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REVISION OF THE NORTH AMERICAN BEETLES OF
THE STAPHYLINID SUBFAMILY TACHYPORINAE—
PART 1: GENUS TACHYPORUS GRAVENHORST

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ONLY once have the American species of beetles of the genus *Tachyporus* been monographed, and nearly 60 years have passed since that time. Only one new species has been described and little added to the knowledge of the genus since Horn's revision in 1877.¹ The members of this genus have always been considered difficult to differentiate because of their feeble characters. Horn states that they "resemble each other so closely that it is only with difficulty that they can be described, so that their feeble differences may be made apparent." This is to some extent due to the fact that color has been used almost exclusively for distinguishing the species, in spite of the recognized fact that this character is frequently very variable. Certain species are distinct and may be readily separated by the color pattern, but with others great confusion has been brought about by the attempts to separate the species in this way.

Even the structural characters available are few and rather feeble. An attempt to utilize the genitalia of both the male and female has led me to the conclusion that the very slight and inconstant differ-

¹ Horn, George H., Synopsis of the genera and species of the staphylinide tribe Tachyporini of the United States. Trans. Amer. Ent. Soc., vol. 6, pp. 81-128, pl. 1, 1877.

ences in these structures cannot be used for specific segregation. In this study only the larger punctures of the elytra have been found to be of value, and their constancy appears to be sufficient to justify their use.

Chiefly owing to the exclusive use of color as a distinguishing character, several of the common American species have been completely confused under two or three names. The supposed recognition of the European *chrysomelinus* from this country only served to increase the difficulty. Under the name *jocosus* and *chrysomelinus* have been included indiscriminately at least three common species, as is demonstrated by the fact that the Horn collection contains all three of these species under each name. The names *maculicollis* of LeConte and *acaudus* of Say have in the past been suppressed on the basis of color similarities.

Because of the loss of the Say types, it is impossible to be sure of his species. His descriptions, in combination with the type localities, seem to be sufficient to distinguish both *jocosus* and *acaudus*.

No specimen from America has been seen that can be placed with European specimens of *chrysomelinus*. This species runs in our key to *rutomus* but differs especially from that species by the absence of the extra discal puncture near the humerus of the elytra.

Because of this confusion and the incorrect statements in Horn's descriptions and synonymy of *jocosus* and *chrysomelinus*, it is impossible to use any of the records published for these species. It cannot be determined, except from the specimens, to which of the valid species they belong. This is also true to a large extent of *scitulus*, *nanus*, *californicus*, and *elegans*.

Certain of the characters used in the key need explanation. The large setiferous punctures of the elytra are arranged in a regular pattern, which holds throughout the genus and consists of a series of one to four punctures along the suture, a series of three to five along the lateral margin, a series of one to three along the apical margin, and five or six punctures forming an oblique quadrilateral on the disk. Any of these punctures may disappear in certain species, but the basal members of the sutural and lateral series are more permanent than the apical members. The sutural series is said to be present if one puncture of this series remains on each elytron. The "median discal puncture" is situated at basal third at the middle of the disk. The maculation of the pronotum is sometimes very faint and diffuse, but the immaculate forms are never darker at the center of the disk. The folding of the hind wings beneath the elytra frequently forms a small triangular black spot at the scutellum, which is visible through the elytra. This is not considered to invalidate the statement "elytra without large scutellar black spot."

The material available for this study consists of approximately 1,100 specimens from our region and a small series of species from Central America, the West Indies, and Europe. These comprise the United States National Museum collections and my own. In addition, the collections of LeConte and Horn have been critically examined.

I am indebted to Dr. E. A. Chapin, of the United States National Museum, for providing facilities for studying the specimens in the Museum's collection and also for many other kindnesses. The Academy of Natural Sciences of Philadelphia and the Museum of Comparative Zoology have greatly aided the study by allowing the examination of the Horn and LeConte collections, respectively.

Genus TACHYPORUS Gravenhorst

1802. *Tachyporus* GRAVENHORST, Coleoptera Microptera Brunsvicensia . . . , p. 124. [Genotype: *Staphylinus chrysomelinus* Linnaeus (1758), through synonymy with *Oxyporus chrysomelinus* Fabricius (1792); designated in 1810 by Latreille (Considérations générales . . . , p. 183).]

Head smooth, inclined, narrower than the prothorax and more or less inserted in the latter, not margined at the sides beneath the eyes; antennae feebly clavate, 11-segmented, inserted at the sides of the front of the head; fourth segment of the maxillary palpi subulate; segments of labial palpi gradually diminishing in thickness; ligula bilobed, paraglossae not projecting; no ocelli. Pronotum smooth; front coxae conical, prominent; trochanters distinct. Elytra longer than the pronotum, minutely and irregularly punctate; epipleurae distinctly limited by a carina. Mesosternum not carinate. Tarsi 5-segmented, first segment of hind tarsi moderate or short, posterior coxae free, contiguous, transverse, expanded portion attaining the epimeron; tibiae with a fringe of unequal spinules at tip. Abdomen narrowly margined; eighth sternite² of male notched at middle; eighth tergite of female divided into four slender processes.

