

- O. meigenii* (O.S.). Orillia, June 29, 1926 (C.H.C.).
- * *O. mesocera* Alex. Sand Lake, June 28, 1926 (F.P.I.).
- * *Crytolabis paradoxa* O.S. Long Is., Rideau River, July 14, 1925 (F.P.I.); Kearney, August 5, 1925 (F.P.I.); Burke Falls, July 15, 1926 (F.P.I.).
- Helobia hybrida* Meig. Orillia, June 28, 1926 (C.H.C.); Burke Falls, July 12, 1926 (F.P.I.).

NOTES ON SOME FLORIDA COLEOPTERA WITH DESCRIPTIONS
OF NEW SPECIES.

BY W. S. BLATCHLEY,
Indianapolis, Ind.

My last general paper on Florida Coleoptera was prepared in the autumn of 1924, and appeared in the Canadian Entomologist for July, 1925. Since that was written my time has been largely devoted to the final preparation and publication of the "Heteroptera of Eastern North America." During the three years which have elapsed I have spent the winters at Dunedin on the west coast of Florida, but have made three additional collecting trips, of three or four weeks each, to Royal Palm Park. One of these was in December, the other two in March and April. This park comprises an area of 4,000 acres lying in extreme southern Florida, about 40 miles northeast of Cape Sable. Its topography and other features were briefly described in the paper above cited.¹ In the four visits which I have made to the Park I have taken (exclusive of the Staphylinidae and Scydmaenidae, not yet mounted or studied) 645 species of Coleoptera, 72 of Orthoptera and 177 of Heteroptera, these being the three groups of insects in which I am principally interested. When collections can be made in the months from April to November, these numbers will be greatly increased, perhaps almost doubled.

It is of some of the scarce and more interesting Coleoptera which I have taken since November, 1924, that this paper treats, its main object being to place on permanent record the distribution in the State and the local habitats of the species mentioned.²

(317). *Scarites substriatus* Hald.—There are apparently two forms passing under this name in the eastern United States. Both have two denticles above the second tooth of front tibiae and both are much larger than the common *subterraneus* Fabr., which has but one denticle. The form of *substriatus* occurring in Florida is from 28 to 33 mm. in length. It is not common as I have taken only a dozen or so specimens in 15 years collecting, and they mainly at light, though some were found in the muck along the margins of ponds. This is probably the true *substriatus* of Haldeman as he gives the length as 13 lines (26 mm.). The form occurring in Indiana is smaller (22-25 mm.) with hind body much less robust and elytral intervals more convex, the striae minutely but evidently crenate. I treated this in my "Coleoptera of Indiana" as *substriatus*, as I had not then seen the Florida form, but the length given in my description

1.—Can. Ent. LVII, 1925, 160.

2.—In the notes which follow the sequence and usually the nomenclature is that of Leng's "Catalogue of the Coleoptera of America North of Mexico" (1920) and the Supplement thereto (1927) and the number in parenthesis, before each species mentioned, is the serial number of that species in these two works.

is too great. It may represent the *S. distinctus* Hald. described³ from Georgia, though he gives the length of that species as $10\frac{1}{2}$ lines (21 mm.). Leng, in his Catalogue, does not mention this *distinctus* of Haldeman.

(845). *Tachys ventricosus* Lec.—Scores of this little southern Carabid were taken March 19, 1925, from beneath boards about the margin of a flowing well in a dense wet hammock near Dunedin. It had been taken previously, though sparingly, in very moist situations at Lakeland, Kissimmee, Royal Palm Park and Dunedin. Leng, in his "Carabidae of Florida" records it only from Sebastian; though Schwarz, in the "Coleoptera of Florida" mentioned it as "common" without further comment.

Rembus (Diplocheila) angusticollis sp. nov.

Elongate-oblong, subdepressed, sides subparallel. Black, feebly shining; antennae, mouth parts and tarsi reddish-brown. Head smooth, a transverse ridge between the fronts of eyes, back of which is a distinct concavity. Pronotum quadrate, scarcely broader than long, sides very feebly and broadly curved; disk impunctate, minutely alutaceous, median line fine, entire, a distinct impression at middle of apical third and a larger deeper one each side near the hind angles which are rectangular. Elytra conjointly narrowly oval, scarcely wider than middle of thorax, disk distinctly alutaceous, striae one and two deeper than the others, six and seven almost obsolete, all minutely punctate; intervals one to three feebly convex, the others flat, smooth; three with a distinct dorsal puncture at apical third. Length 10 mm.

Type a female taken at Dunedin, Fla., Jan. 25, 1926. From *R. nupera* (Casey), the only other Florida species of nearly similar size, it differs in its much narrower thorax with sides much less curved, alutaceous upper surface, much paler antennae and other characters. My second specimen of *R. nupera* was taken at Royal Palm Park, March 28, 1927. It is known only from the southern third of that State.

(1454). *Dicaelus purpuratus* Bon.—This large and handsome species is rather common in the north, but is apparently very scarce in Florida. Leng recorded it definitely only from "Between Allen River and Deep Lake," near Everglade. I did not take it in the State until March, 1927, when three were found at Royal Palm Park. Like others of its kind, it occurs beneath cover on the ground, usually in open woodland.

