

SOME FOOD PLANTS OF LEPIDOPTEROUS LARVAE

List 2.

By J. R. J. Llewellyn-Jones

Prior to reading this second list of Food Plants of Lepidopterous larvae I have a few remarks to offer arising from the last list re *Halisdota argentata* Pack.

Having reported as secondary hosts Sallow (*Salix hookeriana* Barratt) and Flowering Currant (*Ribes sanguineum* Pursh.) a further testing was made in the spring of 1933. The above hosts were again accepted and normal imagines resulted.

It would therefore seem established that immature larvae, when deprived of their primary hosts, i.e., species of fir, will feed up successfully on the substitutes above cited.

Larvae were placed on cherry (garden varieties) and apple. The former was accepted and normal imagines obtained but the larvae on apple died, apparently from malnutrition. This latter result also befell a larva fed on thimbleberry. Pear was refused.

From the above it would seem that although the leaves of certain fruit trees are sometimes eaten these insects are unlikely to become a menace to the fruit grower.

In compiling this list my thanks are due to all members of the Society particularly Mr. G. O. Day of Duncan who willingly placed his breeding notes at my disposal; Mr. E. P. Venables, who together with his own findings forwarded a list which first appeared in the Bulletin of the Society in 1908; also officers of the Division of Forest Insects, Department of Agriculture, Vernon, B.C.

May I solicit the further co-operation of entomologists in the Province to enable this list to be made as comprehensive as possible. I would suggest that records be sent either to me direct at "Arranmore" R.M.D. No. 1, Cobble Hill, B.C., or to the Secretary of the Society who will, I am certain, forward them to me.

I append a schedule of abbreviations used in the following list. The initials of those members furnishing the records are placed in brackets after the record concerned.

G.D. G. O. Day, Sahlatston, Duncan, B.C.

E.P.V. E. P. Venables, Vernon, B.C.

M.H.R. Max H. Ruhmann, Vernon, B.C.

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RHOPALOCERA

- Papilio rutulus-arizonensis* Edw. Willow, poplar, apple (J.C.)
Papilio eurymedon Luc. Ceanothus (J.C.) hawthorn (E.A.)
Parnassius smintheus D & Hew. Stonecrop (J.C.)
Neophasia menapia F & F. Pine (J.C.) Fir.
Ascia napi-venosa Scud. Cabbage (E.A.)
Ascia rapae L. Cabbage, turnip, etc. (E.A.)
Anthocharis sara Bdv., form *reakirtii* Edw. Arabis (R.V.H.)
Eurymus eurytheme Bdg. form *eriphyle* Edw. Clover (J.C.)
Eurymus occidentalis Scud. Clover (E.A.)
Eurymus interior Scud. In fir woods only (J.C.)
Danaus mennipe Hbn.
 plexipus Auct. (L. partim.)
 archippus Fabr. (Nec Cram.) Milkweeds.
Oeneis nevadensis F. & F. Lichens (E.A.)
 gigas Butl.
Brenthis myrina Cram. Violet (E.A.)
Euphydyas perdiccas Edw. Common plantain (*Plantago major* L.)
 cooperi Behr. Rib grass. (*P. lanceolata* L.)
Euphydryas taylori Edw. Valerianella (G.W.T.) Camassia (E.A.)
Phyciodes campestris Behr. Wild Aster (J.C.)
 pratensis Behr.
Polygonia satyrus Edw. Hop (R.V.H.) poplar (E.A.)
Polygonia faunus Edw. Willow (J.C.)
Polygonia zephyrus Edw. Rhododendron, currant (J.C.)
Polygonia oreas Edw. Alder (E.A.)
 a. *silenus* Edw.
Hamadryas californica Bdg. Ceanothus (J.C.)
Hamadryas antiopa L. Willow (J.C.) elm (R.V.H.) poplar (E.A.)
Cynthia atalanta L. Nettle (J.C.)
 Huntera Fabr.
Cynthia carye Hbn. Hollyhock (J.C.)
Basilarchia lorquini Bdv. Cottonwood, apple (J.C.) Willow (E.A.)
 Crataegus (W.D.)
 a. *burrisonii* Mayn. Willow (G.D.)
Basilarchia archippus Cram. Poplar, willow (E.A.)
Stymon californica Edw. Willow (E.A.)
Mitoura nelsoni Bdv. Strawberry (J.C.)
Erynnis icelus Scud. and Burg. Willow (J.C.)