Gravenhorst erected *Tachyporus* in 1802 in his Coleoptera Microptera Brunsvicensia for three species of *Staphylinus*, five of *Oxyporus*, and six new species. In 1806 he again described the genus (*Monographia Coleoptera Microptera*), citing his earlier publication of it (p. 1), and listing 26 additional species. Almost every subsequent writer has cited the genus as dating from the later date, though this is certainly erroneous.

²The abdominal segments are referred to by their morphological number rather than by the apparent one. The eighth sternite is the sixth visible one. For a complete discussion of this principal, see Blackwelder, Morphology of the coleopterous family Staphylinidae, Smithsonian Misc. Coll., vol. 94, no. 13, 1936.

Twelve names have been proposed for American species of *Tachyporus*, of which eight were considered valid by Horn. Blatchley and Sharp have each described one additional species. Of these 14 names 9 are considered valid by the writer, and 8 new ones are proposed. The species described by Sharp in the *Biologia Centrali-Americana* from northern Mexico is tentatively identified with United States material.

KEY TO NORTH AMERICAN SPECIES OF TACHYPORUS

- | | |
|---|---------------------|
| 1. Elytra with oblique discal spot black..... | <i>maculipennis</i> |
| Elytra without oblique discal black spot..... | 2 |
| 2. Elytral suture with series of submuricate punctures..... | 3 |
| Elytral suture without submuricate punctures..... | 8 |
| 3. Body convex and robust, prothorax not decidedly broader than
elytra..... | 4 |
| Body narrow and depressed, prothorax obviously broader than
elytra..... | <i>nitidulus</i> |
| 4. Body above black, apex of elytra alone paler..... | <i>nanus</i> |
| Color piceous to pale, not as above..... | 5 |
| 5. Pronotum paler at sides or at base..... | 6 |
| Pronotum unicolorous, pale..... | <i>rulomus</i> |
| 6. Basal fifth only of pronotum paler..... | <i>tehamae</i> |
| Base and sides of pronotum indefinitely paler..... | 7 |
| 7. Eighth sternite of female broadly rounded..... | <i>californicus</i> |
| Eighth sternite of female feebly emarginate..... | <i>stejnegeri</i> |
| 8. Pronotum uniform in color throughout..... | 9 |
| Pronotum maculate or at least clouded at center..... | 12 |
| 9. Elytra with large scutellar black spot and last abdominal seg-
ments indistinctly darker..... | <i>elegans</i> |
| Elytra without large scutellar spot, abdomen unicolorous..... | 10 |
| 10. Elytra marked with darker areas..... | 11 |
| Elytra unicolorous..... | <i>jocosus</i> |
| 11. Marginal series of five punctures; no additional discal puncture
at humerus..... | <i>snyderi</i> |
| Marginal series of five punctures; with an additional discal
puncture near the humerus..... | <i>temacus</i> |
| 12. Basal fourth of pronotum and basal half of elytra black..... | <i>pulchrus</i> |
| Thorax maculate at center or in apical half..... | 13 |
| 13. Each elytron with sutural black spot extending to apical fourth... .. | <i>oregonus</i> |
| Elytra without large black discal spot..... | 14 |
| 14. Elytra with an additional humeral puncture just inside the
lateral series..... | 15 |
| Elytra without additional humeral puncture..... | <i>acaudus</i> |
| 15. Marginal series of three punctures..... | <i>arizonicus</i> |
| Marginal series of four punctures..... | 16 |
| 16. Elytra with median discal pair of large punctures..... | <i>alleni</i> |
| Elytra with a single median discal puncture..... | <i>mexicanus</i> |

The species herein described have the following characters in common; these have been omitted from the specific descriptions, but they apply to all the species listed:

Size 2 to 3 mm, depending chiefly on the degree of extension of the abdomen. Head above smooth, shining, extremely minutely and indistinctly punctate; beneath opaque, gula smooth, shining, and somewhat elevated. Antennae a little longer than the head and pronotum, segments gradually expanded apically, last segment obliquely truncate. Pronotum smooth, shining, impunctate except for the marginal punctures.