(1656). *Lebia cyanea* Dejean.—This is a little coppery-blue Cuban species of which I took a half dozen or more at Royal Palm Park in December and April from beneath bark of dead pine, and by beating dead leaves of royal palm in the dense hammock on Paradise Key. It was included by Leng in his "Carabidae of Florida" without definite station, as a variety of *L. marginicollis* Dej., but is very distinct from that species and was correctly placed in the Leng Catalogue.

(1692). *Dromius atriceps* Lec.—This little pale yellow, black-headed species was known only from Georgia and Louisiana until I took several specimens at Royal Palm Park in April, 1925, by sifting the debris from about the roots of large clumps of wire-grass. Another specimen is at hand taken Dec. 22 by A. N. Tissot at Gainesville, by passing the debris of the bushy beard-grass, *Andropogon glomeratus* (Walt.), through a Berlese funnel.

3.—Proc. Acad. Nat. Sci. of Phil., II, 1844, 54.

(1755). *Apenes opaca* Lec.—Three examples of this species have been taken in recent years; two at Dunedin in February by sifting clumps of grass roots in open pine woods, the other at Ft. Myers from beneath a chunk in a spot of dry sand. It is recorded elsewhere in the State only from Tampa and Naples.

(2665). *Megadytes fraternus* Sharp.—The first and only previous record of this large West Indian Dytiscid from this country was that of Leng and Mutchler, from specimens taken at West Palm Beach, Fla., by Charles Dury. On March 11, 1927, a male was taken from a ditch at Royal Palm Park, and on April 13, a female was found in a room at the Park Lodge. I do not have Sharp's description at hand, but the two specimens differ from that of Leng and Mutchler only in not having the front margin of thorax testaceous and in the female having the short linear impressions of elytra confined to the basal third and not "covering the entire surface except near apex" as stated by those authors.

Hydrochus equicarinatus sp. nov.

Elongate, sides subparallel. Bluish-gray with a brassy lustre; antennae and legs dull yellow, knees and bases of femora darker. Head as wide across eyes as front margin of pronotum, coarsely, rather closely and evenly punctate. Pronotum as wide at apex as long, sides straight, feebly but visibly converging from apex to base, disk finely, deeply unevenly punctate and with five large shallow foveae, the median one in front the more pronounced. Elytra with sides straight and parallel to apical third, thence, curved into the conjointly obtuse tip; disk with all intervals narrower than stria, subcarinate, of equal convexity, uninterrupted throughout and without callosities; striae rather deep, the punctures relatively large, contiguous. Length 2.5-2.7 mm.

Common in December, 1914, less so the following month, among the stems and debris of water purslane, *Didiplis diandra* (Nutt.), in a slough of the everglades at Royal Palm Park. Differs from our other eastern species in the narrow carina-like elytral intervals, which are without break or callosity over the entire surface.

(2865). *Phaenonotum semiglobosum* (Zimm.).—Our two members of this genus are supposed to be strictly hygrophilous in habitat. I beat *semiglobosum* by scores from the old fallen leaves of royal palm in the hammock on Paradise Key, half a mile from water.

(6916). *Lycostomus lateralis* (Melsh.).—But two or three examples of this well marked Lampyrid had been taken by me in Florida until the spring of 1927, when I took a half dozen or so by beating oak and other foliage at Royal Palm Park. On April 23 I found it mating by scores on foliage of the southern elder, *Sambucus intermedia* Carr, near Dunedin.

Cantharis degener sp. nov.

Elongate, slender, sides parallel. Head and elytra black, shining, thickly clothed with rather long grizzly-gray suberect hairs; thorax yellow with a moderately wide median longitudinal black stripe, this slightly wider at apex and base; under surface and femora shining black, finely pubescent; tibiae and tarsi piceous. Antennae piceous, finely pubescent, joints 2 and 3 subclavate, 2 one-third the length of 3, the two united slightly longer than 4. Thorax quadrate, as long as wide, sides straight and parallel, their margins narrow, slightly reflexed; disk uneven, impressed near the angles, impunctate. Elytra slightly wider at base and

three times as long as thorax, sides straight, subparallel; disk finely, evenly and densely rugose-punctate. Tarsal claws all deeply acutely cleft. Length 4.8-5 mm.

This is a rather common species in March and April about Dunedin, where it occurs on ferns in dense moist hammocks. It belongs in Leconte's Group B.⁴ and is allied to *lineola* Fabr., differing in its smaller thorax, with margins narrow and not reflexed as in that species. Although so small in size, it is often attacked by a red harvest-mite (*Trobidium* sp. ?) one specimen at hand having four of these mites along the suture of elytra.

Polemius suturalis sp. nov.

Elongate, slender, sides subparallel. Head piceous; thorax yellow with a broad median piceous stripe; elytra fuscous-brown, the side margins and narrow sutural stripe pale yellow; under surface piceous, ventrals margined with yellow; femora and apical half of tibiae brown; trochanters, tarsi and basal half of tibiae yellow. Antennae dark brown, not serrate, joint 2 very small, 3-5 subequal, 6-11 longer, more slender, subequal. Thorax quadrate, as wide as long, sides straight, margins narrow, not reflexed, minutely notched at middle; front angles obtusely rounded, hind ones prominent, rectangular; disk uneven, impunctate, flattened near hind angles and with a narrow median longitudinal impressed line. Elytra slightly wider at base than thorax, sides parallel, disk finely rugose-punctate, thickly clothed with subprostrate grayish hairs. Length, male, 4 mm.; female, 5 mm.

