PSYCHE.

NOTES ON NEW ENGLAND ACRIDIDAE.—III. OEDIPODINAE.—VI.

BY ALBERT P. MORSE, WELLESLEY, MASS.

16. DISSOSTEIRA Scudd.

Dissosteira Scudder 1876. U. S. Geog. Surv. W. of 100th merid., Wheeler, ann. Rep't, 1876, appendix JJ, p. 291.

Saussure, while acknowledging the priority of *Spharagemon*, refers to *Dissosteira* the species here treated under the names of *Dissosteira*, *Spharagemon*, and *Scirtetica*. As genera are now recognized both *Dissosteira* and *Spharagemon* should receive generic rank, *Scirtetica* perhaps being excepted.

23. *Dissosteira carolina* Linn.

Locusta Carolina. Harris, 176.

Oedipoda carolina. Scudder, 468; Smith, — Me., 150, — Conn., 371; Thomas, 117.

Dissosteria carolina. Comstock, 104.

Dissosteira carolina. Saussure, 137; Fernald, 43; Morse, 105; Beutenmüller, 298.

Antenna: ♂, 9.5–11; ♀, 11.5–13. Hind fem.: ♂, 12.6–14.7; ♀, 15.5–20.5. Teg.: ♂, 28–33.5; ♀, 36–43. Body: ♂, 24–28; ♀, 33–42. Total length: ♂, 34.5–42; ♀, 43.5–53. mm.

Though quite variable in appearance this species is readily recognized by its

black wings with pale border. The border varies from dull white to yellowish buff. The most striking variation, however, is in the ground color of the body, which varies in examples from the same locality from light yellow to dark fuscous or even bright reddish brown. The tegmina are sometimes markedly trifasciate, sometimes evenly maculate or almost unspotted.

This is a very common and widely distributed species, and probably the best known of any of the group, owing to its conspicuous black wings and habit of frequenting roadsides. From the prevailing brown tints of its coloring it has in some localities received the name of "Quaker." In correlation with its large wing expanse its flight is powerful and erratic, and in hot August afternoons it may often be seen hovering motionless in the air or dancing up and down above a particular spot and stridulating, an act which is doubtless to be looked upon as a sort of courtship. It is an alert species, well able to take care of itself, and on warm days rather difficult to secure.

It appears early in July, — I have taken it on the 7th — and is common until late in the fall. It is found over the whole of New England with the

probable exception, as noted by Mr. Scudder, of the highest mountainous portions. I have examples from various parts of all of the New England States and from Martha's Vineyard, Penikese, and Cuttyhunk Ids.

17. SPHARAGEMON Scudd.

Spharagemon Scudder 1875. Proc. Boston soc. nat. hist., xvii, 467.

The treatment of the New England species of this genus in my two recent papers* is so full that a mere outline need be given here.

24. *Spharagemon collare scudderi* Morse. Figs. 24, 24a.

Oedipoda collaris. Scudder, Final Report Geol. Surv. Neb., 250 (1871).

Spharagemon aequale subsp. *scudderi* Morse, Proc. Boston soc. nat. hist., xxvi, 225 (1894).

Spharagemon collare subsp. *scudderi*. Morse, Psyche, vii, 297.

(See remarks under *S. aequale* in Psyche, vii, 293.)

Antenna: ♂, 11.5-12.5; ♀, 11-11.5; Hind fem.: ♂, 13-14; ♀, 14-16.5. Teg.: ♂, 23-24.5; ♀, 25.5-28.5. Body: ♂, 21-23; ♀, 27-29. Total length: ♂, 28.5-30.5; ♀, 32-35.5 mm.

A common but rather local species found from early in July till October; it occurs in open fields on dry uplands, preferring sandy soil. It is recorded from southern Maine, Vt., and various

points in Conn. and eastern Mass., including Martha's Vineyard and Nantucket Ids.

25. *Spharagemon saxatile* Morse. Figs. 25, 25a.

Spharagemon saxatile. Morse, Proc. Boston soc. nat. hist., xxvi, 229 (1894). Morse, 105;—also Psyche, vii, 294; Beutenmüller, 300.

