Coleoptera are ventral, in Hymenoptera dorsal, and in Hemiptera both dorsal and ventral.

Not only has this method been found to answer every purpose (both as to utility, and beauty also—if neatly done) in connection with the preservation and study of material in Coleoptera, Hemiptera, and Hymenoptera, but it is a far more rapid method for the minute things than any other, and American workers have no time to waste. I would like to ask why this method cannot be used for Micro-diptera? I can see nothing to be gained by adhering to the old methods of pinning, that in which the cork and pith blocks are used requiring the expenditure of too great an amount of time. Up to a very recent date most dipterists have insisted that it was absolutely necessary to pin all Diptera, yet in no case at hand can I find a good reason given. On the contrary one of our best dipterists lately informed me that in future he wished the micros all mounted on slips.

I use the moderately thin shellac glue and have had no trouble with specimens falling off. On the other hand, specimens on the little pins in pith often come loose and swing about, standing at all angles and ruining the appearance of the collection. Not only is there a great saving of time in mounting on slips, but there is far less injury to the specimen than in pinning, and it is much more readily manipulated under the microscope. I have used this method in my own collection for some time and think myself justified in recommending it to American collectors, though it would undoubtedly horrify our patient and long-suffering European brethren. Many of us would be very glad to hear from the dipterists regarding this matter. However, before any definite opinion is rendered, specimens correctly mounted by this method should be carefully examined. I will gladly loan such specimens from my own collection to any one willing to pay postage on same.

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

BY ALBERT P. MORSE, WELLESLEY, MASS.


Chortophaga Saussure 1884. Pro-
dromus Oedipodorum, 43, 72.

18. Chortophaga viridifasciata DeG.

Figs. 18, 18a.

Acrydium viridifasciatum. De-
Geer, Memoires d. Ins., iii, 498, pl.
42, fig. 6 (1773).

Locusta (Tragocephala) viridifas-
ciata. Harris, 181.

Locusta (Tragocephala) infuscata. Harris, 182.

Locusta (Tragocephala) radiata. Harris, 183.

Tragocephala infuscata. Scudder, 461; Thomas, 102.

Tragocephala viridifasciata. Scud-
Chlorophaga viridifasciata. Saus- 
sure, 72; Fernald, 40; Comstock, 104; 
Morse, 105; Beutenmüller, 295.

Chimarocephala viridifasciata. 
Comstock, 98.

A very full bibliography of this 
species and interesting notes on vari- 
ation are given by Scudder in Proc. 
Boston soc. nat. hist., xvii, 481,— also 
Entom. notes, iv, 80. In coloration, 
dichromatism, form of head and char- 
acter of haunts it is intermediate between 
the present group and the Tryxalinae, 
with which it was formerly classed.

Antenna: ♂, 6-8; ♀, 6-8. H. fem.: 
♂, 10.5-12.5; ♀, 13-15.5. Teg.: 
♂, 16.8-20; ♀, 18.6-25. Body: ♂, 
17-20; ♀, 22-32. Total length: ♂, 
21.5-26; ♀, 26-33 mm.

This is our only species of the sub-
family which is markedly dichromatic, 
presenting two distinct types of colora-
tion, one entirely brown, the other 
largely green but with a small amount 
of brown upon the tegmina. These 
two forms are commonly distinguished 
by the names virginiana for the green 
and infuscata for the brown, applied 
to them by Fabricius and Harris respec-
tively. Specimens are occasionally 
found which can scarcely be referred 
properly to either form, the color being 
a mixture. Rarely, the green is wholly 
or largely replaced on the head, pronou-
tum and hind femora by pink or reddish 
purple.

This dichromatism is largely, but not 
entirely, characteristic of sex; most of 
the females being green, of the males 
brown. Thus of 300 specimens in my 
collection only about 18 per cent. of the 
females are brown and 10 per cent. of the 
males green. This proportion is smaller 
than that given by Scudder (Proc. B. 
S. N. H., loc. cit.) but I have no doubt 
that it is much higher than exists in 
nature, the common practice of the 
collector being, naturally, to preserve 
more examples of the scarcer form. 
Brown specimens vary much in intensity 
of hue according to age, those taken in 
late July and August being notoriously dark 
colored.

