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CHECKLIST OF SASKATCHEWAN MOTHS: PART 15 - LUTE STRINGS, HOOKTIPS, URANIIDS AND GEOMETRIDS (1)

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Parts 1 to 14 of this Saskatchewan moths series were previously published in *Blue Jay* and I am planning to write up more families in the near future.

Unless otherwise indicated, all the species are represented in the Royal Saskatchewan Museum collection in Regina. The species are arranged according to the website of Jim Troubridge and Don Lafontaine, *Moths of Canada*, updated by Greg Pohl in 2006.⁶ This website also has color photographs of the moths. Other helpful

websites and references are listed at the end of the article. The common names that are used are mostly according to R. J. L. Jones and C. V. Covell, Jr.^{1,2} Recent name changes are according to Minet and Scoble, and Scoble. ^{4,5}

In this article, the size and early and late dates of Saskatchewan specimens is given. Some of the recorded food plants are mentioned. Abbreviations: s=south, n=north, w=west, e=east, CNC = Canadian National Collection in Ottawa.

Family DREPANID MOTHS (DREPANIDAE)

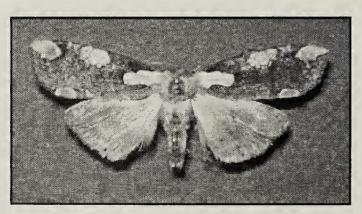
Subfamily LUTE STRINGS (THYRATIRINAE)

This is a small subfamily of mediumsized brown moths. The fore-wing discal spot is an enclosed circle. The larvae live in curled up leaves. Some larvae lack 'legs' near the end, so the last few segments stick up in the air. The Scribe is beautifully inscribed with black and white scroll work. The Peach Blossom Moth has beautiful pink blotches on the fore-wings.

The Scribe (Lettered Habrosyne), Habrosyne scripta (Gosse) - Central Sask., n. to Cumberland House and Meadow Lake Provincial Park; s. to Carlyle and Regina; also in Cypress Hills. (36-39 mm) (May 27-July 19). Reported on raspberry and other Rosaceae.

Tufted Thyatirid (Short-cloaked Lute String), Pseudothyatira cymatiphoroides (Gn.) - Central Sask., n. to Sturgeon Landing and Narrow Hills Provincial Park area; s. to Carlyle, Fort Qu'Appelle and Pike Lake; also at Saint Victor. (36-42mm) (June 17-July 25). Reported on birch.

Peach Blossom Moth (Dogwood Thyatirid), Euthyatira pudens (Gn.) - S. Sask, n. to Bjorkdale. (43-46mm) (May 5-27) Reported on dogwood.



Peach Blossom Moth / RSM collection, M. Janzen

Alberta Lute String, Ceranemota albertae Clarke - Fort Qu'Appelle. (34-36mm) (August 18-Sept. 4)

Subfamily HOOKTIP MOTHS (DREPANINAE)

These moths are medium-sized. Most species have the apex of the forewing extended out to a downward pointing tip. The body is rather slender, but short. The antennae of the males are usually pectinate (barbed). In Saskatchewan, we have four of the five species that are known to occur north of Mexico.

Arched Hooktip (Common Hooktip), Drepana arcuata Walker-N. Sask., s. to Greenbush and Meadow Lake Provincial Park. (28-32mm) (June 4-July 8). Reported on birch and alder.

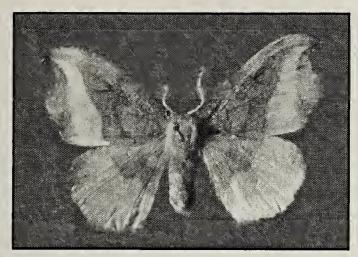
Two-lined Hooktip (Scalloped Hooktip), Drepana bilineata (Pack.)—Central Sask., n. to Bainbridge, La Ronge area and Clearwater River Provincial Park; s. to Kenosee Lake, Fort Qu'Appelle and Moose Jaw area. Also at Saint Victor. (28-38mm) (May 26-August 5) Reported on birch and bush cranberry.