Described from three males taken at Royal Palm Park, March 20-24, and one female, December 10, by sweeping herbage along the margins of a slough in the everglades. Allied to *P. limbalis* Lec. but body narrower, more pubescent, thorax with side margins narrow, not reflexed and elytra with a distinct pale sutural stripe. The thorax of female is one-fourth wider than long, and slightly narrowed toward apex.

Oxaxis falli sp. nov.

Elongate, subcylindrical. Brown or piceous-brown with a metallic bluish tinge, the very narrow side margins of elytra and suture paler; clypeus, mandibles, tibiae and tarsi dull yellow. Head as wide across eyes as front of thorax, finely, closely punctate. Thorax longer than wide, widest at apical third, thence gradually narrowed to base; disk finely, minutely alutaceous, finely, thickly punctate, the punctures each bearing a fine prostrate grayish hair. Elytra at base one-half wider than base of thorax, humeri rounded, sides parallel to apical fourth, thence feebly curved into apices; disk with two vague narrow longitudinal costae, very finely, not densely punctate, each puncture with a fine prostrate hair. Under surface similarly punctate and pubescent. Last joint of maxillary palpi subtriangular, widest at middle. Tarsal claws simple, thicker near base. Length 6 mm.

Two specimens taken April 16, 1927, by sweeping a fleshy crucifer on the beach near Cape Sable. Named for my friend and noted authority on American Coleoptera, H. C. Fall, of Tyngsboro, Mass., who reports it in his collection from Key Largo. Belongs under 9 of Horn's key⁵, but differs in color, sculpture and pubescence from any of the species there placed.

4.—Trans. Amer. Ent. Soc., IX, 1881, p. 51.

5.—Proc. Cal. Acad. Sci. (2), VII, 1896, p. 412.

(7232). *Temnopsophus impressus* Sz.—A single female was taken at Dunedin Febr. 10, by sifting roots of a bunch of grass. Not before known from the west coast of the State.

(7805). *Tomoxia lineella* Lec.—My first Florida example of this Mordellid was taken March 24 at Dunedin while beating in a dense hammock. Recorded elsewhere in the State only from Gainesville.

(7989a). *Pomphopoea femoratus* Lec.—A male of this handsome Meloid was taken March 14, at porch light at Dunedin. Two females, previously mentioned by me⁶, are the only ones definitely recorded from the State. The male is 17, the female, 23 mm. in length.

(8480). *Zonantes nubifer* (Lec.).—This species was described⁷ from a single male taken at Enterprise, and has been recorded elsewhere only from Crescent City. Examples are at hand from Gainesville, Lakeland, Tarpon Springs and Dunedin, taken in January and February by beating dead branches of holly and magnolia and sweeping ferns in a dense hammock.

(8481). *Zonantes subfasciatus* (Lec.).—A single specimen was taken March 26 at Royal Palm Park from beneath weed debris on the side of a ditch. It is recorded only as "very rare at Tampa and Enterprise."

(8509). *Axylophilus yuccae* Casey.—This little Anthicid was described⁸ from Crescent City and Cape Jupiter, Fla., and has not been recorded elsewhere. Several examples of the typical form, which is piceous-black with pronotum and base and two fasciae on elytra, dull yellow, were taken at Royal Palm Park, in March by sweeping grasses in the marshes of the everglades. At Dunedin a half dozen specimens of a form which is wholly dull yellow, have been taken in December and March by beating the leaves of dead banana stalks. Other than in color it does not appear to differ from typical *yuccae*.

(8562). *Adelocera avita* (Say).—Two specimens were taken, April 13, from beneath loose bark at Royal Palm Park. Schwarz mentions it as "very rare in decaying oak trees at Enterprise."

(8994). *Discrepidius ramicornis* (Beauv.). My second Florida specimen of this tropical species was taken at Dunedin, March 17, from beneath bark of pine. It had been recorded only from Tampa and Royal Palm Park.

(—). *Ischiodontus granosus* Fall.—This recently described⁹ species has been taken in some numbers by sweeping herbage just back of the beach front on Hog Island, opposite Dunedin. Fall's types were taken near the beach at Palm Beach, Fla., so that it is evidently a subaritime species.

(9092). *Cardiophorus convexulus* Lec.—This widely distributed species is apparently scarce in Florida, having been recorded from that State only by Blanchard. It is at hand from Ormond, Arch Creek, Cape Sable and Dunedin, these being the first definite stations for the State.

(9166). *Nematodes atropos* (Say).—Royal Palm Park, March 27, 1927, one male taken by beating in the dense hammock. Recorded only from Dunedin and Crescent City.

(9319). *Chalcophora georgiana* (Lec.).—This large Buprestid was included in the Schwarz list from "Fla.," without definite station. It has since been

6.—Can. Ent., XLII, 1920, 72.

7.—Proc. Amer. Phil. Soc., XVII, 1878, 475.

8.—Ann. N. Y. Acad. Sci., VIII, 1895, 809.

9.—Bull. Brook. Entom. Soc., XI, 1925, 180.

recorded from Jacksonville and St. Augustine in the northern part of the State. Two were taken at Royal Palm Park in March, by beating branches of young pine.

(9687). *Helodes pulchella* Guer.—The first known Florida example of this prettily marked Dascyllid was beaten from juniper near Dunedin on February 5, 1927. It differs from Indiana specimens in having the center of disk of thorax largely piceous and the larger black spot of each elytron prolonged along the sides almost to the humerus. I regard it as only a color variety. The range of *pulchella* has heretofore been recorded as extending from Connecticut to Texas.