TACHYPORUS NITIDULUS (Fabricius)

1781. *Staphylinus nitidulus* FABRICIUS, Species insectorum . . . , vol. 1, p. 337.
 1792. *Oxyporus brunneus* FABRICIUS, Entomologia systematica . . . , vol. 1, pt. 2, p. 535.
 1834. *Tachyporus faber* SAY, Trans. Amer. Phil. Soc., vol. 4, p. 468.
 1877. *Tachyporus scitulus* ERICHSON, HORN, Trans. Amer. Ent. Soc., vol. 6, p. 105.
 1877. *Tachyporus brunneus* (Fabricius) HORN, Trans. Amer. Ent. Soc., vol. 6, p. 105.
 1916. *Tachyporus nitidulus* (Fabricius) BERNHAUER and SCHUBERT, Coleopterorum catalogus, pars 67, p. 475.

Form depressed, narrow, and parallel. Uniformly rufotestaceous, varying to rufopiceous occasionally, head frequently darker and the elytra usually paler. Antennae with segments 7 to 10 wider than long. Third segment of maxillary palpi short and expanded distally, fourth very short but conical and large at base. Pronotum with sides regularly arcuate; slightly wider than the elytra. Elytra very finely irregularly punctured, the punctures indistinctly or bluntly submuricate; a row of two or three large punctures along the suture; lateral series with four punctures, and an additional discal puncture near the humerus. Abdomen above punctured like the elytra or a little less distinctly; beneath with a few larger muricate punctures on the apical segments. Eighth tergite of male with a feeble, rounded lobe; eighth sternite with a triangular notch, about as deep as wide, with the apex rounded. Eighth tergite of female divided into four lobes equal in length, the median pair narrower and separated one-half toward base; eighth sternite very feebly emarginate at middle and with a group of silken hairs on each side of the emargination.

Type locality.—Not recorded in original description.

Localities represented.—Massachusetts, New York, New Jersey, Pennsylvania, Maryland, District of Columbia, Virginia, Kentucky, Ohio, Michigan, Indiana, Iowa, Nebraska, North Dakota, Louisiana, Kansas, Colorado, Texas, New Mexico, Wyoming, Utah, Idaho, California, Oregon, Washington, Ontario, Lake Superior, Alberta, Saskatchewan, British Columbia, Europe.

Remarks.—A widespread species, probably occurring throughout our territory, though no specimens from the Southeastern States

have been seen. It has not been recorded from Mexico or Central America. This species is quite distinct from any other, only *nanus* being similar; it is distinguished from *nanus* by its pale color and narrow, depressed form.

T. scitulus Erichson (1839) is said by European workers to be the same as *T. macropterus* Stephens (1832). If Horn's identification is correct, then *macropterus* also may be a synonym of *T. nitidulus* (Fabricius).

TACHYPORUS NANUS Erichson

1840. *Tachyporus nanus* ERICHSON, Genera et species staphylinorum. . . , p. 240.

1877. *Tachyporus nanus* Erichson, HORN, Trans. Amer. Ent. Soc., vol. 6, p. 105.

Form rather parallel, convex. Black; antennae, trophi, narrow basal margin of pronotum, apical third of elytra, legs, and apical margins of abdominal segments rufotestaceous. Antennal segments gradually expanding from the third, but all longer than wide, terminal just less than twice as long as the tenth. Third segment of maxillary palpi moderately expanded, fourth acicular. Pronotum with sides regularly arcuate; not distinctly wider than elytra. Elytra very indistinctly and not very densely submuricately punctured; with sutural row of large muricate punctures; lateral series with four punctures. Abdomen above less distinctly punctured, the punctures excavated behind, beneath with the excavations long and anastomosing to form ridges between the adjacent punctures. Eighth tergite of male evenly rounded; eighth sternite notched, the notch small, as deep as wide, the apex narrowly rounded. Eighth tergite of female 4-lobed, the median pair narrower, separated almost to base; eighth sternite broadly rounded and with a continuous series of silken hairs.

Type locality.—Pennsylvania.

Localities represented.—Michigan, District of Columbia, Pennsylvania.

Remarks.—A specimen of this species from Michigan in the LeConte collection in the Museum of Comparative Zoology, at Cambridge, Mass., bears a lectotype label with the number 7350!

TACHYPORUS RULOMUS, new species

Form robust and moderately convex. Rufopiceous; basal segment of antennae, trophi, head beneath, prothorax, and legs testaceous. Antennae with segments all longer than broad, eleventh barely one-half longer than tenth. Third segment of maxillary palpi feebly enlarged, fourth acicular. Pronotum with sides straight in apical third; not wider than elytra. Elytra very finely and irregularly submuricately punctured, the punctures frequently arranged in

transverse groups; with an irregular series of larger punctures along the suture but unusually distant from it; lateral series with four punctures and with an additional discal puncture near the humerus. Abdomen above a little more distinctly punctured than elytra; penultimate segment with a transverse row of large punctures; beneath punctures more distinctly muricate; a few of the large bluntly muricate punctures on the apical segments. Eighth tergite of male rounded; eighth sternite feebly notched, the notch twice as wide as deep, the apex rounded and the angles feeble. Eighth tergite of female 4-lobed, the median pair a little longer, narrower, and separated two-thirds to base; eighth sternite narrowly rounded, with a single series of silken hairs.

