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APHOTAENIUS, A NEW GENUS OF DUNG BEETLE
(COLEOPTERA: SCARABAEIDAE)

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A NEW South American beetle, which I discovered as I studied the collection of Aphodiinae (Coleoptera: Scarabaeidae) in the United States National Museum, has certain characters, especially those of the hind tibiae, that are shared by *Ataenius carolinus* Van Dyke. These peculiar characters, which have precluded the satisfactory inclusion of *carolinus* in any known genus of the Aphodiinae, would seem to indicate the advisability of setting up a new genus for the reception of both species.

APHOTAENIUS, new genus

General shape elongate oval, very convex, lateral edges of elytra and pronotum posteriorly not visible from directly above. Head moderately large, smooth except for a band of coarse punctures across occiput. Clypeus shallowly emarginate, finely reflexed margin flattened and dorsally angulately widened between two widely placed marginal teeth or denticles, when viewed from directly above the widened margin appearing as an angulate carina and hiding extreme lower edge, which has a much smaller median angulation directed in the opposite direction. Genae bent downward as in *Ataenius*. Pronotum not crenate, not fimbriate, posterior angles truncate-obtuse, slightly depressed. Pygidium as in *Ataenius*, the anterior basal portion with a longitudinal groove receiving the ventrally dentate tips of the elytra, the exposed apical portion with a depressed central area. Middle and posterior tibiae with distinct oblique carinae as in *Apho-*

dus but without the apical fringe of spinules, the apical margin ventrally with two well-separated triangular teeth, each tooth with a very fine hairlike seta basally on each side, the outer apical angle spinelike as in *Ataenius*. Mouthparts as in *Ataenius*.

Genotype.—*Ataenius carolinus* Van Dyke = *Aphotaenius carolinus* (Van Dyke).

Aphotaenius, though having distinct oblique carinae on the middle and hind tibiae as in *Aphodius*, should be placed in the tribe Eupariina, since the head, genae, pygidium, and other parts are much closer to *Ataenius* and allied genera than to *Aphodius*. The middle and hind tibiae are unique.

APHOTAENIUS CAROLINUS (Van Dyke)

Ataenius carolinus VAN DYKE, Pan-Pacific Ent., vol. 14, p. 157, 1928.

Aphodius carolinus HINTON, Ann. Mag. Nat. Hist., ser. 10, vol. 20, p. 196, 1937.

Piceous black, shining, head anteriorly and legs reddish, antennae and palpi testaceous. Head three-fourths as wide as pronotum, strongly convex, basally with a band of coarse punctures, front finely punctate, anterior smooth, impunctate; clypeus with finely reflexed margin, bidentate, teeth strongly developed, acutely pointed and widely separated, slightly emarginate between teeth, margin flattened and dorsally angulately widened, this appearing as an angulate carina from directly above, the extreme ventral margin, invisible from above, with a small median angulation directed in the opposite direction. Pronotum convex, margined basally and laterally, surface with mixed coarse and very fine punctures, coarse punctures uniformly distributed, separated by less than one to two diameters. Elytra convex, coarsely striate, striae strongly crenate punctate, intervals moderately convex, minutely punctate. Covered basal portion of pygidium deeply grooved under tips of elytra, exposed portion with depressed eroded area divided by a longitudinal carina. Posterior prosternal spine strongly developed, laterally compressed. Mesosternum closely moderately punctate. Metasternum quite closely coarsely punctate, median longitudinal line deep. Second abdominal segment closely shallowly setigerously punctate along anterior margin, carinate between the coxae; remaining segments smooth, coarsely deeply crenate in front. Posterior femoral line obsolete, only faintly indicated, middle femoral line and anterior ventral line of profemur wide, deep, and noticeably alutaceous. Anterior tibiae tridentate externally. Middle and posterior tibiae with oblique carinae as in *Aphodius*, without fringe of spinules apically but with two well-separated triangular teeth, each tooth with a fine hairlike seta basally on each side, the outer apical angles prolonged, spinelike as in *Ataenius*, long spur, first tarsal joint, and three following tarsal joints combined equal in

length. Terminal tarsal joint about as long as two preceding combined, claws minute. Length, 2.75 mm.