HETEROCERA

- Smerinthus cerisyi* Kirby. Willows in general (J.R.J.)
 b. *ophthalmicus* Bdg.
- Sphinx galii* Rott. Willow Herb (*Epilobium angustifolium* L.)
 a. *intermedia* Kirby.
- Sphinx lineata* Fabr. *Fuchsia riccartoni* (hardy var. Vine Outdoor grape var.) (J.R.J.)
- Platysamia euryalus* Bdv. Willows, june-berry (G.D.)
 a. *kasloensis* Ckll.
- Telea polyphemus* Cram. Apple, alder, willows, Flowering currant (*Ribes sanguineum* Pursh) (J.R.J.)
- Halisidota argentata* Pack. Douglas fir, Western hemlock, Norway spruce, *Pinus Contorta* (W.D.) will also eat cherry (garden vars.) possibly thimbleberry (*Rubus nutkanus* Moc.) (J.R.J.)
- Leptarctia californiae* Wlk. Chickweed, common plantain (*P. major* L.) will eat oak, willows, dandelion (G.D.) Blackberry (W.D.)
- Diacrisia pteridis* Hy. Edw.
danbyi Neum. Common plantain (*P. major* L.)
 a. *rubra* Neum. (G.D.)
- Apantesis ornata* Pack. Lettuce, knotgrass. Have been known to nibble at common plantain (*P. major* L.) (G.D.) dandelion and willow.
- Agrotis plebia* Sm. Dandelion (G.D.)
- Lampra sambo* Sm. Wild strawberry (G.D.)
- Polia adjuncta* Bdv. Wild strawberry (G.D.)
- Polia petita* Sm. Phlox (garden vars.) (J.R.J.)
- Graptolitha patefacta* Wlk. June-berry (G.D.)
- Graptolitha contenta* Grt. Oak (J.R.J.)
- Xylena cineritia* Grt. Willow (G.D.)
 a. *mertena* Sm.
- Xanthia pulchella* Sm. Thimbleberry, rose (G.D.)
- Chutapha periculosa* Gn.
 form *v-brunneum*. Balsam fir (G.D.)
- Hyppa xylinoides* Gn. Willows, wild cherry, rose, alder, flowering currant (*Ribes sanguineum* Pursh.), honeysuckle, june-berry, plantains, dandelion, red clover (J.R.J.)
- Nadata gibbosa* A. & S.
 a. *oregonensis* Butl. Alder (preferred), maple, (*Acer macrophyllum* Pursh.) rose, june-berry, willow (J.R.J.O.) oak (W.D.)
- Ianassa pallida* Stkr. Willows, poplar, alder, june-berry, maple (*Acer macrophyllum* Pursh.), rose.
- Schizura unicornis* A. & S. Apple, plum, apricot (G.D.)
- Pseudothyatira cymatophoroides* Gn. Poplars, willows, june-berry.
 form *expultrix* Grt. alder, rose, bramble (J.R.J.)

