

OCCASIONAL PAPERS  
OF  
BERNICE P. BISHOP MUSEUM  
HONOLULU, HAWAII

Volume XVIII

September 10, 1945

Number 9

Two New *Storeus* from the Philippines  
(Coleoptera, Curculionidae)

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The genus *Storeus* Schoenherr, 1843, has not been recorded from the Philippine Islands heretofore. In fact, the most westward locality from which species have been reported is West Australia. Of the more than 40 known species of *Storeus*, practically all are confined to Australia and Tasmania, with a few of the described species from the New Caledonian and Fijian areas. However, the information now at hand indicates that other new species will be found in the great insular area between Fiji and the Malay Peninsula.

The following two species were sent to me for identification from the United States National Museum, and their representatives, as holotypes, have been returned to the National collection. Although they are represented by unique individuals, I feel that the value of recording the new zoogeographical data justifies their description at this time.

***Storeus luzonae***, new species (fig. 1, *a, b*).

*Female*: Derm reddish brown to piceous; densely clothed with rounded scales above, but derm not entirely concealed by scaling, which is predominantly yellow above with some scattered patches of white scales; scales on legs and underside predominantly white; setae on pronotum and elytra white.

*Head* with derm of crown almost completely concealed by rounded scales, which become smaller and sparser laterad; crown with only a few decurved, narrow, lanceolate, white setae; interocular area strongly narrowed dorsad, only about one half as broad at top as breadth of base of rostrum, densely squamose and with some narrow setae similar to those on crown along inner margins of eyes.

*Rostrum* rather evenly arcuate, slender; its chord, measured from lower edge of an eye to the apex, about one sixth longer than median line of pronotum, as measured from side; approximately even in diameter subbasally, medianly, and subapically; dorsal contour continuous with that of head; antennae inserted

at approximately distal one third; scaling dwindling away rapidly beyond base, and with only minute setae beyond middle; minutely alutaceous, not distinctly punctate, and only faintly sulcate toward sides basad.

*Antennae* with slender scape about as long as funiculus excluding club, reaching to within breadth of first funicular segment of eye; funiculus 7-segmented, segment one somewhat more than twice as long as following three segments combined, two about twice as long as broad and about as long as two following segments combined, segments three to seven successively broader; club ovoid, about as long as segments six to seven inclusive.

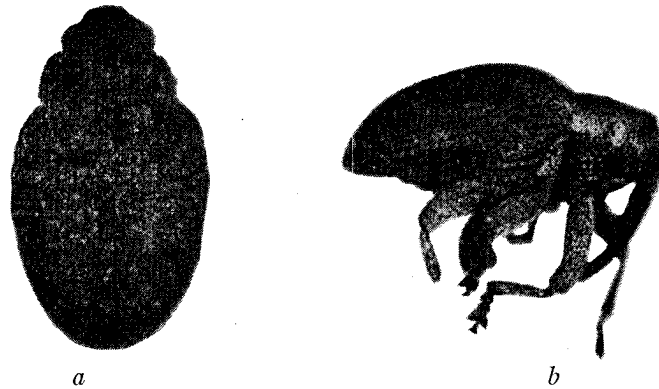


FIGURE 1.—*Storeus luzonae*: a, dorsal view; b, side view. (Photographs prepared at United States National Museum, reproduced through courtesy of L. L. Buchanan.)

*Prothorax* distinctly transverse (36:24), broadest at base; arcuate on sides from base to about apical two fifths to sharply marked subapical constriction, thence subtubular to apex; longitudinal dorsal contour flatly arcuate, and its outline only slightly, shallowly, broadly interrupted by subapical constriction; lateral fovea large and deep, the bare surrounding area continued forward to eye, and the contour of ventral edge of lateral wall of pectoral canal almost straight, at most just perceptibly interrupted behind middle, ventral part of fovea filled with dense, long hairs; squamae mostly subcircular, those on disk subequal in size to those on elytra, the derm distinctly visible between scales, but scales larger and denser on sides of disk and there almost entirely concealing derm, the scales scattered on pleura, and smaller and less numerous basad on disk; with scattered, decurved, anteriorly directed, hairlike setae on disk; punctures indistinct on unabraded disk.

*Scutellum* convex, partly setose.

