ON SOME COCCINELLIDAE (COLEOPTERA) FROM NEWFOUNDLAND AND NOVA SCOTIA.

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In 1949 and 1951, Dr. Carl H. Lindroth, of the University of Lund, Sweden, and party made extensive collections of insects in Newfoundland, with some attention paid to Nova Scotia and Miguelon. The writer has been privileged to examine the lady-beetles collected by the members of the two expeditions, which were made possible by grants from the Arctic Institute of North America and the University of Helsinki, Finland. A total of 348 specimens. representing 19 species, one of which appears to be new to science, was taken. The first set of specimens is deposited in the Helsinki University museum, the second (including the unique type of the new species) in the Canadian National Collection. Other specimens are in the collections of the United States National Museum, the Museum of Comparative Zoology and the writer. A list of the species taken, with localities, dates, collector's initials and station numbers, is given at the end of this paper. The collectors were C. H. Lindroth and E. Palmen. The following species seem worthy of special comment.

Coccinella undecimpunctata L. Known from various stations along the Atlantic coast from Massachusetts northward. At this time it seems best to correct the record of this species from Alaska. Dobzhansky, in his revision of North American Coccinella¹ reported two specimens from Alaska as belonging doubtfully to this species. Dissection of one of them, a male, showed them to be C. difficilis Crotch. Therefore, at present, the known distribution of C. undecimpunctata L. in North America is along the Atlantic coast from Massachusetts to Newfoundland and the distribution of C. difficilis Cr. is from Colorado, Utah and Nevada north to a point 60-75 miles north of Rampart House, Alaska.

¹U.S. Nat. Mus., Proc., Vol. 80, Art. 4, p. 28, 1931.

Microweisea misella (Leconte). A single specimen, which I refer to this species, differs from the type in that the punctation of the elytra seems to be slightly coarser. This apparent difference could be due to the difference in age of the specimens, the Newfoundland specimen being fresher and cleaner than the Leconte type. Otherwise, no differences could be noted.

Hyperaspis novascotiae n. sp.

A single specimen from Nova Scotia appears to be undescribed and is characterized as follows.—

Female: form very broadly oval, similar to that of H. lugubris (Rand.), piceous black, with head, lateral margins of pronotum narrowly, and four spots on each elytron. vellowish brown. Head and pronotum finely and moderately densely punctured, very finely alutaceous between punctures, pronotum finely margined across base. Scutellum extremely finely and sparsely punctured. Elytra much more coarsely punctured than pronotum except on extreme flanks where the punctures are fine and sparse. Each elytron decorated with four spots — a triangular spot on the humerus which fails narrowly to reach the base but which reaches the marginal bead; a lateral spot, almost semicircular, at the beginning of the posterior half of the length of the elytron, its outer margin following the marginal bead; an apical spot, slightly larger than the lateral spot and evenly elliptical, failing to reach the apical angle by a little less than its long diameter but following the marginal bead; a discal spot, similar in size to the lateral spot and located slightly apicad of the lateral spot, so that the lateral and discal spots together form a row across the elytra which is slightly curved with the convexity toward the apices. Under parts dark except epipleura of thorax and elytra; anterior and middle legs. posterior coxae, tips of femora, tibiae and tarsi pale. Metacoxal arcs on first visible sternite semicircular, nearly touching posterior margin of sternite. Metasternum and abdominal sternites coarsely punctured laterally, finely and sparsely punctured along median line. Dimensions: length 2.3 mm., width 1.8 mm.

Male: unknown.

Type locality and known distribution: Nova Scotia, Bridgewater, Crescent Beach. Type and only specimen collected May 19, 1951 by C. H. Lindroth (CHL 179). Deposited in the Canadian National Collection.

At first glance this species appears to be *H. undulata* (Say) with the discal spots displaced apicad on the elytra. However, its form and other characteristics seem to ally it with *H. lugubris* (Rand.).

List of species, with localities.

Hippodamia tredecimpunctata tibialis (Say). 119 specimens.

Northeast. New foundland:Springdale, 20-21.VI.51 (CHL 254): Twillinggate, 5 and 8.VII.51 (CHL 276,280). East. Gambo, 25-26.VIII.49 (CHL 160,161,163); Terra Nova. 28.VII.51 (CHL 328). South. Rencontre West. 17-20.VI.49 (CHL 36); Terrenceville, 13-14.VIII.51 (CHL 357). West. Deer Lake, 18.VIII.49 (CHL 148); Deer Lake, 1-2.VI.51 (CHL 212,213,215); South Branch, 4.VII. 49 (EP 109); Cooks Bk., Curling, 15.VIII.49 (EP 242). Northwest. St. Pauls, 10.VIII.49 (CHL 134); Cow Head, 7.VIII.49 (CHL 130); Cow Head, 9.VIII.49 (EP 216); Daniels Harbour, 23.VII.49 (EP 169). Central. Gander, 2.VI.49 (EP 3); Buchans Junction, 15.VI.51 (CHL 240); Badger, 22-25.VI.51 (CHL 256,257,258,259); Grand Falls, 26.VII.51 (CHL 324).

Nova Scotia: Baddeck, 24.V.51 (CHL 190); North Sydney, 27.V.51 (CHL 200).

Anisosticta bitriangularis (Say). 21 specimens.

Nova Scotia: Halifax, 18.V.51 (CHL 177); Halifax, Waverley, 21.V.51 (CHL 184); Baddeck, 24.V.51 (CHL 189,190); Cheticamp, 25.V.51 (CHL 191); North Sydney, 27.V.51 (CHL 200,201).

Coccinella transversoguttata Fald. 82 specimens.

