, posterior area smooth, sparsely punctate, median line an impunctate strip.

Elytra 1.6 to 1.7 times as long as pronotum; lineate-punctate, strial punctures close, not impressed; interspaces flat, feebly coriaceous with a series of fine piliferous punctures becoming aciculate or granulate towards declivity and alternating fairly regularly with very minute punctures; apical margin subacuminately rounded, declivity obliquely convex, opaque to well beyond the summit on the dorsum; 1st interspace with 3 small tubercles on the slope of which the two larger are in the upper half of the declivity, one small tubercle on the summit and one granule beyond; 2d interspace slightly depressed, smooth, one or 2 small granules beyond the summit; 3d interspace weakly convex with 2 small tubercles in the upper half of the slope and a minute granule near the apex and one or 2 granules beyond the summit; remaining interspaces with a few granules; striae on declivity evident with regular, flat, strong punctures.

Society Islands: Tahiti, Taohiri, Mount Aorai trail, alt. 3,500 ft., Sept. 12, 1934, 21 females, Zimmerman. Holotype in Bishop Museum.

Closely allied to *Xyleborus affinis* Eichhoff and its allies, but distinct by its larger size, very dark color in which there is no trace of ferrugineous, and the much stronger tubercles on the declivity.

Separable from *Xyleborus rapanus* Beeson by its size, less steep declivity with smaller tubercles, dorsum with impressed striae and less evidently granulate interspaces.

Xyleborus rapanus, new species.

Female: length 2.95 mm. Fuscous brown to black, the legs light brown with joints and serrations darker; sparsely pubescent, shining, the declivity subopaque or pruinose.

Front coarsely punctate with an impunctate, smooth median area and weakly elevated longitudinally as in *X. adamsoni* Beeson, but more rugose. Pronotum in outline and punctuation as in that species.

Elytral striae very slightly impressed, punctures close, shallower than in *adamsoni*; interspaces flat, transversely rugulose with a single row of piliferous punctures remoter and more conspicuous though not larger than the strial punctures, becoming granulate before the summit of the declivity.

Declivity oblique, planoconvex, apical margin obtusely rounded; strial punctures superficial, inconspicuous; 1st interspace with 3 or 4 tubercles on the slope not symmetrical with the opposite interspace, the 2 middle ones (or single middle one) largest, and 2 or 3 granules on the dorsum; 2d interspace without tubercles on the slope but with 2 or 3 granules beyond the summit; 3d interspace with one large tubercle above the middle and traces of up to 4 granules; remaining interspaces with irregular granules as in X. adamsoni.

Vestiture as in X. adamsoni.

Rapa: Maitua, alt. 700-800 ft., July 2, 1934, beating dead branches, 2 females, Zimmerman; July 21, 1934, Cooke.

Differentiated from X. adamsoni Beeson by its flatter, less mat declivity, the apical margin of which is more obtusely rounded, and by the less impressed elytral striae.

Xyleborus torquatus Eichhoff subspecies **badius** Eichhoff.

Xyleborus torquatus Eichhoff, Berl. Ent. Zeitschr., 12:146, 1868. Xyleborus badius Eichhoff, Berl. Ent. Zeitschr., 12:280, 1868.

Society Islands: Tahiti, Blue Lagoon, Papeete, Mar. 2, 1934, seashore, at light, one female; Tiupi Bay, Papeari, Mar. 31, 1934, on *Inocarpus edulis*, one female, Zimmerman.

For distribution see Beeson, B. P. Bishop Mus., Bull. 142, art. 6: 109-110, 1935.

Xyleborus nesianus, new species.

Female: length 3.27-3.37 mm. Elongate, cylindrical, shining, ferrugineous brown to piccous brown, legs testaceous.

Front weakly convex transversely, ground shagreened, coarsely sparsely punctate except central area which is impunctate with a smooth shining patch and a zone behind epistome which is densely punctate, median line slightly elevated.

Pronotum longer than broad, basal angles broadly rounded, sides broadly curved widest behind middle, apical margin semi-elliptical; from side anterior slope is obliquely convex, steeper behind apical margin, posterior half horizontal, depressed in front of basal margin, junction of anterior and posterior areas at an obtuse angle; anterior asperities weakened apically and obsolete at the apical margin and not extending to the lateral margins, posterior area with fine, sparse punctures.