*Elytra* shaped as illustrated; broadest at about basal third, about 1.4 as long as broad, about three times as long as pronotum, as measured from side; dorsal contour rising distinctly above level of pronotum, its outline abruptly discontinuous with that of pronotum; base, except for scutellar emargination, almost straight; intervals broad and flat, not setose, except sutural interval and lateral intervals, the scales almost circular, each about one third as broad as an interval, placed two or three across each interval, some isolated, some touching their

neighbors, and some imbricate, but the moderately shiny derm visible between most scales; striae linelike, their punctures each bearing distinct, decurved, narrow, white setae.

*Legs* with femora densely squamose, the scales similar to or more elongate than those on dorsum, and with numerous inclined setae, sulcate beneath and not dentate; tibiae less densely squamose; tarsi shaggy with setae, but not squamose.

*Sternum* with prosternal canal broad and deep with high, strong side walls, the area in front of coxae densely filled with golden hair; fore coxae each with a large, distinct, dense patch of scales on inner sides of anterior parts, separated by a distance about as broad as breadth of a fore tibia, the intercoxal process hairy in front, but otherwise bare; intercoxal process of mesosternum about as broad as a mesocoxa, hairy; mesopleural scales rounded, comparatively dense; metasternum about as long at its narrowest point between mid and hind coxae as the breadth of intercoxal process of mesosternum, or about as long as a hind coxa, punctate, closely and rather coarsely so in middle, the punctures bearing long, hairlike setae on disk, these becoming denser and broader laterad and lanceolate-squamiform in front of metacoxae and rounded on pleura, metasternal episternum with the scales mostly arranged in a single line.

*Abdomen* comparatively flattened, alutaceous, for the most part not distinctly punctured, the first two ventrites with round or ovate scales, mostly somewhat larger than those on dorsum and mostly isolated from one another, numerous, but not very dense, for derm is well exposed, and with scattered setae; intercoxal process of first ventrite broadly arcuate, about as broad as median length of ventrite; ventrites three and four with smaller scales and ventrite five with setiform scales only; posterior margin of ventrite one as broad as the median length of abdomen; posterior margin of ventrite four about as broad as the median length of ventrites two to five inclusive (by measurement, but it does not appear to be so broad).

Length, 2.2 mm.; breadth, 1.25 mm.

Holotype female (number 57246, United States National Museum), collected on Mount Makiling, Luzon Island, by the late C. F. Baker.

This broad, small species has the fore coxae much more widely separated than those of its Philippine congener described below. It somewhat resembles undescribed species that I have collected in Fiji.

#### Subgenus *Anostoreus*, new subgenus

The following new species is unique among the described *Storeus* and the undescribed ones known to me, in that it has only six antennal funicular segments instead of the usual complement of seven. I therefore propose a new subgenus to contain it.

This new species with its contiguous fore coxae and 6-segmented funiculus might be separated generically from *Storeus luzonae*, if only the two species were known. However, I feel that it would be unwise

to erect a new genus in this complex group, based upon the characters mentioned above, without a thorough study of the various species groups of which it is composed and the nature of their structural variations. Such characters as the number of antennal segments and position of the coxae are certainly of generic rank in many groups of weevils, yet in others they appear to be only worthy of specific weight. I have a series of about a dozen new species which I collected in Fiji, and a study of them reveals that there is considerable variation as to the distance the fore coxae are separated. The separation ranges from almost nothing to comparatively broad. On the genotype, *S. variegatus* Fabricius, from Australia, the antennal funiculus is 7-segmented, and the anterior coxae are contiguous. The new species also differs from the genotype in having unarmed femora, but it is known that the femoral teeth are variable in *Storeus* and may be present or absent. The new species has a normal facies for one of the small *Storeus*, such as those found in Fiji, and its aberrant antennal character is surprising.

Subgenotype: *Storeus buchanani*, new species.

***Storeus (Anostoreus) buchanani*, new species (fig. 2, a, b).**

**Male:** Derm reddish brown to piceous; densely clothed above with rounded scales, but derm not entirely concealed by scaling, which is mixed whitish and yellowish with some rather obscure darker spots above and white on the legs and under surface; setae mostly white or yellowish.

**Head** with crown closely set with oval or rounded, appressed scales which are only about one half as large as those on sides of pronotum, densest at top of interocular area, with no conspicuous setae; interocular area about three fifths as broad at top as breadth of base of rostrum, densely squamose, scales mostly somewhat larger than those on crown and similar to and continuous with those on rostrum, with a row of slender, decurved setae along inner margins of each eye.