Newfoundland: Northeast. Hampden, 12.VII.49, 24.VII. 51 (CHL 87,316,317); Springdale, 20-21.VI.51 (CHL 254); Fogo, Tilting, 30.VI.51 (CHL 268). East. Terra Nova, 26-28.VII.51 (CHL 327,328); Port Rexton, 30-31.VII.51 (CHL 332,333). Southeast. Holyrood, 10.VI.49 (CHL 23). South. Rencontre West, 15-20.VI.49 (CHL 32,36,40); St. Albans, 26.VI.49 (CHL 51); Garnish, 6.VIII.51 (CHL

349); Terrenceville, 13-14.VIII.51 (CHL 356). West. Deer Lake, 2.VI.51, 25.VII.51 (CHL 215,320,321); Lomond, Bonne Bay, 14.VII.49 (EP 149). Northwest. St. John I., St. John Bay, 3.VIII.49 (EP 195). Central. Millertown Junction, 22.VIII.49 (CHL 152); Glenwood, 23.VIII.49 (CHL 158); Gander, 1.IX.49 (CHL 173, EP 307); Lake St. John, 27.VII.51 (CHL 325).

Nova Scotia: Halifax, 21.V.51 (CHL 183); Cape North, 26.V.51 (CHL 198); North Sydney, 27.V.51 (CHL 199). Miquelon. 8-10.VIII.51 (CHL 351).

Coccinella trifasciata L. 29 specimens.

Newfoundland: Northeast. Springdale, 20-21.VI.51 (CHL 252,253,254); Fogo, Tilting, 30.VI.51 (CHL 268); Norris Arm, 23.VIII.49 (EP 278). South. Rencontre West, 17-20.VI.49 (CHL 36). West. Stephenville Cross, 5-8.VII. 49 (CHL 69); Deer Lake, South Brook, 3.VI.51 (CHL 219). Central. Millertown Junction, 22.VIII.49 (CHL 152); Victoria Lake, 11-12.VI.51 (CHL 237); Buchan Junction, 15.VI.51 (CHL 240).

Nova Scotia: Halifax, 21.V.51 (CHL 183); Orangedale, 28.V.51 (CHL 202).

Coccinella undecimpunctata L. 39 specimens.

Newfoundland: Northeast. Fogo, Tilting, 30.VI.51 (CHL 269); Twillinggate, 5.VII.51 (CHL 276). South. Grand Bank, 3.VIII.51 (CHL 345). West. Piccadilly, Port au Port Peninsula, 7.VII.49 (EP 117). Northwest. Cow Head, 7-13.VIII.49 (CHL 128,135); St. Pauls, 10.VIII.49 (CHL 134).

Nova Scotia: Halifax, 18.V.51 (CHL 178). Miquelon. 8.VIII.51 (CHL 352).

Anisocalvia quattuordecimguttata (L.) 3 specimens.

Newfoundland: West. Deer Lake, 25.VII.51 (CHL 321); Deer Lake, South Brook, 3.VI.51 (CHL 217). Central. Glenwood, 23.VIII.49 (CHL 155).

Anisocalvia quattuordecimguttata duodecimmaculata (Gebl.) 4 specimens.

Newfoundland: Northeast. Fogo, Tilting, 30.VI.51 (CHL 268). West. Deer Lake, 30.V.51 (CHL 205); Deer Lake, 25.VII.51 (CHL 321).

Anatis ocellata (L.) 2 specimens.

Newfoundland: South. Port aux Basques, 1.VII.49 (CHL 61).

Nova Scotia: Bridgewater, Crescent Beach, 19.V.51 (CHL 179).

Adalia bipunctata (L.) 11 specimens.

Newfoundland: West. Cooks Bk., Curling, 15.VIII.49 (EP 242); Corner Brook, 15.VIII.49 (EP 247).

Nova Scotia: Halifax, 21.V.51 (CHL 183).

Adalia frigida (Schneider) 7 specimens.

Newfoundland: Northeast. Fogo, Tilting, 30.VI.51 (CHL 268). West. Stephensville Crossing, Harry's River, 5-6. VII.49 (CHL 70, EP 112); Steady Brook, Humber, 10. VII.49 (EP 136); Spruce Brook, 8-9.VII.49 (EP 125); Deer Lake, 31.V.51 (CHL 211).

Mulsantina hudsonica (Casey) 9 specimens.

Nova Scotia: Bridgewater, Crescent Beach, 19.V.51 (CHL 179).

Psyllobora vigintimaculata (Say) 10 specimens.

Newfoundland: West. Spruce Brook, 8-9.VII.49 (EP 125); Glenburnie, Bonne Bay, 19.VII.49 (EP 165). Microweisea misella (Lec.) 1 specimen.

Newfoundland: West. Deer Lake, 31.V.51 (CHL 210).

Hyperaspis undulata (Say) 1 specimen.

Nova Scotia: Orangedale, 28.V.51 (CHL 202).

Hyperaspis novascotiae n.sp. 1 specimen.

Nova Scotia: Bridgewater, Crescent Beach, 19.V.51 (CHL 179).

Hyperaspis moerens (Lec.) 1 specimen.

Newfoundland: Northwest. Cooks Harbour, 16.VII.49 (CHL 97).

Scymnus (Pullus) haemorrhous Lec. 2 specimens.

Newfoundland: Northeast. Twillinggate, 4-8.VII.51 (CHL 277).

Nova Scotia: Halifax, Sackville, 20.V.51 (CHL 181).

Scymnus (Nephus) ornatus Lec. 5 specimens.

Newfoundland: Northwest. Cooks Harbour, 16.VII.49 (CHL 96,97); St. Pauls, 10.VIII.49 (CHL 134).

Scymnus (Nephus) flavifrons (Melsh.) 1 specimen.

Newfoundland: Central. Gaff Topsail, 19-20.VIII.49 (CHL 149).