
Errata and first update to the 2010 checklist of the Lepidoptera of Alberta

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Introduction:

Since the Annotated list of the Lepidoptera of Alberta was published in March 2010 (Pohl et al. 2010), a few typographical and nomenclatural errors have come to the authors' attention, as well as three erroneous AB records that were inadvertently omitted from that publication. Additionally, a considerable number of new AB species records have been brought to our attention since that checklist went to press. As expected, most are microlepidoptera. We detail all these items below, in what we hope will be a regular series of addenda to the AB list. If you are aware of further errors or additions to the AB Lepidoptera list, please contact the authors.

Within the Noctuoidea, there are a few minor inconsistencies in the order of species within genera, and in the order of genera within tribes or subtribes, as compared to the sequence published by Lafontaine & Schmidt (2010). As well, the sequence of tribes in the AB list does not exactly match that of Lafontaine & Schmidt (2010), particularly in the Erebinae. We are not detailing those minor differences here unless they involve a move to a new genus or new higher taxonomic category.

Errata:

Abstract, p. 2, line 10, should read "1530... annotations are given"

41 *Nemapogon granella* (p. 55). Add Kearfott (1905) to the AB literature records.

78 *Caloptilia syringella* (p. 60). This species should be placed in the genus *Gracillaria* as per De Prins & De Prins (2005). (The genus *Gracillaria* follows *Caloptilia* taxonomically, so the species still appears in correct position in the AB species sequence, immediately following true *Caloptilia*.)

403 *Acleris albicomana* (Note, p. 331). Append to the note: "This species was recorded from AB by Bowman (1951) under the name *A. bergmanniana* (Linnaeus), a closely related Palaearctic species."

686 *Eucosma derelecta* (p. 122; also in the Note, p. 339). This species name was misspelled, it should read "*derelecta*".

749 *Epinotia crenana* (p. 128; also in the Note, p. 341). Contrary to the note for this species, the name *Epinotia columbia* (Kearfott, 1904) has been recognized as a valid name, by Brown (2005), and is the correct name for North American populations previously referred to under the Palaearctic name *E. crenana* (Hübner).

924 *Homoeosoma stypticellum* (Note, p. 347). Contrary to the note here, the taxon *H. uncanale* is no longer a synonym of *H. stypticellum*; it was synonymized by Heinrich (1956), but reinstated as a full species by Neunzig (1997). Thus the report of *H. uncanale* in AB by Bowman (1951) is actually a missed AB species, see new AB records below.

Errata continued next page

Errata cont...

939 *Eudonia lugubralis* (p. 150; also in the Note, p. 347). The valid name for *Eudonia lugubralis* is now *E. alpina* (Curtis, 1850), following a recent synonymy.

1315.1 *Orthonama centrostrigaria* (p. 202; also in the Note, p. 378). This species should be placed in the genus *Costaconvexa*, following Scoble (1999). It remains in the correct position in the AB list.

p. 202. The heading Eudulini was misspelled Eudelini.

1506.1 *Metarranthis hypocharia* (p.222; also in the Note, p.385). This species name was misspelled, and should read "*hypochraria*".

p. 224, 225. The genera *Sicya* and *Prochoerodes* were removed from the tribe Ourapterygini by Pitkin (2002) and are currently unplaced at the tribal level. They would have been more properly placed at the end of Geometridae on p. 225, after 1533.

1556 *Paonias excaecatus* (p. 230). This species epithet should read "*excaecata*", the original spelling.

1941 *Oligia fractilinea* (p. 278). This species should be placed in the genus *Mesapamea*, following Lafontaine & Schmidt (2010). It should also be moved three spaces up in the list, to 1938.1, to be in the correct taxonomic position before the genus *Eremobina*.

1944 *Oligia mactata* (p. 278) This species should be placed in quotation marks in the genus "*Platypolia*" in the Xylenini (rather than in *Oligia* in the Apameini), following Lafontaine & Schmidt (2010); although it is not a true *Platypolia*, that is the best placement for this species pending further taxonomic work. It should be moved to the end of the true *Platypolia*, to 2032.1 on p. 285.

1945 *Oligia illocata* (p. 278). This species should be placed in the genus *Fishia* in the Xylenini (rather than in *Oligia* and the Apameini), following Lafontaine & Schmidt (2010). It should be listed as the last *Fishia* species, at 2029.1 on p. 285.

1983.1 *Lithophane bethunei* (p. 281). The date of description was erroneously listed as 1968; it should read 1868.