Northern Eudeilinea, Eudeilinea herminiata (Gr.)-S. Sask., n. to Namew Lake, Emma Lake and Battleford Provincial Park. (23-27mm) (May 24-July 15)

Rose Hooktip, Oreta rosea (Wlk.)-Central Sask., n. to Otter Rapids; s. to Carlyle and Fort Qu'Appelle. (27-34mm) (July 5-19) Reported on birch and bush cranberry.

Family URANIID MOTHS, (URANIIDAE) (EPIPLEMIDAE)

This is mainly a tropical family. Our 2 Canadian species are small (wingspan about 20 mm), with notched



Rose Hooktip / RSM collection, M. Janzen

hind wings. The larvae feed in a web when young.

Maltese Cross (Gray Scoopwing), Callizia amorata Pack.—S. Sask., n. to Madge Lake and Pike Lake. (14-20mm) (June 1- July 18) Reported on honeysuckle.

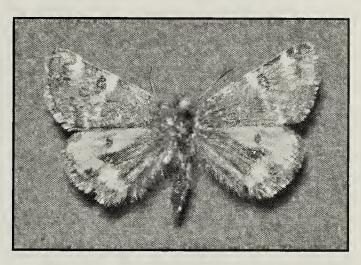
Family GEOMETRID MOTHS (GEOMETRIDAE)

This large family of moths is exceeded in numbers of species only by the Owlet Moths (Noctuidae). They are usually rather small with slender bodies and delicate wings. The caterpillars are often called 'measuring worms' or 'loopers' because they lack two or three pairs of legs in the middle. With legs only at the front end and the back end, they stretch themselves forward, grab hold with the front legs and pull themselves ahead, with the legless middle looped up. Some have imagined that when they crawl on you like this that they are measuring you for a new suit!

Subfamily ARCHIARINAE

These are hairy moths which are dayfliers early in the spring. In flight, the bright-coloured Infant is often mistaken for a butterfly. The Early Geometer is sometimes seen during a spring thaw when one might have a shovel in his hands instead of an insect net.

The Infant, Archiearis infans (Mosch.) (Brephos infans)—Central Sask., n. to Narrow Hills Provincial Park area; s. to Moose Mountain Provincial Park, Craven and Dundurn; also at Willowbunch and Saint Victor. (30-32mm) (April 7-May 10) Reported on birch.



The Infant / RSM collection, M. Janzen

The Early Geometer, Leucobrephos brephoides (Walker)—S. Sask., n. to Nipawin area and Candle Lake area. (25-30mm) (March 24 - May16) Reported on aspen and birch.

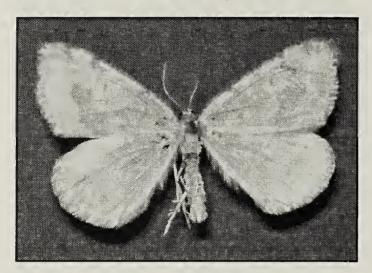
Subfamily ENNOMINAE

This is the largest subfamily of geometrid moths in Canada. It contains our largest geometrid moths (up to 48 mm in wingspan) as well as medium-sized ones. The males usually have a blister-like structure at the base of the fore-wings between the veins. In a few species, the females are wingless, or have greatly reduced wings.

Virgin Moth, Protitame virginalis (Hulst)—Throughout Sask. (20-26mm) (May 27-July 15) Reported on aspen and willow.

Brown-bordered Geometer, Eumacaria latiferrugata (Walker)—S. Sask., n. to Harlan. (23-25mm) (June 1- August 13) Reported on cherry. Lesser Maple Spanworm, Macaria pustularia (Gn.) (Itame pustularia)—Reported for south-central Sask.³ Reported on maples.

Gooseberry Spanworm, Macaria ribearia (Fitch) (Itame ribearia)—S. Sask., n. to Earl Grey and Lloydminster area. (26-29mm) (July 9-August 5) Reported on gooseberry and currant.



