

ON THE SYNONYMY OF THE PEA MOTH

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In the Canadian Entomologist for November 1920 (pp. 257—258) I stated that our American pea moth, which had been known for many years as *Laspeyresia nigricana* Stephens was different from the European species of that name and proposed for it the name *novimundi*. In this I was in error and I regret exceedingly that I was led into making an entirely unnecessary synonym for a well known economic species. The American and European pea moths are identical and the name *novimundi* Heinrich must fall as a synonym of *nigricana* Stephens. I find upon revising the Laspeyresiinae that our series of European specimens of *nigricana* in the National Museum are mixed and represent two distinct but very close species: *nebritana* Treitschke and *nigricana* Stephens (*nebritana* Zeller, not Treitschke) both under the name *nebritana* Treitschke. Unfortunately the specimen I selected for genital study and the harpe of which I figured (fig. 25 p. 258, Can. Ent., 1920) was one of the true *nebritana*. Genitalia of other males from the series agree with those I figured for *novimundi*. The two species (*nebritana* Treitschke and *nigricana* Stephens) have been kept separate in European lists but have been more or less confused. In fact Spuler intimates that they may be synonymous. Both are pea moths. Their genitalia however show them to be quite distinct.

The figures given in my previous article (and which by the way are printed upside down) represent: fig. 24, *Laspeyresia nigricana* Stephens (*novimundi* Heinrich) and fig. 25, *L. nebritana* Treitschke (*nigricana* Heinrich, not Stephens.)

NOTES ON THE COLEOPTERA OF SOUTHERN FLORIDA WITH
DESCRIPTIONS OF NEW SPECIES

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My last season's collecting in Florida began on November 18th, 1921, the day after I reached my winter home at Dunedin, and continued until April 14th, 1922, the day before I started on my spring migration northward. There was, however, an interim between December 20th and February 15th, when but little collecting was done, as the coleoptera were then mainly dormant and hibernating beneath the most available cover.

On March 19th I started on a twelve days' collecting trip to the Lake Okechobee region, making my headquarters at first at Moore Haven, a town of about fifteen hundred population located on the former southwestern shore of the lake, but now twelve miles inland and connected with it by a dredged canal along the former outlet and source of the Caloosahatchie River. The region for miles around Moore Haven is a flat muck prairie, the former bed of the lake, almost devoid of shrubs and trees, so that no beating could be done. By sweeping herbage and using a water net in the canal and some tributary ditches, I succeeded in securing a good number of species, mostly aquatic or semiaquatic in habit. On March 23, I left with a friend on a small freight boat which he was running between Moore Haven and various points around the southern half of the lake. We were gone four days, living on the boat, and I was able to collect, sometimes several hours at a time, while he was discharging and taking on freight.

When I first saw Lake Okeechobee in 1911, and again in 1913, its shores were practically uninhabited and almost unmarred by man. Land about the lake could then be bought for \$5.00 or less per acre. Close to the water it was covered with shrubs and vines growing so densely that there was scarcely a place where I could use a sweep-net to advantage.¹ Now there are four towns of three hundred to one thousand inhabitants each, around this portion of the lake, and the shores, where not too marshy, are one almost continuous settlement. Little if any of the land can now be purchased for less than \$300 per acre. The vegetation has been so cleared away that only at two stopping points was I able to do any beating, but had to collect by sweeping in truck patches and along roadsides, or by searching beneath debris along the lake beaches. For that reason I got few species that I had not taken before, but quite a number which were desirable as additions or duplicates.