Holotype.—In California Academy of Sciences, No. 2549.

Type locality.—Black Mountains, N. C.

Remarks.—*Aphotaenius carolinus* is a common species in deer droppings in June in Pisgah Forest, near Brevard, N. C., and was taken there as early as April 29 and as late as September 10. It has been taken in sheep droppings on Sassafras Mountain, S. C.; in rather old cow dung in woods near Pine Mountain, Ga.; and in the same in I'On Swamp, Fair Lawn Plantation, 7 miles from Awendaw, near Charleston, S. C. Mark Robinson and I collected several specimens at the last-named place on June 4, 1948. These were the first seen from other than mountain localities, except possibly a single specimen in the M. A. Cazier collection bearing an old and very doubtful label, "Key West, Fla." Recently a single specimen was found in an early private collection of H. S. Barber, which had been determined by E. A. Schwarz as "*Aphodius* n. sp." This specimen bears label data as follows: "Marlboro, Md. May 13. Collection H. S. Barber." It was probably collected between 1898 and 1901.

Still more recently I found a specimen in the Blatchley collection at Purdue University. This specimen of *Aphotaenius carolinus* was collected in Crawford County, Ind., May 19, 1903, by W. S. Blatchley and was erroneously reported as *Ataenius lecontei* Harold in his "Catalogue of the Coleoptera in Indiana."

APHOTAENIUS COLOMBIENSIS, new species

Piceous black, shining, anterior margin of head and thorax and legs reddish, antennae and palpi testaceous. Head about three-fourths as wide as pronotum, strongly convex, basally with a band of close moderate punctures, front with more widely spaced fine to minute punctures; clypeus slightly depressed and emarginate at middle with a low angulation or denticle each side, lateral margins finely reflexed, genae bent down as in *Ataenius*, margin between denticles flattened and dorsally angulately widened to twice the height of the denticles, this appearing as a carina from directly above, lower edge of widened margin, invisible from above, with a small median angulation in the opposite direction. Pronotum convex, laterally and basally margined, not fimbriate, anterior angles obtusely rounded, posterior angles truncate-obtuse, slightly depressed, base distinctly lobed medially, surface with mixed fine and coarse punctures, the latter generally distributed but closer laterally, separated by one to four or five diameters on the disc. Elytra convex, deeply striate, striae coarsely crenately punctate, intervals weakly convex, with scattered minute punctures. Mesosternum closely moderately punctate. Metaster-

num with scattered very fine punctures at middle, a few coarse shallow punctures and alutaceous sculpture at sides, median longitudinal line moderately impressed. Second abdominal segment carinate between coxae, closely, shallowly, setigerously punctate anteriorly, remaining segments smooth, coarsely deeply crenate anteriorly. Covered portion of pygidium longitudinally grooved to receive tips of elytra, which lock together with tongue-and-groove sutural edges, disc of exposed portion depressed but smooth, with a few scattered very small low tubercles basally. Anterior ventral profemoral line and posterior femoral line of middle femurs entire, wide, moderately deep and alutaceous. Posterior femurs smooth, with scattered minute punctures, without femoral line. Anterior tibiae externally tridentate. Middle and hind tibiae with well-developed oblique carinae as in *Aphodius*, terminally without fringe of spinules but with two widely separated triangular teeth on ventral apical edge, each tooth with a fine hairlike seta basally on each side, outer apical angle prolonged, spinelike as in *Ataenius*. Long spur slightly shorter than first tarsal joint, which is as long as the three following joints combined, tarsal claws minute. Sex not determined but probably a male. Length 4 mm.; width 1.75 mm.

Holotype.—U. S. N. M. No. 59444.

The unique specimen of *colombiensis* was collected at 2,900 meters, above Guasca, Cundinamarca, Colombia, March 10, 1942, by Dr. E. A. Chapin.