Type locality.—Alaska, between Rapid River and Rampart House.

Types.—Holotype (a female collected from between Rapid River and Rampart House, Alaska, June 14, 1912, by J. M. Jessup) and 19 paratypes (same data), U.S.N.M. no. 50895; 4 paratypes (same data) in collection of the writer.

Localities represented.—Sixty-seven other specimens represent the following additional localities: Alaska (100 miles north of Rampart House; Porcupine River, 100 miles north of Fort Yukon), British Columbia (Victoria, Vancouver Island), Washington (Pullman; Tenino), California (Humboldt County; San Francisco County), Alberta (Banff Springs; McLeod), Saskatchewan (Swift Current; Oxbow), Montana (Helena; Bear Paw Mountains), Wyoming (National Park), Michigan (Sault Sainte Marie; Michepocoten; Isle Royal; Whitefish Point; Gargantua; Pointe Aux Pins).

This is a common northern species hitherto confused in the complexes known under the names *jocosus* and *chrysomelinus*.

TACHYPORUS TEHAMAE, new species

Form robust and moderately convex. Light brown, head above and disk of pronotum somewhat darker. Antennae with segments all elongate, apical only one-half longer than the tenth. Third segment of maxillary palpi scarcely dilated, fourth long, acicular. Pronotum with transverse band of basal fifth paler than the rest; sides straight from basal third; not wider than the elytra. Elytra very finely and irregularly but densely submuricate punctured, punctures frequently in transverse rows; irregular sutural row of larger punctures present; marginal row of five punctures, and with a submarginal row of three. Abdomen above more feebly punctured than elytra; beneath a little more distinctly than above, with a few of the larger punctures on the apical segments. Eighth tergite of male rounded; eighth sternite with triangular notch, the notch one-half wider than deep, apex not rounded, angles obsolete. Eighth ter-

gite of female 4-lobed, the middle pair a little longer and narrower; eighth sternite rounded and with a single series of silken hairs.

Type locality.—Tehama County, Calif.

Types.—Holotype (male collected from Tehama County, Calif., April 27, 1913, by F. W. Nunenmacher), U.S.N.M. no. 50896; 2 paratypes (same data) in collection of the writer.

Remarks.—This species has only been collected once, but the differences between it and *californicus* seem constant and of sufficient importance to separate it specifically.

TACHYPORUS CALIFORNICUS Horn

1877. *Tachyporus californicus* HORN, Trans. Amer. Ent. Soc., vol. 6, p. 104.

Form robust and convex. Piceous; basal half of antennae, margins of pronotum, prothorax beneath, elytra, and legs slightly paler. Antennal segments all elongate, but last four slightly expanded, eleventh less than twice as long as tenth. Third segment of maxillary palpi enlarged, fourth acicular. Pronotum with sides regularly arcuate; not wider than the elytra. Elytra castaneous, very finely and densely punctate and pubescent; with a row of two or three large muricate punctures along the suture; lateral series with four punctures, and a submarginal series of three. Abdomen above less distinctly punctured, beneath more sparsely and with a few larger muricate punctures on the apical segments. Eighth tergite of male slightly prolonged in a broad lobe; eighth sternite with a triangular notch, somewhat broader than deep and with the apex broadly rounded. Eighth tergite of female divided into four lobes, the median pair narrower and separated to base; eighth sternite evenly rounded and with a single series of silken hairs.

Type locality.—Hunters Point, San Francisco County, Calif.

Lectotype.—Acad. Nat. Sci. Phila. no. 3139; labeled "Cal." and "Hunter's Point."

Localities represented.—The present collection includes specimens from the following localities: California (Humboldt County, Siskiyou County, Shasta County, Plumas County, Mendocino County, Marin County, San Francisco County, Alameda County, Contra Costa County, Sacramento, San Mateo County, Santa Clara County, Santa Cruz County, Yuba County, Eldorado County, Stanislaus County, Tuolumne County, Sierra County, San Joaquin County, Mariposa County, Tulare County, Monterey County, Kern County, Inyo County, Los Angeles County, San Diego County). The Horn collection contains a specimen from Oregon and Dr. W. M. Mann has recorded one specimen from Pullman, Wash.

Remarks.—This is a very common species throughout California. It varies considerably in color but usually maintains the general

plan. The sutural series of punctures is variable, the pair at apical third and the basal pair being the most persistent.

A specimen from San Francisco, Calif., in the LeConte collection at the Museum of Comparative Zoology bears a lectotype label no. 7349, but a specimen in the Horn collection is herein designated the lectotype.