Gooseberry Spanworm / RSM collection, M. Janzen

Western Sulphur, Macaria occiduaria (Pack.) (Itame occiduaria)—S. Sask., n. to Cumberland House and Loon Lake. (25-29mm) (June 12-Oct. 26) Reported on saskatoon-berry and currant.

Northern Grey, Macaria andersoni (Swett.) (Itame andersoni)—N. Sask., s. to Nipawin, Two Forks River and Meadow Lake Provincial Park. (22-30mm) (June 29-Aug. 16) Reported on blueberry.

Spotted Sulphur, (Macaria sulphurea (Pack.) (Itame sulphurea)—S. Sask., n. to Nipawin and Meadow Lake Provincial Park. (24-27mm) (June 29-Sept.12) Reported on blueberry and bog myrtle.

Striped Ochre, Macaria brunneata (Thunberg) (Itame brunneata)—N. Sask., s. to Squaw Rapids and Meadow Lake Provincial Park; also at Moose Jaw and Cypress Hills. (22-

28mm) (July 5-August 15) Reported on aspen, buffalo-berry, blueberry and birch.

Birch Granite, Macaria anataria (Swett.) (Itame anataria)—Geikie River and Prince Albert. (24mm) (August 15) Reported on birch, shrubby cinquefoil and alder.

Russian Granite, Macaria Ioricaria (Evers.) (Itame Ioricaria)—Throughout Sask. (Males 25-28mm) (June 10-August 19) Reported on aspen and willow.

Speckled Granite, Macaria exauspicata (Wlk.) (Itame exauspicata)—S. Sask., n. to Pelican Narrows and Turtle Lake. (21-25mm) (June 30-July 27). Reported on willow and poplar.

Four-spotted Granite, Macaria coortaria, (Hulst) (Itame coortaria)—S. Sask., n. to Goodeve and Macklin area. (22-25mm) (June 20-July 27) Reported on chokecherry.

Short-lined Granite, Macaria bitactata (Wlk.) (Itame bitactata)—S. Sask., n. to Somme and Lloydminster area. (20-27mm) (July 11-August 28) Reported on alder and gooseberry.

Decorated Granite, Macaria decorata (Hulst) (Itame decorata)—Great Sand Hills, s. of Portreeve. New Sask. Record, collected by N. Page, July 24, 2005. (25-30mm) Reported on currant and gooseberry.

Black-banded Orange, Macaria trunctaria (Wlk.) (Epelis trunctaria)—N. Sask., s. to Spy Hill and Douglas Provincial Park; also in Cypress Hills. (25-30mm) (May 14-July 5) Reported on bearberry.

Common Angle, Macaria aemulataria Walker (Semiothisa aemulataria)—S. Sask., n. to Fort Qu'Appelle, Pike Lake area and Macklin area. (18-26mm) (May 19-August 15) Reported on maple.

White Peacock, Macaria ulsterata (Pears.) (Semiothisa ulsterata)—N. Sask., s. to Greenbush and Buffalo Narrows; also at Wood Mountain Park. (26-29mm) (June 15-July 15) Reported on birch and alder.

Bicolored Angle Macaria bicolorata (Fab.) (Semiothisa bicolorata)—Central Sask., n. to Key Lake area and mile 84 on Cluff Lake Road; s. to Roche Percee, Prince Albert and Meadow Lake Provincial Park; also in Cypress Hills. (23-27mm) (June 28-July 10) Reported on pine.

Larch Angle, Macaria sexmaculata (Pack.) (Semiothisa sexmaculata)-N. Sask., s. to Estevan area, Lumsden area and Saint Walburg. (20-23mm) (May 28-July 7) Reported on tamarack.

Pale-marked Angle, Macaria signaria dispuncta (Wlk.) (Semiothisa signaria dispuncta)—N. Sask., s. to Kamsack, Pleasantdale and Harlan; also in Cypress Hills. (22-29mm) (June 12-August 11) Reported on spruce, tamarack and pine.