(10,056). *Carpophilus marginatus* Erich.—No definite record of this species from Florida can be found. A single example was taken at Dunedin February 2 by sifting weed debris on the margin of a pond.

(10,132). *Cryptarcha concinna* Melsh.—One specimen was taken February 23, near Gainesville, by beating the foliage of holly. Not before recorded from the State, the range as given by Leng being "Middle States to Kansas and Texas."

In his fragmentary treatment¹⁰ of the Family Monotomidae Casey states that the species are "much more numerous in the temperate than in the tropical latitudes of North America." Had he modified this by using the word "apparently" before "much" his statement would have been more correct. The fact is they have not as yet been carefully collected and studied from the southern regions. As the most of them are very small, usually inhabit crevices in wood or beneath bark, or occur in decaying fruit, and remain quiescent when their cover is removed, they are overlooked by most collectors. During the past ten years a number of species have been taken in Florida, some of which are not included in either the Horn Monograph or Casey's paper. I therefore herewith name and describe three of them as new, and add some notes on others.

(10,163). *Monotoma fulvipes* Melsh.—This species has been taken on a number of occasions in December and February from beneath boards and other cover close to the water's edge of the bay front at Dunedin. It has been recorded¹¹ from the State only from Lake Worth, where Hamilton found it abundant in rotten oranges.

***Monotoma avara* sp. nov.**

Elongate, subconvex. Dark reddish-brown to piceous; antennae and legs a paler reddish-brown. Head more flattened than usual, very coarsely and densely punctate, not impressed. Thorax subquadrate, slightly longer than wide; sides straight and parallel, distinctly carinate; disk moderately convex, coarsely and densely punctate, without basal impression, each puncture, as well as those of head and elytra, bearing a short prostrate golden yellow hair, front and hind angles small but distinct, the latter subacute. Elytra conjointly elongate-oval, two-fifths wider at base than thorax, sides parallel to apical fifth then feebly curved into the subtruncate tips; disk with rows of fine, close-set punctures. Under surface very densely, coarsely, closely and relatively shallowly punctured, each puncture beset with a short yellow hair. Last ventral of male with a very large, rounded median concavity. Length 2.2 mm.

10.—Memoirs, VII, 1916.

11.—Can. Ent. XXVI, 1894, 250.

Described from two males taken at Royal Palm Park, April 5-6, from beneath the dried remains of a mass of very foetid shrimp carrion. By Horn's key¹² it runs to the northern *M. parallela* of Leconte, from which it differs in its paler color, crenate margins and lack of basal impressions of thorax and especially in the very notable prostrate yellow hair of all punctures.

(10176). *Hesperobaenus rufipes* Lec.—This species occurs frequently. December to March, about Dunedin, beneath the close fitting bark of dead water-oak. It has not been recorded elsewhere from the State.

(10179). *Europs pallipennis* (Lec.).—A single specimen was taken February 22, at Gainesville by beating a bunch of Spanish moss. It has been recorded in the State only from Enterprise and Tampa, where it was found in rotten oranges by Schwarz.

***Europs fervida* sp. nov.**

Elongate, narrow, sides subparallel. Head and thorax chestnut-brown, shining; elytra testaceous, the suture with a narrow piceous line which, at base and apex, is broadened to form a triangular spot; antennae dark brown, basal joint and club paler; under surface reddish-brown, last three ventrals paler; femora brownish-yellow, tarsi darker. Head slightly wider across eyes than front margin of pronotum, sparsely and finely punctate. Thorax one-fifth longer than wide, sides straight, slightly converging and feebly crenate toward base, hind angles rounded; disk depressed, sparsely irregularly punctate, nonalutaceous and without a crescentic impression near base. Elytra subdepressed, as wide and two and a fourth times as long as thorax; sides straight and parallel; disk minutely alutaceous and with unimpressed rows of fine close-set punctures. Length 2 mm.

Dunedin, Fla., February 8-March 19; three specimens taken by beating dead vines and foliage of pine. Smaller and narrower than *E. pallipennis*, the thorax narrower and more elongate, with sides less convergent basally, the disk not alutaceous and without the median smooth space and basal crescentic impression of that species.

***Europs frugivorus* sp. nov.**

Elongate, slender, subdepressed. Head and thorax pale reddish-brown; elytra testaceous, usually with a common ill defined piceous spot near apex and sometimes with a vague sutural one at base; antennae and under surface reddish-brown, the former with basal joint and club paler. Head slightly narrower across eyes than front margin of thorax, finely and very sparsely punctate. Thorax very slightly longer than wide, sides visibly yet very feebly curved, their margins finely crenate throughout the length, hind angles rounded; disk depressed, its sides finely, sparsely and unevenly punctate, the middle with a curved irregular row of punctures each side, reaching from apical third almost to base, the area between these with only a few widely scattered punctures. Elytra slightly wider than and scarcely twice as long as thorax, sides subparallel, tips broadly rounded or subtruncate; disk with regular rows of fine punctures separated by their own diameters, each bearing a minute yellowish seta. Under surface very finely and sparsely punctate, the intercoxal process, as in our other species, narrow and subacute. Length 2-2.2 mm.

This is a very common beetle at Royal Palm Park in March and April,

occurring beneath bark and by scores at traps of apple peelings placed between boards; also at light. It differs from our other known eastern species in color and in the peculiar arrangement of the thoracic punctures.