TACHYPORUS STEJNEGERI, new species

1898. *Tachyporus jocosus* LINELL and SCHWARZ (not Say), in Stejneger's "Asiatic Fur-Seal Islands and Fur-Seal Industry", pt. 4, appendix 1, p. 333.

Form robust and convex. Piceous; antennae, trophi, prothorax, elytra, and legs testaceous; antennae darker distally, pronotum broadly clouded on disk, elytra with sutural band, median sutural spot and marginal band darker. Antennae with all segments longer than wide; eleventh one-half longer than tenth. Third segment of maxillary palpi enlarged, fourth normal but blunt and short. Pronotum with sides straight in apical half; not distinctly wider than elytra. Elytra very finely and irregularly submuricately punctured; with sutural series of larger punctures more distant from the suture than usual; marginal series with four punctures. Abdomen above punctured a little more distinctly than elytra; beneath less finely and with numerous of the larger bluntly muricate punctures on the apical segments. Eighth tergite of male broadly rounded; eighth sternite triangularly notched, the notch a little broader than deep, the apex narrowly rounded, the angles not prominent. Eighth tergite of female 4-lobed, the middle pair narrower and separated almost to base; eighth sternite broadly truncate or very feebly emarginate, with a continuous series of silken hairs.

Type locality.—Nikolski, Bering Island, Bering Sea.

Types.—Holotype (a male collected from Nikolski, Bering Island, 1882, by Dr. L. Stejneger) and 1 paratype, U.S.N.M. no. 50897; 1 paratype in collection of the writer; paratypes collected by Dr. L. Stejneger at same locality in 1922.

Remarks.—This species is very similar to *californicus* but appears to be distinct. When a complete collection from the intervening areas is available, the true status can be determined.

TACHYPORUS MACULIPENNIS LeConte

1866. *Tachyporus maculipennis* LeConte, Proc. Acad. Nat. Sci. Philadelphia, vol. 18, p. 374.

1877. *Tachyporus maculipennis* LeConte, Horn, Trans. Amer. Ent. Soc., vol. 6, p. 103.

Form robust and convex. Piceous; antennae, trophi, prothorax, elytra, and legs testaceous, elytra with an oblique discal black spot

and irregular humeral band; pronotum generally vaguely clouded at middle. Third segment of maxillary palpus feebly expanded, fourth acicular. Antennal segments all longer than broad; eleventh one-half longer than tenth. Pronotum with sides nearly straight in apical half; not wider than elytra. Elytra finely irregularly punctate, the punctures submuricate, though indistinct; sometimes with two or three sutural punctures. Abdomen above more regularly and distinctly punctured than elytra, more feebly apically; beneath with the punctures more distinctly muricate, and with numerous large bluntly muricate punctures on the apical segments. Eighth tergite of male broadly rounded; eighth sternite triangularly notched, notch a little wider than deep, the angles obsolete. Eighth tergite of female 4-lobed, the median pair narrower and separated almost to base and slightly longer than the laterals; eighth sternite broadly rounded and with a single series of silken hairs.

Type locality.—Louisiana.

Lectotype.—Mus. Comp. Zool. no. 6494, bearing only an orange disk and a determination label by Horn.

Localities represented.—The present collections contain specimens from the following localities: Vermont, Massachusetts, New York, Ohio, Michigan, Indiana, Illinois, Iowa, Nebraska, North Dakota, Colorado, Utah, Manitoba, British Columbia. This species has been recorded also from Georgia, New Mexico, and Connecticut.

Remarks.—This species is quite distinct and is readily recognized by its color pattern. Even in very pale specimens the elytral spots are distinguishable in the difference in transparency of those areas.

TACHYPORUS ELEGANS Horn

1877. *Tachyporus elegans* HORN, Trans. Amer. Ent. Soc., vol. 6, p. 103.

Form robust and convex. Rufopiceous; head and scutellar spot black; abdomen darker or last two segments alone black. Antennal segments 7 to 11 expanded, but all longer than wide, eleventh almost twice as long as tenth. Third segment of maxillary palpi only slightly dilated, fourth acicular. Pronotum with sides straight from middle; not distinctly wider than elytra. Elytra very finely and irregularly submuricately punctate and without sutural row of large punctures. Abdomen above similarly punctured, beneath more distinctly and with numerous large bluntly muricate punctures on the apical segments. Eighth tergite of male slightly produced into a rounded lobe; eighth sternite with a shallow triangular notch nearly twice as wide as long, with apex broadly rounded, and lateral angles not very distinct. Eighth tergite of female 4-lobed, the median pair narrower, equal to the laterals, and separated nearly to base; eighth sternite broadly rounded, with a single series of silken hairs.

Type locality.—Canada.

Lectotype.—Acad. Nat. Sci. Phila. no. 3138, from "Can."