Returning to Moore Haven on the evening of March 26th, I left the next morning for Palmdale, a station near Fish-eating Creek, where I was able to do some fairly remunerative beating for a half day; then taking the evening train north some forty miles, I stopped at Istokpoga, a station only, near the west shore of the large lake of that name. I had been here for several days in the spring of 1913, and found conditions but little changed. A partially drained cypress swamp with numerous shrubs growing about its margins and some near-by meadows furnished both excellent beating and sweeping grounds, and I had here the most successful and pleasant two days' collecting of the trip. At Lake Wales, in one of the most beautiful citrus-growing regions of South Florida, I was able to stop a day, but rain prevented work in the afternoon, coming on just after I had taken my first and only specimen of the new *Leptotrachelus* described below. Leaving there by flivver at 3 p.m., a drive of ninety or more miles to the northwest, via Lakeland and Tampa, put me in to Dunedin at about 8 o'clock in the evening of March 31st.

In the pages which follow I have included notes on the distribution or habits of a number of Floridian species sent me by other collectors or taken by me in previous years, in order that our knowledge of the beetle fauna of the State may gradually be made more definite as to local distribution. Many of the older Coleopterists, including both Leconte and Horn, were content to put "Fla." or "Florida" after their descriptions, forgetting that the State is approximately 400 miles long, 360 miles wide across its northern border, and contains an area of nearly 60,000 square miles. Representatives of three distinct faunas, the Austroriparian, Subtropical and Tropical, live within its bounds, and the time has come when more definite and accurate distribution notes, than those furnished by the mere name of the State, are in demand.

Cicindela dorsalis saulcyi? Guer.—This handsome form, which has the elytra wholly white, was found April 11th, in small numbers, on the Gulf beach at the south end of Hog Island opposite Dunedin. I had not before taken it in the State, though Leng records it from several localities along the west coast, and states³

1—See Can. Ent. XLVI, 1914, 62.

2—In the notes and descriptions which follow, the nomenclature and sequence is that of Leng's Catalogue of the Coleoptera of America North of Mexico. The Rhynchophora taken will be treated elsewhere.

3—Bull. Amer. Mus. Nat. Hist., XXIV, 1915, 561.

that: "It appears to be confined to the shore of the Gulf of Mexico, extending westward to Texas."

Dyschirius filiformis Lec.—One specimen of this slender bodied little Carabid was taken February 26th from beneath a board on the margin of a brackish water pond. Its length is but 2.7 mm., though stated in the original description to be .14 inch (3.5 mm.). Recorded by Schwarz as rare at Ft. Capron and Haulover on the east coast, and by Leng from Punta Gorda.

***Clivina dissimilis* sp. nov.**

Elongate, convex, relatively robust. Head, thorax and under surface dark chestnut-brown; elytra reddish-brown, shining, with a broad vague angulate fuscous shading at base and another at middle; antennae dark brown; fore femora chestnut-brown, the legs otherwise reddish-brown. Head impunctate, front with a short, distinct median groove, each side of which is a minute carina; clypeus entire, rounded at sides. Thorax strongly pedunculate, its disk subquadrate, slightly longer than wide, smooth, the median impressed line entire; hind angles rounded, not dentate; lateral marginal line not reaching the base but bent inward and forming a pseudo-basal margin midway between the true base and the plane of the upper surface. Elytra conjointly a little narrower than thorax, disk striate and punctate on basal half, both striae and punctures becoming faint or obsolete towards apex, third stria with two dorsal punctures. Middle tibiae without subapical spur. Intermediate anal setae-bearing punctures approximate. Length 4.7 mm.

Described from a single example taken at Dunedin, December 1st, from beneath a board in the damp sand of the bay beach. Evidently a subarctic species belonging to the *bipustulata* group of Fall.⁴ Resembles superficially in color and size *rubricunda* Lec., but easily distinguished by the longer thorax, with unarmed hind angles and pseudo-basal margin.

***Leptotrachelus depressus* sp. nov.**

Elongate, slender, depressed. Pale dull yellow throughout except the elytra, on which there is a narrow sutural piceous stripe beginning about basal fourth and of nearly equal width to apical fourth whence it gradually widens to apex. Head smaller and less convex than in *dorsalis*, behind the eyes distinctly shorter with sides more rounded than there. Antennae with joints 5—II pale brown, all except the basal one pubescent. Thorax subfusiform, widest at middle, the sides very broadly curved, feebly sinuate near base; disk with a fine median impressed line, smooth except in a vague curved impression each side of basal third, where there are a few shallow punctures; margins with a single median bristle-bearing puncture. Elytra elongate-oval, strongly depressed, very feebly striate, the striae with fine, very slightly impressed punctures, these obsolete near tip; intervals flat, the second with two setae-bearing punctures. Length 6 mm.