Ferguson's Angle, Macaria marmorata (Fgn.) (Semiothisa banksianae)—N. Sask., s. to Greenbush, Fort a la Corne and Harlan; also in Cypress Hills. (27-29mm) (June 11-July 15) Reported on pine.

Submarmorate Angle, Macaria submarmorata Wlk. (Semiothisa submarmorata)—Glen Elder (e. of Swan Plain), Shoal Lake and Harlan. (20mm) (July 7). Recorded on tamarack.

Beautiful Angle, Marcaria oweni (Swett.) (Semiothisa oweni)—Central Sask., n. to La Ronge area, s. to Fort Qu'Appelle area and Harlan. Reported on tamarack, balsam fir, spruce and pine.

Seton's Granite, Digrammia setonana (McD.) (Semiothisa setonana)—Fort Esperance, Fort Qu'Appelle and Moose Jaw. (27-28mm) (July 21-August 3) Reported on juniper.

Shaded Granite, Digrammia curvata (Grote) (Semiothisa curvata)—Roche Percee, Rockglen and Grassland's Park (e. block and w. block). (24-25mm) (June 12-August 25) Reported on rabbitbush.

Striped Granite, Digrammia denticulata (Grt.) (Semiothisa denticulata)—Throughout Sask. (23-27mm) (May 14-August 25) Reported on chokecherry.

Colorado Granite, Digrammia delectata (Hulst) (Semiothisa delectata)—E. of Rosefield (Grasslands National Park, w. block) (Specimen is in CNC, Ottawa.) (May 28, 1986) Taken among Creeping Juniper.

California Granite, Digrammia californiaria (Pack.) (Semiothisa californiaria)—S.W. Sask., n. to Douglas Provincial Park and Winter; e. to Big Muddy Lake and Buffalo Pound Provincial Park. (23-26mm) (May 31-Sept 4)

Willow Granite, Digrammia decorata arubrescens (McD.) (Semiothisa arubrescens)-S. Sask., n. to Greenbush. (24-27mm) (June 16-21) Reported on willow.

Northern Granite, Digrammia rippertaria (Dup.) (Semiothisa hebetata) (Hulst)-Throughout Sask. (23-25mm) (June 8 - August 16) Reported on willow.

Dark-bordered Granite, Digrammia neptaria (Gn.) (Semiothisa neptaria)—S. Sask., n. to Otter Rapids. (21-28mm) (May 14-August 26) Reported on willow and poplar.

Honeystreak Digrammia mellistrigata (Grote) (Semiothisa mellistrigata)—S. Sask., n. to Creighton area. (22-25mm) (June 13-August 14). Reported on willow.

Splendid Granite, Digrammia subminiata (Pack.) (Semiothisa subminiata)—Saint Victor, Rockglen area and Grasslands National Park (w. block) (23-24mm) (June 26-August 10)

Arizona Dainty, Narraga fimetaria partitaria (Grt.)—Rockglen, Val Marie and Grasslands National Park (w. block). (16-18mm) (June18-July 1).

EXPECTED SPECIES

Brown Scoopwing, Calledapteryx dryopterata Grote-W. To Aweme, Manitoba. (July 12, 1920) J.B. Wallis.

One-spotted Granite, Macaria unipunctaria perplexa (McD.) (Semiothisa unipunctaria perplexa)— B.C. e. to Cypress Hills, Alberta.

Acknowledgements

I thank Greg Pohl of Edmonton, AB for checking this manuscript and giving helpful suggestions.

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http://www.cbif.gc.ca/spp_pages/misc_moths/phps/mothindex_e.php

Additional web sites and references of possible interest to readers:

http://mothphotographersgroup.msstate.edu/Plates.shtml

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"Yes, as a matter of fact, a pelican's 'bill can hold more than its belly can: about three gallons of liquid in the pouch of a white pelican, compared to a stomach capacity of a little more than a gallon."

- Scott Weidensaul, The Birder's Miscellany, p.10