(10210). *Nausibius repandus* Lec.—Two additional examples of this little rare Cucujid have been taken at Dunedin since my first one was recorded.¹³ They were beaten from the tops of recently felled pine.

(10278). *Psammoecus desjardinsi* Guer.—My first Florida example of this cosmopolitan Cucujid was taken at Dunedin December 16, 1925, by beating a pile of dead leaves of cabbage palmetto in my back yard. This pile of leaves, which I renew each fall, is by successive beatings during the winter, a source of many scarce and interesting insects, especially members of the Heteropteron family Ploirariidae, and other Cucujid beetles as *Hemipeplus marginipennis* (Lec.) and *H. microphthalmus* Sz.

(10529). *Synchita parvula* Guer.—No definite Florida station has been recorded for this little Colydid. Two specimens are at hand taken at Dunedin in February, one by beating Spanish moss, the other from beneath the outer flakes of bark of pine.

(10624). *Metopthalmus albosignatus* Fall.—A single specimen of this minute Latridid was received from A. N. Tissot, who took it at Gainesville Dec. 7, by passing vegetable debris through a Berlese funnel. It was described¹⁴ from Biscayne and St. Petersburg and has not been recorded elsewhere.

(10666). *Adistemia watsoni* (Woll.).—This little Lathridid is almost cosmopolitan in range, but has been recorded from the United States only from the District of Columbia. A single specimen was received from A. N. Tissot, which was taken at Gainesville December 16, from a species of *Epidendron* attached to an oak tree.

(10932). *Hyperaspis paucicola* Sz.—In the notes following the original description¹⁶ of this species Schwarz says: "Very common in Florida on swampy meadows in the pine lands." This may be true in the summer months, but not from November to April. In 15 years I have taken fewer than a dozen specimens, and they by sweeping natal grass and other herbage in dry uplands, or by sifting grass roots growing in sandy soil. Those at hand are from Istokpoga, Lake Wales and Dunedin. No definite station record has hitherto been published.

(10947). *Hyperaspis taedata* Lec.—This species was described¹⁷ from "Florida," without definite station, and no other record of it can be found in print. Schwarz, in his manuscript notes, mentions it from Enterprise, and that may have been the type locality, as he and Bolter furnished Leconte his types. Specimens are at hand from Ormond, Sanford and Gainesville, three from the latter place having been beaten from holly and magnolia foliage on Feb. 21.

(—). *Hyperaspidium pallidus* Casey.—In the last number of his "Memoirs" (XI, 1924, p. 169) Major Casey described this little Coccinellid from a unique taken at Southern Pines, N. Car. A single specimen is at hand taken at Dunedin, March 16, by sweeping herbage on Hog Island.

(10994). *Microweisea ovalis* (Lec.).—This minute wholly-piceous-brown

13.—Can. Ent., L, 1918, 423.

14.—Trans. Amer. Ent. Soc., XXVI, 1899, 115.

16.—Proc. Amer. Phil. Soc., XV, 1878, 362.

17.—Trans. Amer. Ent. Soc., VIII, 1880, 187.

and glabrous Coccinellid was described¹⁸ from Haulover and Enterprise and noted as "rare." At Dunedin, and especially at Royal Palm Park, it is, in early spring, one of the most common members of the family, occurring on roadside herbage, especially pigweed (*Amaranthus*), and hibernating beneath boards and other cover.

(—). *Scymnus pellio* Blatch.—A second example of this recently described¹⁹ species was taken at Royal Palm Park, March 28, 1927, by sweeping along the margins of a tomato field. The type was a unique male taken at the Park in 1925.

(12483). *Talanus langurinus* (Lec.).—Although rather common on the wild cucumber, *Melothria pendula* L., in the eastern and southern portions of the State, this Tenebriod had never been taken on the west coast until January, 1927, when a single specimen was secured at Dunedin while sifting weed debris from the margin of a pond. It was described from Florida and is known only from that State.

(12835). *Cryptorama holoscriceum* (Lec.).—Dunedin and Royal Palm Park, April 10-23; one specimen from each place, taken by beating and sweeping along the pathways of dense hammocks. Described from Enterprise.

(12954). *Cis krausi* Dalla Torre.—This species was described²⁰ by Kraus as *C. bimaculatus*, a preoccupied name. His types were from Texas and Coconut Grove and Key West, Fla. Two specimens are at hand from Dunedin, one taken in February from beneath the bark of a dead limb of the grape fruit (citrus) tree, the other in March by beating dead limbs of oak. In his description of this species Kraus stated that the circular black spot on each elytron "was just anterior to the vertex," when in fact they are just behind the middle. He made the same statement of the smaller elytral spots of *Orthocis pulcher*.

(12996). *Orthocis pulcher* Kraus.—Two examples of this minute bi-colored species have recently been taken at Dunedin, one in January from a dead limb of red-bay, the other in April from beneath moss on the ground near the border of a pond. It is known only from southwestern Florida.

(12999). *Xestocis miles* Casey.—A single specimen of this peculiar little Cisid was taken April 13 at Ormond some years ago from a lichen-like fungus on an oak log. A number of others were recently sent me by A. N. Tissot who took them from fungi at Gainesville, November 29 and February 5. It has been recorded from Rhode Island and Alabama, but not before from Florida.