Lake Wales, Fla., March 31st; a single male taken from between the leaves and stems of a tall saw-grass growing in shallow water along the margin of a lake. Others might have been found but a heavy shower prevented. Very different from *dorsalis* in color, shape of head and thorax, and in the strongly depressed feebly striate elytra. The disk of elytra, viewed from above, appears to be feebly concave in the common area between the fifth stria of each side.

4—Ent. News, XXXIII, 1922, 164.

Thalpius pygmaeus Dej.—One specimen was taken from beneath debris near the water of Lake Okeechobee at both Pahoka and Canal Point and a third at Moore Haven. From the State it has been heretofore recorded only from single specimens taken at Ft. Capron and Enterprise.

Anatrichis minuta (Dej.)—This species, usually regarded as scarce, was taken in numbers from beneath debris at all points visited on Lake Okeechobee, and also along the canal at Moore Haven. It occurs just above high water line in dry, sandy spots. Next to *Oodes duodecimstriatus* Chev. it was the most common Carabid found about the lake.

Stenolophus conjunctus (Say).—This widely distributed little Carabid appears to vary much in hue. Several specimens having the upper surface wholly shining black, but not apparently otherwise differing from the common form, were taken in April from beneath debris on the bay beach at Dunedin.

Agonoderus pallipes (Fabr.)—Two specimens of this common northern form were taken at Moore Haven from beneath shore-line debris. Not before known from Florida, though its near relative, *A. infuscatus* Dej., is common in the State.

Omophron labiatum (Fabr.)—This, the only member of the genus known from Florida, is distributed throughout the State. I mention it here only to record its abundance along the canal at Moore Haven, where it was found by scores buried in the narrow margin of damp sand along the edge of the water. By scraping aside with a trowel a half inch or more of the sand over a small area, the backs of a half a dozen or so of the beetles would be exposed. If not too much disturbed by the scraping they would remain quiescent, but when touched would hurry away to the nearest shelter or attempt to burrow deeply into the protecting sand.

Pachydrus princeps (Blatch.)—The third known specimen was taken February 22nd from amongst some decaying water weeds in the edge of Jerry Lake, three miles east of Dunedin. The type was from Lake Okeechobee near Pahoka and the second specimen from Ft. Myers.

Matus bicarinatus (Say).—A single specimen was taken from beneath beach debris at Pahoka. It is the third I have from the State, where it appears to be very scarce.

Cercyon variegatum Sharp.—This small Hydrophilid was taken in numbers at Palmdale and Istokopoga, March 28—30, from beneath cow dung in low, moist woods. Others are at hand from Dunedin, taken from beneath the same substance in February and March.

***Cercyon testaceum* sp. nov.**

Oblong-oval, subconvex. Color in great part reddish-brown, shining; the elytra each with an area beginning on margin at basal third and widening gradually and obliquely backward to meet and cover apical fourth, pale brownish-yellow; antennae reddish-brown, the club piceous. Head broader between the eyes than long, finely and closely punctate. Thorax twice as broad as long, sides broadly curved from base to apex, the margin reaching hind angle only, disk finely, evenly and densely punctate. Elytra finely striate, the striae minutely and closely punctate; intervals slightly convex, the eighth and tenth very narrow and uniseriately punctate, the others wider, minutely closely punctate. Under sur-

face and legs smooth, concolorous, the meso- and metasternal areas finely and sparsely punctate, the former narrowly elliptical, the latter subhexagonal, without lateral prolongations. Length 2.5—2.8 mm.

