

PROCEEDINGS
OF THE
ENTOMOLOGICAL SOCIETY
OF WASHINGTON.

VOL. VI.

JULY, 1904.

No. 3.

—The following six papers have been presented for publication:

ON THE SPECIES OF SPHENOPHORUS HITHERTO CONSIDERED AS SIMPLEX LECONTE.*

By F. H. CHITTENDEN.

Since the publication of *Sphenophorus simplex* by LeConte† there has been discovered, and is present in most large collections, a series of a considerably larger species which at first glance, with exception of an occasional abnormal individual, can readily be separated from the true *simplex* which was described from San Juan and Fort Yuma, California. The size of the series of *simplex* which Dr. Horn had at hand when he reviewed the genus *Sphenophorus* in 1873,‡ was less than a third of an inch. The other species which the writer has mentioned frequently measures half an inch and sometimes a little more. It is true that this second species, to which I propose to give the name of *mormon*, since it is found chiefly in Utah, is very closely related to *simplex*, as evidenced by the similarity of the sexes, and it is evident also that they had a common ancestor, or one may possibly be an offshoot of the other. During July, 1903, Mr. H. F. Wickham captured still a third form belonging to this group,

*This paper was presented for publication with No. 2 of the Proceedings but excluded for lack of space.—*Publication Committee.*

† Proc. Acad. Sci. Phila., 1859, p. 70.

‡ Contributions to a Knowledge of the Curculionidæ of the United States, p. 413.

and presented the National Museum with a good series. The study of a very large series shows that although a few individuals of *simplex*, chiefly from Utah, approach in some few characters a tendency to merge into *mormon* from the same State, nevertheless they can be separated by characters which will be furnished in the accompanying table. The latter species is not known and may not occur in California, and it is much less variable than is the true *simplex*. The third species, which I have named *distichlidis*, is apparently known only from the vicinity of Amedee, California. Some of the characters, and particularly those of the sexes furnished in the description of *mormon*, have not previously been noted in this group to my knowledge. The following synopsis is furnished:

Rostrum without carinæ, or, if present, feebly indicated and short.

Scutellum variable, feebly broadly concave.

Elytra subopaque, thorax normally shining; discal striæ narrow and shallow and less distinctly punctate; sutural striæ quite or nearly straight; intervals alternately very minutely uni- and bi-seriately punctulate. Anterior tibiæ seldom serrate inside. Pygidium normally with distinct lateral apical tufts of hairs, of ♀ distinctly bilaterally concave.

simplex LeConte

Rostrum strongly carinate at middle and at sides, carinæ long.

Scutellum somewhat variable, channeled at middle.

Elytra and thorax normally shining; discal striæ very wide, deep and distinctly punctate; sutural striæ outwardly curved at base; intervals distinctly punctulate with two or three rows. Anterior tibiæ and sometimes all distinctly serrate inside. Pygidium without tufts of hair; of ♀ not bilaterally concave or feebly so.

First and second abdominal segments ♀ distinctly separate.

mormon, n. sp.

Elytra and thorax subopaque; discal striæ moderately wide, deep and punctate; sutural curved; intervals 1, 2, 3 and 5 bi- or tri-seriately punctulate. Anterior tibiæ seldom serrate inside.

First and second abdominal segments ♀ connate or subconnate.....*distichlidis*, n. sp.

Sphenophorus mormon, n. sp.

Of very similar form and appearance to *simplex*, but much larger. Surface without coating of any kind. General color polished jet black, or with the elytra piceous and the entire dorsal surface more or less polished. Legs black or dark piceous.

Rostrum three-fifths as long as the thorax, moderately arcuate, moderately nearly uniformly compressed, more narrowly at the apex, strongly

carinate on anterior margin and at the sides, the carinæ extending from the dilated portion of the base to near the apex; base moderately wide, suddenly dilated over the scrobes, feebly or not canaliculate, interocular fossa distinct, large and shallow, from which a fine impressed line leads to the median carina; anterior face of apex convex; surface nearly uniformly finely and densely punctate. Head finely sparsely punctate.

Thorax moderately convex, about one-fourth longer than wide, basal half subparallel, apical half moderately arcuately narrower to apex, which is rather strongly constricted; surface moderately deeply, finely, and somewhat sparsely punctate, punctures larger and sparse in front of scutellum, finer and dense along the basal margin. Scutellum channeled at middle.