(13038a). *Canthon punctaticollis* Schffr.—This form was described²¹ from "Florida" as a variety of *C. nigricornis* (Say). A single specimen was taken at Dunedin March 15, from beneath cow-dung. The thorax is minutely almost invisibly punctate, without a trace of the numerous elongate granules of *nigricornis*. In my opinion it is valid species.

(13047). *Canthon vigilans* Lec.—Specimens from Ft. Myers, taken at light in March and April, are in the collection of W. T. Davis, Staten Island, N. Y. It has not before been recorded from Florida, the general range being giv-

18.—Proc. Amer. Phil. Soc., XVII, 1878, 400.

19.—Ent. News, XXXVIII, 1927, 142.

20.—Proc. Ent. Soc. Wash., X, 1908, 76.

21.—Journ. N. Y. Ent. Soc., XXIII, 1915, 50.

en as Michigan and Pennsylvania to Colorado and Texas. Probably confused in many collections with the common *C. laevis* (Drury) which it closely resembles, but distinguished by the more prominent teeth of clypeus and the much larger eyes.

***Ataenius solitarius* sp. nov.**

Elongate, robust for the genus, sides subparallel. Color a uniform dark reddish—or chestnut-brown throughout, the antennae alone paler. Head but slightly narrower across eyes than front of thorax; occiput finely and closely punctate, clypeus very finely rugose, impunctate, the front margin broadly shallowly emarginate, broadly rounded each side of the emargination. Thorax nearly twice as wide as long, sides feebly curved, hind angles broadly rounded, base with a distinct marginal line; disk finely, somewhat unevenly, rather closely punctate, the punctures on sides coarser and more dense. Elytra slightly narrower at base than thorax, conjointly about twice as long as wide, sides parallel to apical third, thence broadly rounded to apices; disk moderately convex, striae rather deep, impunctate; intervals convex, strongly crenately punctate on their inner side, otherwise smooth. Front tibiae tridentate externally, crenate above the upper tooth; hind tibiae without accessory spinule; hind femora very finely punctate. Pro- and meta-sterna finely and densely granulate-punctate, metasternum more coarsely so. Ventrals coarsely not densely punctate, their front margin finely crenate. Length 5 mm.

Type a female, taken at Royal Palm Park April 2, 1927, while sifting weed debris on the side of a ditch. Evidently allied to *A. socialis* Horn. but color darker, front tibiae distinctly crenate above the teeth, sculpture of ventrals very different, etc.

(13256). *Pleurophorus parvulus* Chev.—One specimen of this, the smallest known species of North American Scarabaeidae, was swept from low herbage along the bay front at Dunedin, March 19. It is also in the Fall collection from St. Petersburg. Although apparently of wide distribution in the United States, it has not before been recorded from Florida. It is the *Psammodyus nanus* DeGeer of Horn's Monograph of Aphodiini.²²

(13333). *Trox tuberculatus* (DeG.).—Three examples of this species are in my collection from Florida, two of them from Dunedin, the other from Sanford. It has not before been recorded from the State.

(—). *Ligyryus laevicollis* Bates.—This name was included without a number in the Leng Catalogue and "Fla.?" placed after it. Specimens of the beetle are in the W. T. Davis and my collections which were taken at light at Everglade in June and August.

(13847). *Ligyryus neglectus* (Lec.).—One specimen was taken March 28 at porch light in Dunedin. The only previous record²³ from the State is that of Casey from Jacksonville.

(13872). *Aphonus variolosus* Lec.—A single specimen is at hand from Dunedin. It also was taken at porch light, on April 20, and has been recorded from Jacksonville by Casey, loc. cit., p. 217.

(13965). *Stephanucha thoracica* Casey.—This species was described from

22.—Trans. Amer. Ent. Soc., JIV, 1887, 96.

23.—Memoirs, VI, 1915, 198.

"Florida." A specimen was taken at Dunedin, February 2, as it was crawling along a sidewalk. Known elsewhere only from Gainesville, and very close to *S. areata* (Fabr.).

(14027). *Trichiotinus bibens* (Fabr.).—A rather common species in the northern states, but not hitherto recorded south of North Carolina. A single specimen was swept from herbage in open pine woods at Dunedin, April 15, 1925.

(14191). *Eburia stigma* (Oliv.).—Three examples of this West Indian species were beaten from the foliage of young Caribbean pine, *Pinus caribaea* Morelet, at Royal Palm Park in March and April. One is also at hand from Chokoloskee. It is known in Florida only from a few stations in the southern third of the State.

(14712). *Neoclytus simplarius* Blatch.—This species was described²⁴ in 1917 from four specimens taken at Dunedin and Enterprise. In the ten years that have elapsed but two additional specimens have been taken, both at Dunedin by beating oak and pine. The one last found, March 15, 1927, is 9 mm. in length, while one of the types was but 4 mm., this range in size being unusual among the Cerambycidae.

(14726). *Euryscelis suturalis* (Oliv.).—A male of this peculiar reddish-brown West Indian species was taken April 1 at light in my room at the Lodge at Royal Palm Park. The hind femora are almost as long as the entire body, very strongly clavate and extend nearly half their length beyond the tip of abdomen; while the hind tibiae are subequal in length to the femora. It was determined for me by Chas. Schaeffer, who stated that the markings of elytra, which consist of a common sutural stripe, widened at base and apex, of fine prostrate white hairs are different from those of female. It has been taken before in the State only by Mrs. Slosson at Miami.