Sarasota, Ft. Myers and Pahoka, Fla., February 14—March 25. One specimen taken at each place from decaying vegetation on the edges of fresh water ponds or lakes. The Sarasota specimen and type is the one formerly recorded by me⁵ as *C. variegatum* Sharp, but the taking since of two additional examples and of numerous specimens of *variegatum* show the latter to be shorter and more broadly oval, distinctly more convex, more sparsely punctate and with head and thorax wholly or in part piceous. The colors of the elytra in *testaceum* are in arrangement and extent like those of the common *C. praetextatum* (Say), the reddish-brown corresponding to the black and the paler yellow to the yellow of that form. In *praetextatum*, however, the eighth and tenth intervals are not narrowed and have two or more rows of punctures. This is the only wholly pale species of *Cercyon* known from the eastern United States, and belongs under the No. 11 of Horn's key.⁶

Ptenidium ulkei Matth.—A form which agrees in all essential characters with the description of this minute species occurs frequently beneath cover on the bay beach at Dunedin throughout the winter. Schwarz records⁷ a *Ptenidium atomaroides* Mots. as "Common in salt marsh on the eastern coast" of Florida. Leng, in his Catalogue, includes this with a question mark. From some source I have a note that the species so listed by Schwarz is *ulkei*, which was described from the District of Columbia.

Xestipyge (Paromalus) conjunctum (Say).—A specimen of this small Histerid was taken at Dunedin, February 26th, from a pile of decaying unhulled rice, and another, March 14th, from beneath the skeleton of a horse. Definitely known from the State only from Fernandina.

Saprinus sphaeroides Lec.—A specimen of this very shining bronzed species was taken at Dunedin from beneath cover along the bay front in February, and others are at hand from Little River. They are smaller than those taken in Indiana along the beach of Lake Michigan, but show no structural differences. Recorded from Florida only from Enterprise.

Hydnocera pallipennis Say.—A single specimen was taken at Dunedin, April 8th, while sweeping ferns in Skinner's Hammock. Not before recorded from Florida, though known from Canada to Alabama.

Isohydnocera (Hydnocera) aegra (Newn.)—A rather common species about Dunedin, where it occurs in winter and spring on the tall dead grasses about the margins of ponds. Taken also at Lake Wales.

Tetraonyx quadrimaculata (Fab.)—One specimen taken at Gainesville and sent me by Prof. Watson. Known hitherto in the State only from Crescent City, where Schwarz (Ms.) found it "rare and feeding on *Centrosema virginianum* Benth., a wild large flowering pea."

Nemognatha punctulata Lec.—Also taken at Gainesville by Prof. Watson. The types of Leconte were from Georgia and it has not since been recorded from elsewhere.

5—Bull. Amer. Mus. Nat. Hist., XLI, 1919, 322.

6—Trans. Amer. Ent. Soc., XVII, 1890, 290.

7—Proc. Amer. Phil. Soc., XVII, 1878, 439.

Mecynotarsus elegans Lec.—This handsome little Anthicid was not known from the west coast until discovered by Mr. Fall, who took a half dozen or so, April 3rd, on the bay beach just south of my residence at Dunedin. After his departure I found them quite plentiful beneath weeds and boards on the dry sand above high water mark. When uncovered they remain quiet for some time, and being so small, with hues blending perfectly with that of the sand, they are invisible. It is only by lying flat on the sand and watching for motion that they can be seen. Once started they run very rapidly towards the nearest cover. Schwarz records it as "common on the ocean beach (of the east coast) in May and June."

Anthicus (Acanthinus) trifasciatus Fabr.—Several specimens of this coarsely sculptured West Indian species were obtained about Dunedin during the winter. They were taken while beating a pile of the dead leaves of cabbage palmetto, and from beneath cover along the bay front. Known from the State heretofore only from Cape Sable and Key West.

Sericus silaceus (Say).—A single individual was swept, March 27th, from the foliage of the moonvine near Moore Haven. Known heretofore in the State only from St. Augustine and Haulover on the east coast.