The hind tibiae differ much in color 
in different specimens, being variously 
tinted with brown, blue, pink or purple, 
without regard to sex.

Harris' name, radiata, proposed for 
examples with infuscated wing-veins 
and a slight difference in general colora-
tion, does not seem worthy of retention.

This is the most abundant of our 
springtime locusts. It is widely spread 
over the country but is found most 
plentifully in old, grassy, mowing fields 
and pastures, where it occurs both in 
the drier and moister portions and is 
seemingly equally at home in each.

It is readily secured by sweeping. 
While taking wing readily its flight is 
short, seldom over a rod or two, and it 
is not difficult to capture. The male 
flies in a circling course, and usually 
stridulates, producing a fine, sharp crep-
itation; the female flies farther and 
more directly.

The season in which this species may 
be found is the most protracted of any 
locust of the present group. It makes 
its appearance in April,— I have taken
it on the 24th, but it can probably be found earlier — is abundant in May and June, common in July, scarce in August, and has been taken in Sept., Oct., and Nov. in the adult state. Beutenmüller reports it as double-brooded at New York. The three specimens which I have taken at Wellesley on Nov. 8 and 17 are females in good condition and probably had gained their wings within a short time. The young may be readily found in the latter part of August and during the remainder of the season in the haunts of the adult. On mild sunny days in winter when the ground is bare they may be met with along the edges of woodlands on southward-facing slopes and in sheltered nooks. Here, in company with the young of *H. tuberculatus* and *A. sulphurea*, they may be found hopping gaily about on the approach of a stranger, pattering like hailstones on the dry leaves underfoot.

This locust is doubtless found throughout New England. Smith reports it from Norway, Me. I have specimens from various points in Vt., N. H., Mass., Conn., and from Martha's Vineyard and Penikese Isds. Among these are two worn males from Tuckerman's Ravine on Sept. 6.

13. **Encoptolophus** Scudd.

*Encoptolophus* Scudder 1875. Proc. Boston soc. nat. hist., xvii, 478. (Also in Ent. notes, iv, 77.)

10. **Encoptolophus sordidus** Burm.

Fig. 19.


*Locusta nebulosa*. Harris, 181.

*Encoptolophus sordidus*. Saussure, 77; Fernald, 41; Comstock, 103; Morse, 105; Beutenmüller, 296.

Antenna: \(\delta\), 8–9; \(\varphi\), 8–9. H. fem.: \(\delta\), 11–12; \(\varphi\), 14–15.5. Teg.: \(\delta\), 16–19.5; \(\varphi\), 20.5–24. Body: \(\delta\), 19–21.5; \(\varphi\), 24–35. Total length: \(\delta\), 21–28.5; \(\varphi\), 28–32.5 mm.

This species is easily recognized, not only from the venation of the tegmina, but from its superficial appearance. Though very plentiful in numbers its range of variation is relatively small even in color, the ground tint being either dull rusty, yellowish, or smoky brown.

It is a very common and widely distributed locust and is found most plentifully in the drier portions of old fields and pastures in late summer and fall, at which season the dull rattling of the countless numbers which rise before the feet of the stroller on a sunny day is almost continual. Its flight is but short, seldom more than a rod or two in length. Owing to its abundance it can readily be obtained in numbers by sweeping.

I have taken it on various dates from Aug. 9 to Nov. 17. It is doubtless found throughout New England; I have examples from Fryeburg and Deering, Me.; Hanover, (Weed), and Kingston, (S. W. Denton), N. H.; Brattleboro, Vt. (Mrs. J. B. Powers); Belmont (Maynard), Adams, Wellesley and vicinity, Mass.; Canaan, Greenwich, So. Kent, New Haven, Stamford, and Thompson, Ct.
Submit your manuscripts at http://www.hindawi.com