Localities represented.—The present collection contains specimens from the following localities: Massachusetts, New York, New Jersey, Pennsylvania, Maryland, West Virginia, Michigan, Indiana, Illinois, Iowa, Nebraska, Manitoba. The Horn collection contains also a specimen from Oklahoma.

Remarks.—The extent of the scutellar spot is variable. It may become so large as to cover the entire width of the elytra in basal fourth and even enlarge posteriorly again along the margin.

TACHYPORUS SNYDERI, new species

Form robust and convex. Black; antennae, trophi, legs, prothorax, and elytra testaceous; elytra indefinitely marked with black at the scutellum and along the suture, with an indefinite humeral stripe extending for two-thirds the length and an indefinite spot near the suture just behind the middle. Antennal segments all longer than wide, eleventh almost twice as long as the tenth, expanded and obliquely truncated. Third segment of maxillary palpi feebly expanded, fourth two-thirds as long, acicular. Pronotum with sides nearly straight from basal third; not wider than elytra. Elytra irregularly but not closely punctured, each puncture excavated behind; no sutural series of larger punctures, lateral series of three punctures, and with an additional discal puncture near the humerus. Abdomen above more regularly punctate than elytra, but similarly excavated; below more coarsely punctured and with an apical series of six or eight large muricate punctures along the posterior border of segments 5 to 8. Eighth tergite of male evenly rounded; eighth sternite with triangular notch, about as wide as deep. Eighth tergite of female 4-lobed, the median pair narrower and separated only two-thirds to base; eighth sternite broadly rounded and with a single series of silken hairs.

Type locality.—Jacksonville, Fla.

Types.—Holotype (a male from Jacksonville, Fla., taken with *Reticulitermes* sp. by Dr. T. E. Snyder) and 3 paratypes, U.S.N.M. no. 50889; 1 paratype in collection of the writer. Paratypes from Alabama (Selma), Washington, D. C., and Kentucky (Henderson).

Remarks.—The color pattern of this species is quite distinct and is constant on the four specimens available. The paucity of material is probably due to lack of collecting rather than to rarity of the species.

TACHYPORUS TEMACUS, new species

Form robust and convex. Piceous-black; antennae, trophi, prothorax, elytra, and legs testaceous; elytra darker at suture and humeral margin, with median sutural spot; apex of abdominal

segments paler. Antennae with all segments longer than wide, eleventh less than one-half longer than tenth. Third segment of maxillary palpi moderately enlarged, fourth distinctly conical but acicular. Pronotum with sides nearly straight in apical two-thirds; not distinctly wider than elytra. Elytra very finely but rather evenly submuricately punctured; without sutural series, marginal series of four punctures; and with additional discal puncture near humerus. Abdomen above very indistinctly punctured; beneath a little more coarsely than elytra, with numerous large bluntly muricate punctures on the apical segments. Eighth tergite of male rounded; eighth sternite triangularly notched, the notch a little wider than deep, apex broadly rounded, angles distinct. Eighth tergite of female 4-lobed, the lobes about equal in length, the median pair narrower and separated almost to base; eighth sternite broadly rounded, with a single series of silken hairs.

Type locality.—Buena Vista, Colo.

Types.—Holotype (a male from Buena Vista, Colo., 4-7, collection of Hubbard and Schwarz) and 2 paratypes, U.S.N.M. no. 50890; 1 paratype in collection of the writer; paratypes from Colorado (Red Cliff), Nevada (Lake Tahoe), and Saskatchewan (Swift Current).

Remarks.—This species also probably owes its rarity to lack of collecting. It has been found only at considerable altitudes.

TACHYPORUS JOCOSUS Say

1834. *Tachyporus jocosus* SAY, Trans. Amer. Phil. Soc., vol. 4, p. 466.

1840. *Tachyporus arduus* ERICHSON, Genera et species staphylinorum . . . , p. 237.

1877. *Tachyporus jocosus* Say, HORN, Trans. Amer. Ent. Soc., vol. 6, p. 104.

Form robust and convex. Rufotestaceous, head darker; base of antennae, trophi, prothorax, elytra, and legs generally paler. Antennal segments expanded from the sixth but all longer than wide, last about one-half longer than the tenth. Third segment of maxillary palpi enlarged throughout its length but more apically, fourth segment acicular but short and a little larger at base. Pronotum with sides arcuate throughout; not distinctly wider than elytra. Elytra very finely and rather irregularly submuricately punctured, without sutural series. Abdomen above more sparsely punctured, beneath more coarsely and with a few of the large bluntly muricate punctures on the apical segments. Eighth tergite of male prominently evenly rounded; eighth sternite triangularly notched, notch a little wider than deep with the apex narrowly rounded, angles rounded. Eighth tergite of female 4-lobed, lobes equal in length; the middle lobes narrower and separated nearly to base; eighth sternite prominently evenly rounded, with a single series of silken hairs.

