

Ther. Cg.

(Reprinted from the Proceedings of the Entomological Society of Washington, Vol. 40, No. 7  
October, 1938.)



#### A NEW GENUS AND SPECIES OF ANOPLURA FROM THE PECCARY.

By O. G. BABCOCK AND H. E. EWING,

*Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture.*

During the winter of 1932 a month-old peccary (javelina) was captured about midway between Juno, Tex., and the Pecos River, in one of the few remaining areas where this animal still roams wild. An examination of this individual revealed that it was heavily infested with a sucking louse. The lice were abundant on the sides and back, while the forequarters and shoulders were even more heavily infested. Attached to the bristles down very close to the skin were many eggs, a very small percentage of which were unhatched.

This louse represents a new genus and species and is the first anopluran to be recorded from the peccary.

#### PECAROEUS, new genus.

Head long and slender; fore head somewhat narrower than hind head; temporal region necklike; antenna five-segmented, segment I much broader than the others, segment V reduced but distinctly separated from IV. Eyes distinct, each with a well-developed cornea and ocular seta. Thorax only slightly reduced, longer than broad as viewed from below; thoracic spiracles dorsal; notum obliterated. Legs large, somewhat semicircular; leg I with femur swollen and an

enormous tibial thumb; legs II and III subequal, each with a large tarsus and a very large, toothed, tarsal claw. Abdomen long, rather slender, lobed laterally; laterotergal plates small, oval, well sclerotized; a single transverse row of dorsal setae to a segment; spiracles on segments III to VIII. Last abdominal segment in female strongly bilobed. Genital armature of male with clasperlike parameres; penis absent; pseudopenis V-shaped.

*Type species.*—*Pecaroecus javalii*, new species.

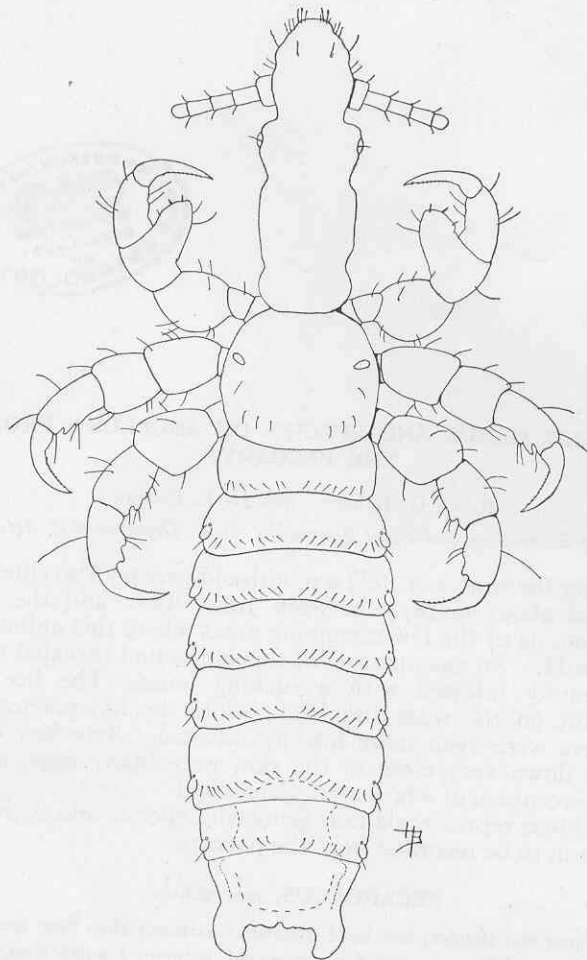


Figure 1.—*Pecaroecus javalii*, new genus and species. Dorsal view of female,  $\times 18$ .

This genus is most nearly related to *Microthoracius* Fahrenholz, from which it differs in having the last segment of the antenna

always distinct, the thorax only slightly reduced, the first pair of legs modified, the abdomen lobed laterally and provided with distinct laterotergal plates. The dorsal setae in *Pecaroecus* are arranged, for the most part, in a single transverse row per segment, while in *Microthoracius* they are not arranged in rows. Finally, in this new genus the last segment of the abdomen is strongly bilobed in the female, while in *Microthoracius* it is practically unlobed. Also, there are differences between the two genera in the plan of the male genital armature. *Pecaroecus* shares with *Haematopinus* Leach the lateral lobing of the abdomen, the presence of small, oval, laterotergal plates, and a similar arrangement of the abdominal setae, but otherwise these two genera are very different. *Pecaroecus* stands as the most generalized anopluran genus yet reported from ungulates.