Agrius lateralis (Say).—While beating bunches of Spanish moss in a partially drained cypress swamp at Istokpoga I secured about a dozen examples of this large and handsome Agrilid. The only record for the State is that of Frost⁸ from St. Augustine, April 21st, 1919. Its known range extends from Maine to New Mexico.

Brachys aeruginosa Gory.—My first Floridian specimen of this little Buprestid was also obtained with the *Agrius* above mentioned. It has been taken in the State only at Jacksonville.

Ora troberti (Guer.)—Two examples of this prettily colored species were recently received from Chokoloskee. It is a Mexican form, recorded from Texas and taken by Schwarz (Ms.) at Crescent City, Fla., though his specimens may be the *O. texana* Champ. which Horn erroneously referred⁹ to *troberti*. *O. texana* occurs sparingly about Dunedin on marsh golden-rod and at porch light.

Scirtes orbiculatus (Fabr.)—I can find no record of this well marked form from Florida. Specimens are at hand from Dunedin, Lakeland, Istokpoga and Palmdale. It occurs on foliage in the close vicinity of water.

Cryptorhopalum ruficorne Lec.—This species is at hand from Ormond, Gainesville, Dunedin, Lake Wales and Palmdale, Fla. Schwarz recorded it as rare at New Smyrna and Enterprise. It is taken in spring by sweeping huckleberry and other low shrubs.

Cryptorhopalum picicorne Lec.—This is a frequent Dermestid in Florida, having been taken by me at seven different stations, but it does not appear in any of the lists nor in the Leng Catalogue from there. It occurs throughout the winter either beneath cover or on the flowers of various plants.

Tenebroides corticalis (Melsh.)—Evidently a scarce species in Florida, as it is recorded only from Lake Worth¹⁰ by Hamilton. My first and only speci-

8—Can. Ent. 1920, 249.

9—Trans. Amer. Ent. Soc., VII, 102.

10—Can. Ent., XXVI, 1894, 252.

men from the State was taken at Dunedin, March 14th, by beating a bunch of Spanish moss.

Tomarus pulchellus Lec.—A common northern form hitherto known in Florida only from St. Augustine. A specimen was taken at Moore Haven, March 29th, and another at Dunedin, April 8; the former by sweeping, the latter beneath weeds on the sand of the bay front. Its congener, *T. hirtellus* Sz., is frequent beneath dead leaves at Dunedin throughout the winter.

Synchita dentata Horn.—The unique type, described from Tampa, Fla., appears to be the only specimen so far recorded.¹¹ A single individual was taken March 14th at Everglade while beating. It differs from *S. granulata*, which is frequent in Florida, in being smaller, darker, with head and thorax much more coarsely granulate. My specimen has the sides of thorax 10-dentate, not 8-dentate as stated by Horn.

Eufallia seminiveus (Mots.)—This minute and prettily marked Lathridid, formerly known as *Belonia unicostata* (Bel.), was taken in numbers in February and April from beneath an empty fertilizer sack lying in a barnyard near Dunedin. It is known from Cuba and Mexico, and has been recorded from Crescent City, Fla., by Fall.¹² They crawl very slowly when exposed to the light, and being only 1.3 mm. in length, are almost invisible. The color is rufo-testaceous, the head and thorax, in fresh specimens, covered with a white, wax-like secretion, whence the specific name.

Scymnus oculatus Blatch.—The second known specimen of this minute Coccinellid was taken March 24th while beating custard apple etc., near the lock of the Hillsboro Canal a mile east of Lake Okeechobee. It differs from the type only in having the common pale central spot of elytra much larger, covering the greater part of the disk but surrounded on all sides by a black margin. The unique type¹³ was from Dunedin.

Leichenium variegatum Kust.—The first Florida specimen of this handsome little Tenebriod was discovered April 4th by Fall on the bay beach at Dunedin, and I afterward found three additional examples. They occurred with *Mecynotarsus elegans* beneath creeping weeds on the dry sand above high water mark, and remained motionless when uncovered. It was described from Madagascar and has been taken in this country only at Mobile, Alabama, by Loding.