Type locality.—Indiana.

Localities represented.—The present collection contains specimens from the following localities: New Hampshire, Massachusetts, New York, New Jersey, Pennsylvania, District of Columbia, Virginia, North Carolina, Florida, Alabama, Mississippi, Ohio, Michigan, Illinois, Wisconsin, Lake Superior, Iowa, Missouri, Kansas, Texas, North Dakota, Colorado, Wyoming, New Mexico, Montana, Utah, Nevada, Idaho, California, Oregon, Washington, Saskatchewan, Ontario, British Columbia, Yukon Territory.

Remarks.—In Horn's system this species was not separable from his *chrysoelinus*. His series contains at least two species, besides a specimen of *elegans*. This is the most uniformly pale species and can generally be told by this character. It has a wider range than any other American member of the genus.

TACHYPORUS PULCHRUS Blatchley

1910. *Tachyporus pulchrus* BLATCHLEY, Coleoptera or beetles of Indiana, p. 447.

Original description.—"Reddish-yellow, strongly shining. Head, basal fourth of thorax, basal half or two-thirds of elytra and last two segments of abdomen, black; under surface piceous. Elytra without visible punctures, very sparsely and finely pubescent. Length 3 mm."

Type locality.—Indiana.

Remarks.—This species has only been recorded once. If the description of the color of the thorax and elytra is correct, it is quite distinct from any other species. No specimens are available to me, and I have assumed the absence of the sutural series of punctures. I believe it is the only species of *Tachyporus* described as having the base of the pronotum black and the apex pale. This is certainly not the same as *obtusus* Linnaeus of Europe, which has the pronotum entirely pale.

TACHYPORUS OREGONUS, new species

Form robust and convex. Piceous-black; antennae, trophi, prothorax, and elytra testaceous, legs somewhat darker; pronotum with indefinite darker spot at middle, and elytra with large scutellar spot extending to apical three-fourths and a narrow humeral stripe nearly black. Antennae with segments all longer than wide, terminal not quite twice as long as tenth. Third segment of maxillary palpi scarcely dilated, fourth acicular. Pronotum with sides nearly straight in apical half; not distinctly wider than elytra. Elytra finely submuricately punctured, the punctures frequently grouped into transverse rows of two or three; without sutural series; marginal series of four punctures, and with an additional discal punc-

ture near the humerus. Abdomen above less finely and more regularly punctured than elytra, penultimate segment with transverse row of larger punctures; beneath as above, with numerous large bluntly muricate punctures on the apical segments. Male unknown. Eighth tergite of female 4-lobed, the median incisure two-thirds as deep as laterals, median lobes narrow, lateral triangular, equal in length; eighth sternite broadly rounded, with a single series of silken hairs.

Type locality.—Oregon.

Types.—Holotype (a female from Oregon collected by C. V. Riley) and 5 paratypes, U.S.N.M. no. 50892; 1 paratype in collection of the writer. Paratypes from Oregon (Corvallis, Scio, Klamath County) and California (Eureka).

Other specimens.—One other specimen from Placer County, Calif., is assigned to this species. It has the pronotum not distinctly clouded and the elytral spot less definite and regular.

TACHYPORUS ACAUDUS Say

1834. *Tachyporus acaudus* SAY, Trans. Amer. Phil. Soc., vol. 4, p. 467.

1866. *Tachyporus maculicollis* LECONTE, Proc. Acad. Nat. Sci. Philadelphia, vol. 18, p. 374.

1877. *Tachyporus chrysomelinus* var. *maculicollis* LeConte, Horn, Trans. Amer. Ent. Soc., vol. 6, p. 126.

Tachyporus heterocerus LECONTE, MS.

Tachyporus angusticollis FAUVEL, MS.

Form robust and convex. Piceous; antennae, trophi, prothorax, elytra, and legs testaceous; apical half of antennae fuscous; pronotum clouded at middle. Antennal segments all longer than wide, eleventh not quite twice as long as tenth. Third segment of maxillary palpi feebly enlarged, fourth acicular and more than half as long as third. Pronotum with sides straight in apical half; not distinctly wider than elytra. Elytra very finely, irregularly, and indistinctly submuricately punctured; without sutural series; lateral series variable but with an additional discal puncture near humerus. Abdomen above more distinctly and regularly punctured, the punctures excavated behind; beneath punctures still coarser, and with numerous large bluntly muricate punctures on the apical segments. Eighth tergite of male produced into an obtusely rounded lobe; eighth sternite triangularly notched, the notch a little wider than long, the apex rounded, angles distinct. Eighth tergite of female 4-lobed, the median pair narrower and separated two-thirds to base; eighth sternite rounded and with a single series of silken hairs.

Type locality.—Quebec, Canada.