(14767). *Agallissus chamaeropsis* Horn.—At the time of my former note on this species I had taken but one specimen at Royal Palm Park. In two of my subsequent visits I have taken 20 or more, all in March or April, on the flowers or foliage of the cabbage palm, *Sabal palmetto* (Walt.). It was not found in December, though especial search was made for it.

(14770). *Zagymnus clerinus* Lec.—The color of this species is exceedingly variable. Seven examples are at hand from Dunedin, Caxambus and Royal Palm Park. Two of them are wholly black; one is black with a round red spot at middle of each elytron; another (from Caxambus) has two cross bars, reaching from side margins almost to suture, one at middle, the other at apical third of each elytron. Three (typical *clerinus*) have the thorax dull red, a round red spot on elytra each side of scutellum and two cross bars as in the Caxambus specimen. The latter agrees very closely with the description²⁵ of Casey's *Agallissus floridanus*, taken at Palm Beach, and that may prove to be only a color variety of *Z. clerinus*. Horn states²⁶ that the two genera *Agallissus* and *Zagymnus* are very closely related, the only appreciable difference being that in the former the body is narrowed behind, while in *Zagymnus* it is very nearly parallel. In Casey's species the elytra are said to be parallel to near apex, and the upper surface coarsely and closely punctate, which is true of *Z. clerinus* but not of *A. chamaeropsis*.

24.—Can. Ent. XLIX, 240.

25.—Memoirs. III, 1912, 376.

26.—Trans. Amer. Ent. Soc., XX, 1893, 138.

(14996). *Lepturges megalops* Ham.—This species was described²⁷ from Biscayne Bay, Fla., and I can find no mention of its occurrence elsewhere. A single specimen was taken at Dunedin, March 25, 1926, while sweeping herbage along the bay front.

(15070). *Eupogonius vestitus* Say.—This northern species was beaten in numbers in March and April, 1927, from the foliage of recently felled white bay near Dunedin. Schwarz (Ms.) mentions it from Crescent City.

(15154). *Oberea gracilis* Fabr.—A single specimen was taken at Dunedin April 17, by sweeping low shrubs along the bay front. It has previously been found in the State only at Tampa and Suwanee Springs.

(15251). *Lema confusa trabeata* Dej.—This color variety of *L. confusa* Chev. has the elytra black with entire narrow side margins and a spot at base and apex dull yellow. It is recorded from Arizona and Venezuela by Schaeffer.²⁸ Three specimens have been taken at Dunedin in April while sweeping herbage on the margins of dense hammocks.

(15483). *Cryptocephalus guttulatus* Oliv.—The first specimens taken on the west coast and south of Sanford are at hand from Dunedin. They were taken in April by beating the foliage of hickory.

(15530). *Bassaricus brunnipes* (Oliv.).—My first specimen of this prettily marked species, 6 mm. in length, was taken at Dunedin, March 20, by sweeping herbage. As *B. congestus* Fabr., a synonym, it has been recorded from several stations in Florida. The northern *B. clathratus* Melsh., placed in the Leng Catalogue as a variety, is distinctly smaller, (not over 5 mm.) with punctures of thorax finer, basal yellow thoracic spots of a different shape and ground color of elytra darker. I regard it as a distinct species.

(15542). *Lamprosoma floridanum* Horn.—This peculiar little black shining Chrysomelid was described²⁹ from Biscayne Bay, Fla., and has been heretofore known only from the extreme southeastern part of the State. A single specimen was taken at Dunedin, April 11, 1925, and I found it common at Royal Palm Park in December, March and April. It occurs in spring on the foliage of young pine and in December was beaten from dead limbs and vines in the hammock. When disturbed it folds its antennae back along the grooves beneath the pronotum, feigns death, and then resembles very much certain smooth black Ptinids of the genera *Eupactus* and *Catorama*.

(15754). *Galerucella notata* (Fabr.).—Specimens are at hand from Dunedin and Royal Palm Park, taken in March and April by sweeping herbage along the margins of ponds. Known heretofore in Florida only from Sanford, Enterprise and Tampa.

***Haltica vitiosa* sp. nov.**

Elongate-oval. Upper surface and femora a uniform dark violet-blue, or violet with a reddish tinge; beneath steel-blue. Antennae blackish, thickly pubescent, the basal half tinged with greenish; joints 3 and 4 equal in length, 2 one-half the length of 3. Thorax two-fifths wider than long, sides visibly but very feebly curved, margins relatively wide, strongly reflexed, more so near front angles; disk convex, with shallow entire ante-basal impression, smooth and

27.—Trans. Amer. Ent. Soc., XXIII, 1896, 127.

28.—Journ. N. Y. Ent. Soc., XXVII, 1919, 321.

29.—Trans. Amer. Ent. Soc., XX, 1893, 135.

impunctate, hind angles obtusely rounded, basal margin curved, vaguely bisinuate. Elytra conjointly oval, about one-fifth wider at base than middle of thorax, sides distinctly but broadly curved throughout their length; disk very finely and sparsely punctate from base to apex. Ventrals minutely, sparsely punctate, their hind margins fimbriate with short fine hairs. Length 4 mm.

Described from three specimens taken at Royal Palm Park, March 23-April 8, by sweeping roadside herbage. Allied to *H. chalybea* Illig. but distinctly smaller and more broadly oval. In *chalybea* the fourth antennal is longer than third, the margins of thorax narrower and less reflexed and the punctures of elytra much coarser.