Antenna: ♂, 12-14.5; ♀, 12-14. H. fem.: ♂, 11.5-14; ♀, 14-17. Teg.: ♂, 21.5-25.5; ♀, 25-31. Body: ♂, 20-24; ♀, 28-34. Total length: ♂, 27-32.5; ♀, 32-39 mm.

A handsome species, common from the latter part of July till October on the bare ledges of rocky hills in Mass. and Conn., and only occasionally found on sandy ground. In appearance and habits it resembles *Circotettix verruculatus*, with which it is sometimes found associated.

26. *Spharagemon bolli* Scudd. Figs. 26-26c.

Spharagemon bolli. Scudder, Proc. Boston soc. nat. hist., xvii, 469 (1875). Morse, 105, — Psyche, vii, 290;—Proc. Boston soc. nat. hist., xxvi, 227.

Spharagemon bollii. Beutenmüller, 300, Fernald, 43; Saussure, 140.

Spharagemon aequale. Comstock, 104.

Antenna: ♂, 10-13; ♀, 11-13. H. fem.: ♂, 12.5-13.5; ♀, 12.5-17. Teg.: ♂, 20.5-25; ♀, 23-28. Body: ♂, 20.5-22; ♀, 27.5-33. Total length: ♂, 26-30.5; ♀, 29-38 mm.

* Proc. Boston soc. nat. hist., xxvi, 220-240 (1894);—Psyche, vii, 287-299 (1895).

A common and widely distributed species found throughout New England from early July to late October in bushy pastures and barren grounds on dry upland soil.

18. SCIRTETICA SAUSS.

Scirtetica Saussure 1884. *Prodromus Oedipodiorum*, 135 (subg. nov.).

27. *Scirtetica marmorata* Harr.

Figs. 27-27 b.

Locusta marmorata. Harris, Report, p. 145, (1841); Treatise, 3rd ed., 179.

Oedipoda marmorata. Scudder, 472; Smith, Conn., 372; Thomas, 111.

Dissosteira marmorata. Saussure, 141; Fernald, 44.

Scirtettica marmorata. Morse, 105; Beutenmüller, 303.

Antenna: ♂, 10.5-12.5; ♀, 9.5-10.5. H. fem.: ♂, 9.3-10.7; ♀, 10.5-12.5. Teg.: ♂, 17-20; ♀, 20.5-22.5. Body: ♂, 15-19; ♀, 22-25. Total length: ♂, 21.5-25; ♀, 25-29 mm.

While usually recognizable by the markings of the tegmina this species is extremely variable in color and widely

so in markings even in the same locality, some examples being chiefly ashy, more or less maculate with black; others chiefly blackish fuscous, marked with white, yellowish, or reddish-brown; others again entirely bright rufous, sometimes of the tint of red hematite. It is one of the handsomest of our locusts, but next to *Hippiscus rugosus* is probably the least known of our Oedipodinae, since, though widely distributed, it is extremely local.

Like the species of the preceding genus it is a wide-awake and rather shy locust, best secured by marking down and cautiously approaching, capturing it with a swift sweep of the net as soon as within striking distance. Its stridulation and flight are very similar, perhaps indistinguishable, from those of *Spharagemon bolli*.

I have met with it in but three localities; in each of these it is common and is found on sandy barrens but scantily clothed with vegetation. My specimens were secured between the dates of Aug. 2 and Sept. 5 at Provincetown, Mass., West Chop, M. V., and North Haven, Ct.

NEW AND LITTLE-KNOWN COCCIDAE FROM FLORIDA.

I. DETERMINATIONS AND DESCRIPTIONS, INCLUDING A NEW GENUS.

BY T. D. A. COCKERELL, N. M. AGR. EXP. STA.

The Coccidae herein recorded were sent to me by Mr. A. L. Quaintance, who gives below the particulars as to their occurrence.

(1) *PSEUDOPHILIPPIA*, n. g. — A Lecaniine Coccid with, in the adult ♀, rudimentary legs and antennæ; secreting a profusion of cottony matter, which completely covers and hides it. Skin not chitinous. Apparently