Localities represented.—The following localities are represented in the present collections: Massachusetts, Connecticut, New York,

Kentucky, Michigan, Wisconsin, Nebraska, Iowa, Kansas, Texas, New Mexico, Wyoming, Washington, Ontario.

Remarks.—The species named *maculicollis* by LeConte seems to have been valid and not a variety of *chrysomelinus* as thought by Horn. It was previously described by Say as *acaudus*. Both names appear to be available, so the earlier one must be used.

TACHYPORUS ARIZONICUS, new species

Form robust and convex. Piceous; antennae, trophi, prothorax, elytra, and legs testaceous; distal half of antennae fuscous; pronotum clouded at middle; elytral suture and margin indefinitely darker. Antennal segments all longer than wide, terminal less than one-half longer than tenth. Third segment of maxillary palpus feebly dilated, fourth conical but acicular. Pronotum with sides straight in apical half; not wider than elytra. Elytra exceedingly finely and rather densely punctate; without sutural series of large punctures; marginal series of three punctures; with additional discal puncture near humerus. Abdomen above indistinctly punctured; beneath a little more distinctly, and with numerous of the large bluntly muricate punctures on the apical segments. Eighth tergite of male narrowly rounded; eighth sternite triangularly notched, the notch two-thirds wider than deep, apex not rounded, angles obsolete. Eighth tergite of female 4-lobed, the median pair a little longer and separated to base; eighth sternite rounded and with a single series of silken hairs.

Type locality.—Chiricahua Mountains, Ariz.

Type.—Holotype (a male from Chiricahua Mountains, Arizona, 11-6, collection of Hubbard and Schwarz) and 8 paratypes, U.S.N.M. no. 50893; 12 paratypes in collection of the writer; paratypes from Arizona (Chiricahua Mountains, Santa Rita Mountains, and Nogales).

Remarks.—The coloration of this species is very similar to that of several others. It is best separated by the elytral punctures. It has not been seen from outside of Arizona.

TACHYPORUS ALLENI, new species

Form robust and convex. Piceous; trophi, prothorax, elytra, and legs testaceous; pronotum clouded at center, elytra vaguely darker about scutellum. Third segment of maxillary palpi moderately expanded, fourth acicular. Pronotum with sides straight in apical half; not wider than elytra. Elytra very finely, irregularly, and somewhat indistinctly punctate, the punctures excavated behind; without sutural series; lateral series of four punctures, and with an additional discal puncture near the humerus. Abdomen above more

regularly and evenly punctured; beneath more strongly excavated, and with numerous large bluntly submuricate punctures on the apical segments. Eighth tergite of male feebly obtusely triangular but rounded; eighth sternite rather strongly triangularly notched, the notch about as wide as deep with the angles narrowly rounded. Eighth tergite of female equally 4-lobed, the median pair narrower and separated to base; eighth sternite broadly rounded but very minutely notched at center, series of silken hairs apparently continuous.

Type locality.—Oswego, Clackamas County, Oreg.

Types.—Holotype (a male from Oswego, Oreg., collected by J. A. Allen, George M. Greene collection) and 1 paratype (same data), U.S.N.M. no. 50894; 1 paratype (same data) in collection of the writer.

Remarks.—The three specimens all lack both antennae. They are very similar to the specimens assigned to Sharp's species *mexicanus* from northeastern Mexico.

TACHYPORUS MEXICANUS Sharp

1888. *Tachyporus mexicanus* SHARP, *Biologia Centrali-Americana*, vol. 1, pt. 2, p. 311, pl. 7, fig. 12.

Form robust and convex. Piceous; antennae, trophi, prothorax, elytra, and legs testaceous; distal half of antennae infuscate; pronotum clouded at center, elytra with humeral stripe clouded. Antennal segments all longer than wide, eleventh less than twice as long as the tenth. Third segments of maxillary palpi feebly enlarged, fourth acicular. Pronotum smooth, shining, impunctate; sides straight in apical half; not wider than the elytra. Elytra very finely and irregularly submuricately punctured, punctures frequently arranged in transverse groups; without sutural series; lateral series of four punctures; and with an additional discal puncture near the humerus. Abdomen above punctured a little less finely and more sparsely and regularly than elytra; beneath similarly but with numerous of the large bluntly submuricate punctures on the apical segments. Eighth tergite of male rather narrowly rounded; eighth sternite triangularly notched, notch a little wider than deep, apex rounded, the angles rather obsolete. Eighth tergite of female 4-lobed, the median pair narrowly separated only two-thirds to base; eighth sternite with an exceedingly feeble emargination at middle, but with a single continuous series of silken hairs.

Type locality.—Saltillo, in Coahuila, Mexico.

Other specimens.—One specimen each from northern Mexico and western Texas have been tentatively assigned to this species. They do not carry any other data.