***Pecaroecus javalii*, new species.**

*Male*.—Conical forehead slightly broader than long. Antennae much shorter than head, each situated in a broad, lateral, cephalic emargination; segment I much broader than long, II longer than I but only about one-half as broad, III slightly longer than II and of about the same width, IV slightly shorter and slightly broader than II, V about one-half as long as IV, with a single sensory pit situated posteroventrally at base. Hind head constricted behind the large, broad, ocular tubercles and again near its base, which overlaps the thorax dorsally to some extent. Thorax as broad as first two (fused) abdominal segments, broadest near middle; thoracic spiracles pear-shaped in outline, situated dorsal to mid-coxae. Femur I slightly longer than broad, very strongly swollen posteriorly; tibia I with enormous thumb which is as long as the segment itself and bears subapically two stout spines; tarsus I as long as tibia I and bearing distally a tarsal claw. Tarsal claw of each leg with a row of transverse ridges and many teeth on its inner surface. Abdomen long, not swollen toward middle; each spiracle of the six pairs present, situated at the base, and on anterior side of its corresponding laterotergal plate. Oval laterotergal plates situated laterally on segments III to VIII. Basal plate of genital armature from three to four times as long as broad, much thickened toward lateral margins, which are incurved; parameres about three-fifths as long as basal plate, flattened, each ending in a stout, heavily pigmented, outcurved hook; dorsal endomere forming V-shaped pseudopenis; ventral endomere complicated, extending forward much beyond bases of parameres as a broad, bilobed process and backward to tip of pseudopenis as a platelike process.

*Length* of male 6.30 mm., width, 1.40.

*Female*.—Similar to male except for size and structure of terminal segments of abdomen. Last segment of abdomen ending in a pair of large dorsolateral lobes, each of which has an outwardly curved lateral margin and an almost straight inner margin. Gonopophyses large, flat, subtriangular, arising from posterior margin of abdominal segment VIII, each with a brush of straight setae near outer border. Genital plate large, pigmented; lateral margins rounded; posterior margin straight.

*Length* of female 6.90 mm., width 1.45 mm.

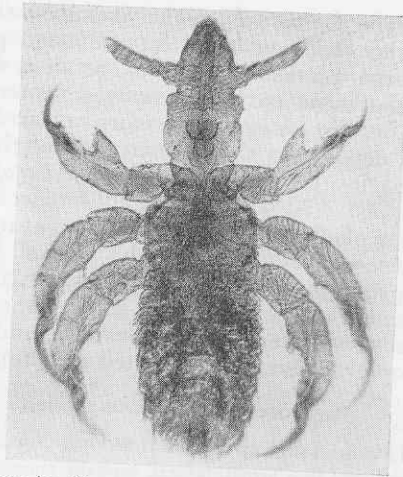


Figure 2.—*Pecaroecus javalii*, new genus and species. Dorsal view of first instar, greatly enlarged. (Photo by Babcock.)

*First nymph.*—In addition to its smaller size, it differs from the adult as follows: Body much smaller in proportion to legs; head broader in proportion to length; laterotergal plates undeveloped; body as a whole less sclerotized and pigmented.

*Length of first nymph* 2.30 mm., width, 0.65 mm.

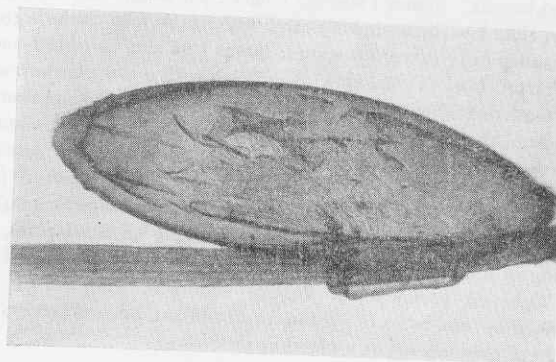


Figure 3.—*Pecaroecus javalii*, new genus and species. Egg attached to hair of peccary, greatly enlarged. (Photo by Babcock.)

*Egg.*—Large, elongate elliptical, whitish in color; attachment sheath of cement cup without pedicel, in length equal to about one-third length of egg; operculum much less in diameter than egg; nodular area more than one-half the diameter of operculum and composed of many small cellulae.

*Length of egg* 2.54 mm., width, about one-third of length.

*Type host.*—*Pecari angulatus*, collared peccary.

*Type locality.*—Western Texas.

*Type slides.*—U. S. National Museum No. 52758.

Different instars described from many specimens taken from type host between Juno, Tex., and Pecos River, January 29, 1932, by O. G. Babcock.

This unusually large and rather peculiar louse deserves, and undoubtedly will receive, additional study, which should throw further light on the phylogeny of ungulates and their sucking lice.

Inside many of the attached eggshells of this new louse were found mites of a species of Sarcoptidae. Why the mites enter these shells is not known. However, one of us (Babcock) suggests a possible explanation. It is believed that the mites enter the eggshells to get protection during a quiescent stage. Such protection would be needed, since peccary bristles are very coarse and very scattering, giving little protection to a scab mite that does not actually burrow into the skin. It should be added that no mites were found on the skin itself.

---