(—). *Chaetocnema robusta* Blatch.—This recently described³⁰ species was taken by scores, March 19 and April 23, 1927, in company with the Barid *Nicentrus grossulus* Casey, from the stems and fruit heads of the sedge, *Fimbri-stylis castanea* (Michx.) growing in a tide water marsh two miles north of Dunedin. Both the Chrysomelid and the weevil were previously mentioned by me as occurring on the fleshy sea-blite, *Batis maritima*, but as both sedge and sea-blite grow together, the sedge is doubtless the true host plant.

(16027). *Systema elongata* (Fabr.).—A scarce species in Florida, only three specimens having been taken in 15 years, two from Moore Haven, March 20, one from Dunedin, April 13, by sweeping herbage in low mucky soil. Recorded only from St. Augustine and Enterprise.

***Systema floridana* sp. nov.**

Elongate, sides subparallel. Black, feebly bronzed, strongly shining, head sometimes dark reddish-brown; antennae brown, bronzed, pubescent; legs piceous-brown or dark brownish-yellow. Head rather finely, sparsely, unevenly punctate. Thorax subquadrate, slightly wider than long, sides feebly curved, hind angles obtusely rounded; disk rather coarsely and evenly punctate, the punctures separated by about their own diameters; a vague median impression near base. Elytra one-third wider and three times as long as thorax, humeri rounded; sides just visibly curved to apical fourth, thence more strongly so into the broadly rounded tips; disk finely, densely distinctly punctate. Ventrals minutely alutaceous, very finely and sparsely punctate. Last ventral of male with median fovea, this preceded by a deep longitudinal impressed line. Length 3.8-4 mm.

Described from four specimens taken at Royal Palm Park in March and April by sweeping the vegetation along the margins of swales in the open Caribbean pine woods. Allied to *S. pallipes* Sz. but larger, more distinctly bronzed, with darker antennae and legs, and much coarser sculpture of upper surface.

(16047). *Longitarsus testaceus* Melsh.—My first Florida examples of this common northern species have been recently taken at Dunedin on April 14, by sweeping low Ericads. It had previously been recorded from several stations in the State, but part, perhaps most of these records should rightly be referred to *L. cotulus* and *L. tenuicornis* Blatch. For a key separating our eastern species see Journ. N. Y. Ent. Soc., XXIX, 1921, 18.

(—). *Aphihona schaefferi* Blatch.—This recently described³¹ species occurs at Royal Palm Park on low herbage along the margins of the swales or "wet-weather" ponds in open pine woods. It and *A. insolita* (Melsh.) are the

30.—Can. Ent., LV, 1923, 33.

31.—Ent. News, XXXVII, 1927, 144.

only species of the genus known from the eastern states. The latter is very scarce in Florida, my second specimen having been recently taken at Dunedin by sweeping a species of *Solanum* near the Gulf beach.

(16090). *Psylliodes convexior* Lec.—This species is at hand from Dunedin and Caxambus. It was recorded from "Florida" by Horn in his "Haliticini of Boreal America," but Gainesville is the only previously recorded station. I cannot agree with Gentner³² that *P. elegans* Horn is a variety of *convexior*. In addition to the difference in color, the elytral intervals of *elegans* are distinctly wider, flatter and less finely rugose than in *convexior*.

(16161). *Coptocycla repudiata* Suffr.—This West Indian species has been recently taken at Dunedin in April by beating bunches of Spanish moss and sweeping tall grasses in tidewater marshes. Not before recorded from the western half of the State.

(16245). *Spermophagus eustrophoides* Schaeff.—This species, described³³ from Lake Worth, Fla., and not recorded elsewhere, was taken in numbers in March and April, 1927, by beating masses of dead leaves and other vegetation along the pathways of the dense hammock on Paradise Key, Royal Palm Park.

THREE NEW SPECIES OF GLARESIS (COLEOPTERA).*

BY W. J. BROWN,
Ottawa, Ont.

The discovery of the forms described below increases greatly the known distribution of *Glareis* on the North American continent. In the following descriptions, the middle and hind tibiae have not been described in great detail for their characters are shown by the accompanying drawings; the drawings are made in the same scale.

***Glareis knausi* n. sp.**

Robust; slightly wider posteriorly; body subopaque, rufo-testaceous throughout, the setae paler. Head with small, sparse, granuliform tubercles, the basal fourth smooth, the setae very sparse and small, almost squarely truncate in front, a small but distinct fovea on each side near eye. Mandibles distinctly sinuate externally.

Pronotum two-thirds as long as wide; slightly narrower in front; the sides almost straight, not crenate. Median line broadly and rather deeply impressed; subapical impression reduced to a deep, transverse fovea on each side; a feebly impressed fovea near each lateral margin extending from hind angle past middle; a small, deeper fovea near hind margin on each side, and a feeble fovea on each side of median impression just before middle. Pronotal surface with sparse setae; sculptured throughout except in the impressions with short, shining, longitudinal carinules.

Elytra at base slightly wider than pronotum; gradually widened posteriorly; strongly costate, each costa with a row of setae which arise from very fine punctures; intervals each with a single row of close, very coarse punctures.

32.—Can. Ent., LVIII, 1926, 154.

33.—Journ. N. Y. Ent. Soc., XII, 1904, 228.

*—Contribution from the Division of Systemic Entomology, Entomological Branch, Dept. of Agric., Ottawa.