Cis lodingi Dury.—A single example is at hand from Ormond, Fla., April 15th. Dury's types were from Mobile, Alabama, and it has not been recorded elsewhere.

Cis impressa Casey.—One male was taken at porch light at Dunedin, June 10 and identified for me by Dury. The first record for the State.

Orthocis pulcher Kraus.—Two specimens were obtained at Lakeland, February 16th, by beating dead branches of oak. Described¹⁴ from Key West and not hitherto known elsewhere.

Euphoria limbalis Fall.¹⁵—This is the species listed by Schwarz¹⁶ as *E. fulgida* var. It was taken by him at Enterprise, Biscayne Bay and Buck Key.

11—Trans. Amer. Ent. Soc., XII, 1885, 139.

12—Trans. Amer. Ent. Soc., XXVI, 1899, 143.

13—Can. Ent., XLIX, 1917, 140.

14—Proc. Ent. Soc. Wash., X, 1908, 78.

15—Can. Ent., XXXVII, 1905, 273.

16—Proc. Amer. Phil. Soc., XVII, 1878, 451.

I recently received a specimen from Chokoloskee. It probably replaces *fulgida* throughout the State.

Cryptocephalus albicans Hald.—Schæffer (Ms.) regards this as a valid species, and reports a specimen in his collection from Gulfport, Fla. I have recently received one for naming from W. T. Davis, taken May 5th at Lakeland. Neither *albicans* nor *gibbicollis* Hald., of which Leng places *albicans* a synonym, have been hitherto recorded definitely from Florida.

(to be continued.)

A NEW GENUS AND SPECIES OF XYELIDAE (TENTHREDINOIDEA, HYMENOPTERA) FROM WESTERN CANADA.*

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Neoxyela new genus

Possesses all the characteristics of *Xyela* Dalman, but there are only two marginal cells (free part of R2 wanting) and the ovipositor is almost as long as the head, thorax and abdomen combined, and is curved downwards. Genotype *N. alberta*.

Neoxyela alberta new species

♀. Length 3 mm.; ovipositor 2.75 mm. Antennal furrows obsolete above, front broadly depressed on the middle line between the antennal furrows; anterior ocellus sunken, the posterior ones bordered behind with deep depressions which extend interiorly to join the depression around the anterior one; a faint depression extending from the outside of the lateral ocelli to the vertex. Front finely scrobiculate, the swollen vertical area finely transversely rugose; the depressions and sides more polished. A well marked transverse depression between the antennæ; between which and the clypeal suture it is gently swollen; labrum short, broad, evenly rounded; clypeus carinate in the middle, its apex gently rounded; only a little broadly prominent in the middle. Face whitish yellowish, the supra-clypeal carina and the sutures piceous blackish; front piceous blackish, a moderately broad occipital stripe, curving towards the vertex above, whitish yellow. Antennae piceous, the third segment not quite as long as the following segments combined; the fourth slightly longer than the fifth, the apical segment a little swollen.

Thorax piceous black, the tegulæ, postcalar calli and pectus whitish yellow. Scutellum not with a median longitudinal depression.

Legs with the coxæ and femora piceous black, the bases of the femora, apices of the coxæ and the remainder of the legs piceous yellowish.

Wings dilutely yellowish, the stigma over twice as long as broad, second marginal cell nearly three times as long as the first.

Abdomen piceous, the venter with a yellowish tinge, ovipositor curved downwards, its basal four-fifths piceous yellowish, the apex black.

Holotype. ♀, Banff, Alberta, May 27, 1922, (C. B. D. Garrett); No. 520, in the Canadian National Collection, Ottawa.

Paratype. ♀, Banff, Alberta, June 5, 1922, (Garrett).

*—Contribution from the Division of Systematic Entomology, Entomological Branch, Department of Agriculture, Ottawa.