**Rostrum** evenly arcuate, continuous in dorsal outline with the head, its chord, measured from apex to lower edge of an eye, as long as the median length of pronotum as measured from side; diminishing gradually and slightly in dorso-ventral thickness from base to apex; antennae inserted at about distal one fourth; squamose from base to about the insertions of antennae, thence finely setose to apex, scales mostly ovate and setae mostly squamiform and elongate-oval, or elongate-subsquamiform; minutely alutaceous, sulci, carinae, and punctures inconspicuous.

**Antennae** with scape as long as funiculus plus about one half of club, reaching to within about the length of second funicular segment of an eye, with a row of setae along its outer side; funiculus 6-segmented, first funicular segment about twice as long as broad, about as long as the following three segments combined, two less than twice as long as broad, not as long as three plus four, segments three to six successively heavier; club ovoid, about as long as the five preceding segments together.

*Prothorax* distinctly transverse, almost one third broader than long (30:22), broadest at base, but slightly narrowed and almost straight on sides to about middle, thence rounded into the strongly marked subapical constriction, then subtubular to apex; subapical constriction slightly but distinctly interrupting the otherwise broadly arcuate longitudinal dorsal contour; lateral fovea large and deep, the bare surrounding area delimited and not continued forward to eye, area between fovea and eye squamose, the contour of ventral edge of lateral wall of pectoral canal almost straight and not distinctly interrupted by fovea, and the lower part of fovea with a restricted amount of fine yellow hair; disk closely punctured, but sculpture hidden by scaling; squamae mostly ovate, narrower and setiform in basal part of disk, densest and largest on sides of disk and with scattered, but rather abundant anteriorly curved setae.

*Scutellum* flattened, minutely setose.



FIGURE 2.—*Storeus* (*Anostoreus*) *buchamani*: a, dorsal view; b, side view. (Photographs prepared at United States National Museum, reproduced through courtesy of L. L. Buchanan.)

*Elytra* shaped as illustrated; broadest at about the basal one fourth, about 1.4 longer than broad, about 2.4 times as long as pronotum as measured from side; longitudinal dorsal contour rising slightly above that of pronotum, but not abruptly so and only comparatively slightly discontinuous with entire contour of pronotum; base only slightly and very broadly emarginate; intervals broad and flat, only the sutural one and perhaps the outer ones near base setose, scales ovate, somewhat smaller than those on postero-lateral corners of pronotum, usually arranged two to the breadth of an interval, and mostly touching or slightly overlapping scales behind, but not so dense as to entirely conceal derm; striae narrow, punctate, the punctures bearing decurved, almost prostrate setae.

*Legs* with femora densely squamose and setose, the scales elongate, not dentate and hardly grooved beneath, hind pair most distinctly grooved; tibiae mostly setose, with few subsetiform scales; tarsi setose, not squamose.

*Sternum* with the prosternal canal deep and broad with high, strong side walls, the area in front of coxae densely filled with matted yellow hair; fore coxae contiguous at their bases, with a dense patch of scales on their front sides; intercoxal process of mesosternum about two thirds as broad as a mesocoxa,

with lanceolate setae, mesopleural squamae dense, mostly ovate, those on episternum largest; metasternum with disk concave, the punctures bearing long, coarse setae, the shortest distance between the mid and hind coxae slightly less than length of metacoxa or as broad as intercoxal process of mesosternum, setae on sides large, elongate-oval; metepisternum with two rows of scales caudad.

*Abdomen* alutaceous, except for first ventrite, not distinctly punctate, the first two ventrites with well-separated, elongate squamae and setae, the scales on remainder of abdomen mostly setiform; intercoxal process of first ventrite pointed, coxae separated by a distance only slightly more than one half as great as the length of ventrite; posterior margin of ventrite one not as broad as the median length of the entire abdomen; the breadth of the posterior margin of ventrite four about equal to the median length of ventrites two to four inclusive.

Length, 1.9 mm.; breadth, 1.0 mm.

Holotype male (number 57247, United States National Museum), collected at Butuan, Mindanao Island by C. F. Baker and bearing the number 4437.

This species shares with the Fijian *Storeus minimus* the distinction of being the smallest of the genus.

It gives me much pleasure to dedicate this species to Mr. L. L. Buchanan, who sent the material to me for identification. For many years he has been most cooperative and generous with his time in helping me with various problems concerning the Curculionidae.