

NEW SPECIES OF NORTH AMERICAN SCARABAEIDAE II  
(COLEOP.)

BY R. E. BARRETT,  
Saticoy, California.

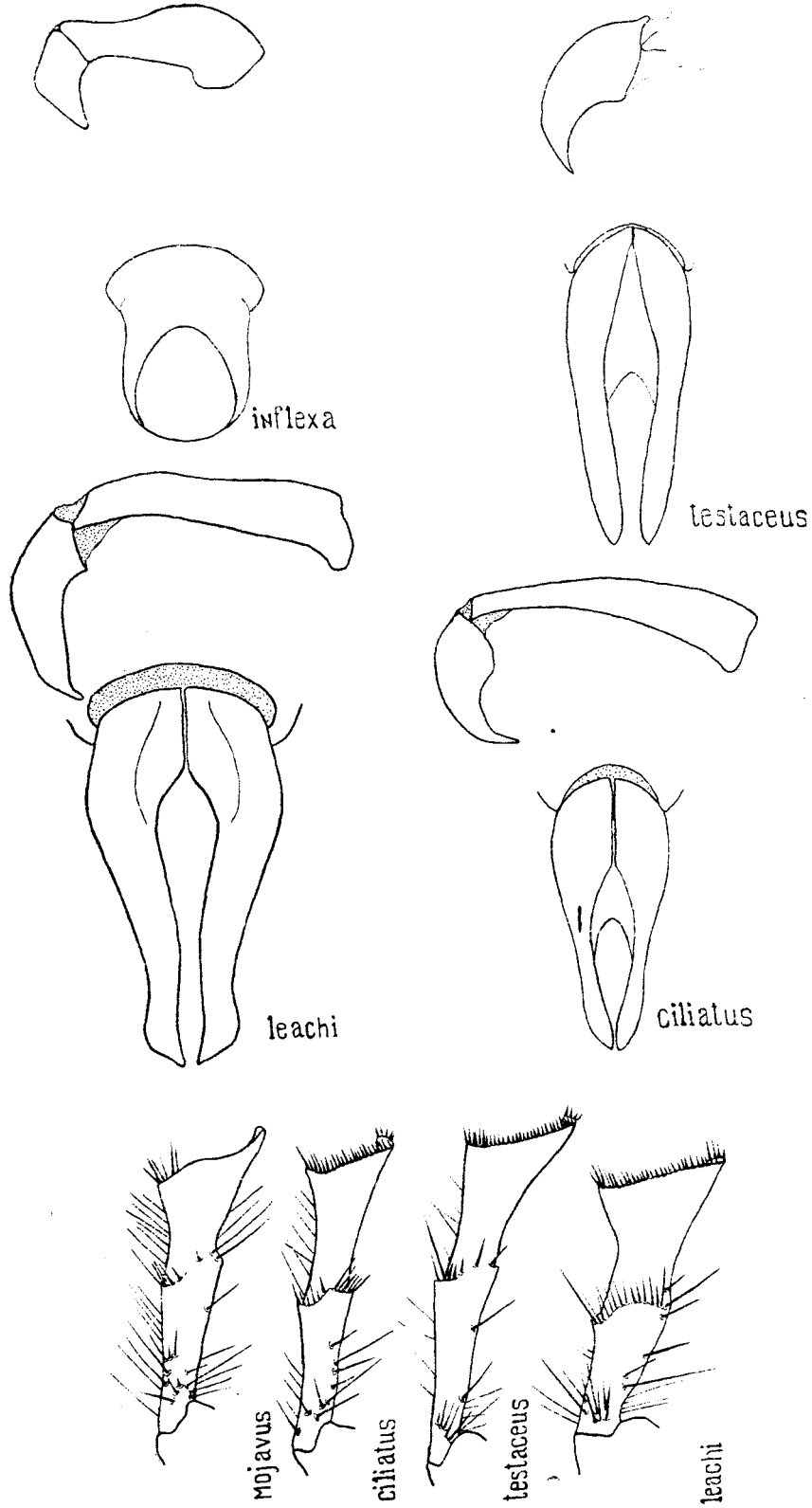
**Phyllophaga inflexa** n. sp.

Oval, slightly oblong, moderately robust, rufocastaneous to brown, dull. Clypeus feebly emarginate, the margin narrowly reflexed, coarsely and deeply punctured, frontal suture not deeply impressed, front more coarsely punctured and with short erect setae. Pronotum obtusely angulate, the lateral margins coarsely crenate and with rather long ciliae, punctures moderate in size separated by 2 to 3 times their own diameters slightly denser near margins, each puncture bearing a short semi-erect seta, median smooth line indistinct to absent in some specimens. Scutellum wider than long, punctures fine and shallow each bearing a short seta, evenly distributed. Elytra with punctures finer than on pronotum separated by 2 to 3 times their own diameters, each puncture with short semi-erect setae, longer setae arising from punctures on each side of the scutellum and along the sutural costae and lateral margins, sutural costae well defined, others obsolete. Pygidium slightly broader than long, punctures oblong and coarse separated by 1 to 2 times their long diameters except along base where they are almost confluent, setae sparse, short and fine. Metasternum finely and densely punctured, punctures separated by their own diameters, uniformly clothed with rather long erect yellow pile. Abdomen very sparsely and finely punctured, punctures separated by 3 to 5 times their own diameters and each bearing a short yellow seta. Last segment maxillary palpi fusiform not impressed.