- Cymatophora improvisa* Hy. Edw. Wild cherry (G.D.)
- Cymatophora fasciata* B. & McD. Wild cherry (G.D.)
- Hemerocampa pseudotsugata* McD. Douglas fir (*Pseudotsuga taxifolia* (Lambert) Britton) (D.D.A.V.)
- Olene vagans* B. & McD. Apple, wild rose (E.P.V.).
- Stilpnotia salicis* L. Poplars, (*Populus trichocarpa* T. & G.), silver Lombardy and Carolina poplars, willow (*Salix lasiandra* Benth.) (D.D.A.V.)
- Drepana arcuata* Wlk.
a. *siculifer* Pack. Alder (J.R.J.)
- Cosymbia pendularia* Gn.
a. *griseor* McD. Alder (J.R.J.)
- Rachela bruceata* Hlst. Apple (E.P.V.)
- Rachela occidentalis* Hlst. Oak (J.R.J.)
- Coryphista badiaria* Hy. Edw. Oregon grape (G.D.)
- Diactinia silaceata* Hbn.
a. *albolineata* Pack. Willow Herb (*Epilobium angustifolium* L.) (J.R.J.)
- Hydriomena nubilofasciata* Pack. Oak (J.R.J.)
- Eupithecia vancouverata* Tayl. Arbutus (*A. menziesii* Pursh.) (G.D.)
- Nepytia phantasmaria* Stkr. Western hemlock (*Tsuga heterophylla* (Raf) Sargent) Douglas fir (*Pseudotsuga taxifolia* (Lambert) Britton) (G.D. & D.D.A.V.)
- Amphidasis cognataria* Gn. Willows, alder, maple (*Acer macrophyllum* Pursh.) flowering currant (*Ribes sanguineum* Pursh.) june-berry, wild cherry, gladiolus (J.R.J.)
- Erannis vancouverensis* Hlst. Oak (J.R.J.), hawthorn (*Crataegus*).
- Anagoga pulveraria* Linn.
form *occiduaria* Wlk. Willows (J.R.J.)
- Ellopia somnaria* Hlst. Douglas fir (*Pseudotsuga taxifolia* (Lambert) Britton), western hemlock (*Tsuga heterophylla* (Raf) Sargent), western red cedar (*Thuja plicata* Donn.), Sitka spruce (*Picea sitchensis* (Bong) Carriere), western white fir (balsam) (*Abies grandis* Lindley), vine maple (*Acer circinatum* Pursh.), red alder (*Alnus rubra* Bong.); also many other shrubs (D.D.A.V.), oak.
- Hyperetis amicarua* H.S. Willows, alder, wild cherry, june-berry, wild rose and sp. of vaccinium (J.R.J.)
- Hyperetis trianguliferata* Pack. Flowering currant (*Ribes sanguineum* Pursh.)
- Euchlaena mollisaria* Hlst. Willow, buckthorn (*Cascara*) *Rhamnus purshiana* Dc.)
- Metanema quercivoraria* Gn. Oak (G.D.)

- Ambesia laetella** Grt. Snow-berry (*Symphoricarpos*), june-berry (*Ame-lanchier*) E.P.V.)
- Anacampis fragariella** Bsk. Wild strawberry (*Fragaria* spp (M.H.R.)
- Argyroploce nimbatana** Clem. Apple (E.P.V.)
- Cacoecia fumiferana** Clem. **Primary Hosts.** Douglas fir, (*Pseudotsuga taxifolia* (Lambert) Britton) Mountain Balsam (*Abies lasiocarpa* (Hook Nuttall); **Secondary Hosts.** Western white fir (*Abies grandis* Lindley), Englemann spruce (*Picea engelmanni* (Parry) Engel.), Sitka spruce (*Picea sitchensis* (Bong) Carriere), western hemlock (*Tsuga heterophylla* (Raf.) Sargent), scrub pine (*Pinus contorta* Douglas) (D.D.A.V.)
- Eucosma culminana** Wls. Wild rose, apple (V.P.V.)
- Jubarella danbyi** Hlst. Willow (G.D.)
- Mimeola tricotorella** Grt. In apple fruit (E.P.V.)
- Peronea maxima.** Apple (E.P.V.)
- Peronea variana** Fernald. Western hemlock (*Tsuga heterophylla* (Raf) Sargent) Douglas fir (*Pseudotsuga taxifolia* (Lambert) Britton), Sitka spruce (*Picea sitchensis* (Bong) Carriere), western white fir (*Abies grandis* Lindley), Amabilis balsam fir (*Abies amabilis* (Dougl.) Forbes), mountain hemlock (*Tsuga mertensiana* (Bong) Sargent), Englemann spruce (*Picea engelmanni* (Parry) Engel. alpine balsam (*Abies lasiocarpa* (Hook.) Nuttall).
- Platyptilia pica** *Dodecatheon pauciflorum* Durrand. (G.D.)
- Platyptilia punctidactyla.** *Dodecatheon pauciflorum* Durrand (G.D.)
- Tortrix allenana** Fem. Alfalfa, apple (E.P.V.)
- Trachoma falciferella** Wls. Wild cherry, apple, (E.P.V.)
- Vitula serratilineella** Rag. In apple, fruit also in bee hives (E.P.V.)