Elytra cylindrical, 1.5 or 1.6 times as long as pronotum, sides subparallel, slightly narrowing in last quarter and obtusely rounded at apex; striate-punctate but not quite regularly, strial punctures large, close, slightly impressed, the first stria broadly impressed; interspaces flat, weakly rugulose, uniseriatepunctate, the punctures half as numerous as strial punctures and pricked up, becoming tubercles towards declivity and in posterior half of sutural interspace.

Declivity oblique, flattened, surface irregular owing to slight depression of the 1st stria and 2d interspace and elevation of 3d interspace; apex margined from sutural angle to end of 3d interspace thence declivity is limited laterally by a carinula up to the 7th interspace; 1st interspace with a large tubercle at summit and smooth throughout except for traces of 3 or 4 granules, 2d interspace as narrow as 1st, smooth with traces of minute granules, 3d interspace irregularly raised with a large conical tubercle at about the middle, 1 or 2 minute granules above and below and a small tubercle near the apex, 4th interspace with 1 or 2 granules and a small tubercle; striae evident with large disclike punctures.

Vestiture of long stiff hairs from asperate area and sides of pronotum, and interspacial punctures and tubercles of elytra; strial punctures without evident hairs; epistome fringed.

Society Islands: Tahiti, Taohiri, Mount Aorai trail, alt. 3,500 feet, Sept. 12, 1934, 7 females, Zimmerman. Holotype in Bishop Museum.

Belongs to the group of Xyleborus confusus Eichhoff and distinct by its larger size and darker color.

Xyleborus confusus Eichhoff, Berl. Ent. Zeitschr., 11:401, 1867.

Society Islands: Tahiti, Afaahiti near Vaitaare, Mar. 20, 1934, one female; Arihiri, Pare, Mar. 5, 13, 1934, at light, two females; Fautaua Valley, Mar. 7, in legume pods,³ one female; Tiupi Bay, Papeari, Mar. 21, 1934, at light, one female, Zimmerman. Papara Valley, 4 miles from sea, alt. 750 ft., from *Hibiscus tiliaceus*, Dec. 21, 1928, one female, Mumford and Adamson.

Rapa: Maitua, alt. 700-800 ft., July 1, 1934, dead branches of *Homalanthus*, 1 female; Mount Tautautu, north slope, alt. 700-800 ft., July 8, 1934, under dead bark of *puru*, 1 female, Zimmerman.

Previously recorded from the Pacific Islands also tropical Africa and America.

Xyleborus oparunus, new species (fig. 2).

Female: length 3.6 mm. Black, base of elytra piceous brown, coxae and femora testaceous, tibiae dark brown. Clyindrical, shining, pilose, declivity oblique, flattened and impressed.

Front, ground shagreened, closely subgranulate-punctate, the punctures finer towards epistome which is broadly smooth and brilliant; median line of front

³ According to Zimmerman the pods in Fautaua Valley were Crotalaria.

shining, weakly elevated and expanding in the center into a diamond-shaped, brilliant boss.

Pronotum subrectangular, longer than wide, basal angles broadly rounded, sides slightly arcuate, apical margin (from above) very broadly curved into sides (concave from in front), center of disc umbonate and finely asperate; asperities of anterior half not very strong or large, becoming weaker towards the steep apical border and passing into aciculate punctures at some distance from lateral margins, posterior half with surface finely shagreened, abundantly punctate, the punctures fine in dorsal area, coarse outwards; a narrow, impunctate, non-shagreened, median line; posterior half of lateral margin more densely punctate than basal margin.

Elytra, 1.77 times as long as pronotum, cylindrical, sides nearly straight to the middle, thence very gradually narrowed, apex obtuse; in longitudinal section subhorizontal for about half way thence very slightly curved, and in posterior sixth rather abruptly obliquely declivous, face of declivity flattened to the 4th interspace and transversely impressed in lower half. Striae impressed, strial



FIGURE 2.—Xyleborus oparunus, new species, female, dorsal view and lateral and terminal views of declivity.