Elytra one-fifth wider than thorax, gradually narrower toward apex; striæ punctate throughout their length, first stria strongly curved at sides of scutellum, feebly punctate at base, the others gradually more distinctly to the sides. Intervals flat, subequal in width, variable in punctuation, the first and second and sometimes the third and fourth tri-seriately punctate, the others irregularly with punctuation in one, two or three rows. Pygidium moderately coarsely and densely punctate, punctures naked or bearing minute yellow hairs, without apical tufts.

Lower surface finely, rather densely punctate, feebly on prosternum and middle of abdominal segments, sparsely in the middle of the metasternum, densely in the apical region of the last segment.

Male.—Metasternum broadly and moderately concave, first abdominal and a portion of the second segment broadly feebly concave; tibiæ angulate and strongly fimbriate with long yellow hairs on the inner surface beyond the angle, the posterior pair very strongly angulated; pygidium subtruncate with rounded sides.

Female.—Metasternum feebly concave, abdominal segments convex; posterior tibiæ not strongly angulated, less fimbriate; pygidium feebly bilaterally concave, rounded at apex.

Length 10-13 mm; width 3.6-4.5 mm.

Salt Lake City, Utah, April 19 (H. Soltau); Salt Lake, June 14 (Hubbard and Schwarz); Provo, Utah (H. F. Wickham); Reno, Nev., July, 1902 (H. F. Wickham); Laramie, Wyo., April 23, 1888 (H. Soltau); Helena, Mont., May 1 (Hubbard and Schwarz); "Dakota" (H. Ulke, 1 ex.); "Grand Coulee, Wash., Steamboat Rock, 10 July, 1902" (C. V. Piper.)

Collected in salt marshes in the vicinity of Salt Lake by Messrs. Hubbard and Schwarz.

Type.—No. 7877, U. S. National Museum. Described from abundant material.

A few obviously much worn individuals with reddish elytra have subopaque thorax and elytra, and one has reddish legs.

Sphenophorus distichlidis, n. sp.

Similar to *mormon* with which it agrees in the structure of the rostrum and, nearly, in the sculpture of the elytra. It averages a little smaller, with the entire surface subopaque, and with the legs and less frequently the elytra and thorax rufous or piceous. The punctuation is feeble, not so strong on the thorax, metasternum or abdominal segments as in *simplex*. The tibiæ are less angulate and more finely fimbriate, and the anterior tibiæ are normally without inside serration.

Male.—First and second abdominal segments moderately distinct; posterior tibiæ more strongly angulate and fimbriate.

Female.—First and second abdominal segments connate or nearly so at the middle; posterior tibiæ feebly angulate and finely and sparsely fimbriate.

Length 8.5-11.5 mm; width 3.2-4.0 mm.

Amedee, Cal., 4,200 ft., July 11-28, 1903. Collected by Mr. H. F. Wickham—who has kindly presented a good series to the National Museum—on *Distichlidis spicata*, a maritime grass which grows in salt marshes and saline spots.

Type.—No. 7878, U. S. National Museum.

Sphenophorus simplex LeConte.

In this species the normal shining jet black color is varied by individuals with more or less rufous legs, and the elytra are frequently piceous in evidently fully developed specimens. One otherwise deep black individual with velvety elytra has the base of the elytra and the legs bright rufous. In the smallest individuals there are fewer rows of punctulations in the elytral intervals than in the larger ones, and in the specimen last mentioned they are so minute as to be almost indistinguishable.

The following is added to the recorded locality list:

In California: Palm Springs, February 2, 17 (H. G. Hubbard), Los Angeles (D. W. Coquillett), Panamint Valley, April 19 (A. Koebele), Harold, March 31 (A. B. Eells), San Diego (G. H. Field). In Utah: Salt Lake City (H. Soltau), Salt Lake, June 14 (Hubbard and Schwarz).

ON THE SPECIES OF SPHENOPHORUS HITHERTO CONSIDERED AS PLACIDUS SAY.

By F. H. CHITTENDEN.

When Thomas Say in his "Descriptions of North American Curculionides," etc.,* described *Rhynchophorus placidus* with

* Complete Writings, Thomas Say, etc., Lec. Ed., 1859, 1, p. 290