*Male*.—Antennae of 10 segments, club sub-equal in length to segments 2 to 7 inclusive. Spurs of posterior tibiae slender, equal in length to first tarsal segment, upper slightly longer, both movable. Claws evenly curved, tooth right-angled and median. Abdomen flat at middle, last segment with transverse impression, penultimate segment vaguely longitudinally impressed and granulate at middle, a few feeble oblique impressions at the sides of the median impression. Aedeagus symmetrical and united. Length 14-18 mm.

*Female*.—More robust. Antennae missing. Spurs of posterior tibiae short, broad and movable. Claws missing. Elytra with erect setae more obvious. Length 19 mm.

Holotype, male; allotype, female; taken at dusk flying along the shore of Morman Lake, Mogollen Rim, Arizona, May 27, 1933. Elevation 7,000 ft. Paratypes, 41 males with same data. All specimens collected by Douglas K. Duncan of Globe, Arizona. This species should be placed in Group XII after *crenulata* Froelich, from which it may be separated by much less abundant dorsal pubescence, darker color and form of aedeagus.



NORTH AMERICAN SCARABAEIDAE.

**Phobetus Lec.**

A character of considerable importance in this genus is the form and ornamentation of the posterior tibia. In the various species the most divergent specific development occurs in the male, the tibiae of the female is more stoutly constructed and uniform. All drawings of the tibiae are from the male.

**Phobetus leachi n. sp.**

Dark, piceous rather dull, of same size and form as *comatus* Lec. Head uniformly piceous, fimbriate, clypeus and front coarsely densely and confluent punctate. Antennae of 9 segments. Pronotum fimbriate with long pile, piceous to testaceous the lighter forms usually with a large central piceous cloud, median anterior portion with large punctures which give rise to long pile, disc finely punctate with punctures separated by 2 to 3 times their own diameters. Elytra, uniformly piceous with sutural interval not darker, fimbriate, long sparse pile near the base, sutural striae distinct and complete the other striae imperfectly represented by fine closely placed punctures, intervals with coarser more widely spaced punctures. Under surface of body densely covered with long yellow pile.

*Male*.—Slender. Uncus present on middle tibiae. Antennal club much longer and distinctly lighter in color than scape. Length 15-17 mm.

*Female*.—Unknown.

Type, male; from Sonoma County, California. Collected March 1, 1929. Paratypes, 18 males with same data. All specimens collected by E. R. Leach of Piedmont, California, to whom the species is dedicated.

**Phobetus ciliatus n. sp.**

Oblong, testaceous, head piceous to testaceous. Head fimbriate, coarsely and confluent punctured, front with long robust setae arising from punctures, terminal segment of palpus twice as long as side when viewed from above and with a broad slightly impressed area. Antennae of 10 segments. Pronotum fimbriate, evenly and minutely punctate, without large punctures on anterior portion of disc. Elytra with sparse long pile near the base, fimbriate, sutural striae distinct and complete, the other striae represented by fine punctures, intervals sparsely punctate. Under surface of body covered with long yellow pile.

*Male*.—Uncus present on middle tibiae. Antennal club slightly longer than the funicle. Length 12-16 mm.

*Female*.—Antennal club shorter than funicle. Length 14 mm.

Holotype, male; allotype, female; from Avalon, Santa Catalina Island, California, March 1, 1932. Paratypes, 21 males with same data except one which was taken February 14, 1930, at Avalon. All specimens were obtained from Arthur T. McClay.

This species can most readily be separated from the other known species by the setae on the front, 10 segmented antennae and smooth anterior portion of the disc of the pronotum.

**Phobetus testaceus Lec.**

This is a very distinct species and only distantly related to *comatus*, being closest to *mojavus* of the previously described species. The two specimens at hand, male and female, are respectively 19 and 22 mm. long. Terminal segment of palpus over twice as long as wide when viewed from above and with distinct longitudinal impression. Male with uncus on middle tibiae. Antennal club of

female but slightly shorter than male. Antennae of both sexes of 10 segments. Disc of pronotum without large punctures on anterior part. Specimens studied were received from the collection of A. C. Davis of Takoma Park, Maryland.

- A. Antennae of 9 segments, pronotum with large punctures, terminal segment of palpus without impressed area.
1. Elytra piceous to lighter, always with darker sutural stripe, club and funicle of same color.
    - a. Northern Calif., Ore., Wash. .... *comatus* Lec.
    - b. Southern Calif. .... *sloopi* Barrett  
(Aedeagus necessary for separation.)
  2. Elytra uniformly piceous, club usually lighter than funicle. Sonoma Co., Calif. .... *lcachi* n. sp.
- B. Antennae of 10 segments, pronotum without large punctures, terminal segment of palpus with impressed area.
1. Front with long robust setae. Santa Catalina Is., Calif. .... *ciliatus* n. sp.
  2. Front without setae.
    - a. Posterior tibiae with accessory spurs present below lower spur. Santa Cruz Is., Calif. .... *testaceous* Lec.
    - b. Posterior tibiae with accessory spurs present only above upper spur. Mojave Desert, Calif. .... *mojavus* Barrett
-