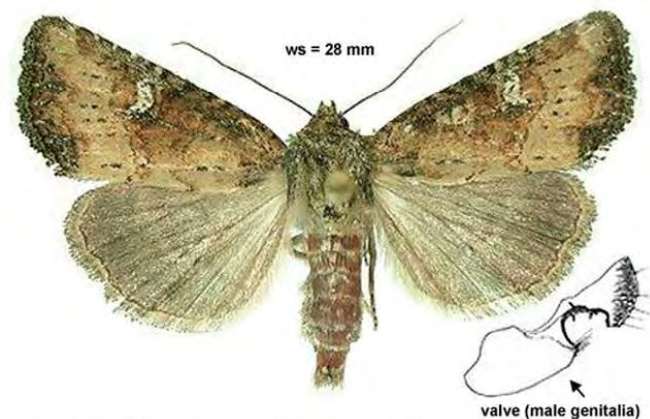
2027 *Cerapoda stylata* (p. 285; also in the Note, p. 410). This species should be placed in the genus *Rhizagrotis*, following the synonymy of *Cerapoda* with *Rhizagrotis* by Troubridge (2008). The species' position in the list remains correct.

2041.1 *Magusa divaricata* (p. 286, also in the Note, p. 410). This species was placed by Lafontaine & Schmidt (2010) in the Dypterygiini rather than the Xylenini. Its proper placement is at the end of the Dypterygiini at 1908.1, on p. 275.

2089 *Spirameter grandis* (p. 290). This species was moved from *Spirameter* to *Lacanobia* by Lafontaine & Schmidt (2010). It should appear four spaces up in the AB sequence, at 2084.1 (the last species in the genus *Lacanobia*).

Image from

http://www.entomology.ualberta.ca/searching_species_details.php?s=6085



Oligia fractilinea (Grt.) SK. Burstall Dunes leg. Troubridge

Errata continued next page

Errata cont...

2108.1 *Admetovis oxymorus* (p. 292). This species was placed by Lafontaine & Schmidt (2010) in the Orthosiini rather than the Hadenini. Its proper placement is at the end of the Orthosiini at 2051.1, on p. 287.

2112 *Faronta diffusa* (p. 292; also in the Note, p. 412). This species should have been placed in the genus *Dargida*, following the synonymy of *Faronta* with *Dargida* by Rodríguez & Angulo (2005). Its position in the AB list sequence remains unchanged.

2168 "*Polia*" *detracta* (p. 297; also in the Note, p. 414). This species should be placed in quotation marks in the genus "*Orthodes*", following Lafontaine & Schmidt (2010); it does not belong in *Orthodes*, but that is a better placement than near *Polia*, and it is placed there pending further taxonomic work. Its position in the AB list sequence remains unchanged.

E111 *Grammia celia* (p. 433). This taxon was synonymized with *G. figurata* by Schmidt (2009), and it should have been listed under the latter name. These western Canadian records of "*celia/figurata*" are correctly reported as referable to *G. margo*.

E157 *Loxagrotis albicosta* (p. 438). This species should have been placed in the genus *Striacosta*, following Lafontaine (2004) and Lafontaine & Schmidt (2010).

Index (p. 545). The index entry for *Sunira* was accidentally omitted. "Sunira ... 2001" [in regular font] should appear right below the entry for "Sunflower Moth".

Additional erroneous records:

E13.1 *Acleris bergmanniana* (Linnaeus). Reported from AB by Bowman (1951); these records are referable to *A. albicomana* (Clemens). *A. bergmanniana* is restricted to the Old World, but was historically confused with *A. albicomana* in North America.

E17.1 *Syricoris aurofasciana* (Haworth). Reported from AB by Bowman (1951), under the name "*Acleris latifascia* Haworth", now a synonym. Bowman's material is referable to *Acleris macdunnoughi*, not yet described at that time. The externally similar *S. aurofasciana* is restricted to the Old World.

E156.1 *Lithophane lepida* Grote. Report of this species from AB in the Moths of Canada website (CBIF 2003) is erroneous, based on a previous taxonomic arrangement. The specimens in question are now referable to *L. adipel* (Benjamin), previously thought to be a subspecies of *L. lepida* but now recognised as a distinct species (Troubridge & Lafontaine 2003).



Lithophane adipel Benj. USA NJ Lakehurst Nov 11-20 leg. F. Lemmer
U. A. Strickland Museum # 59786 PARATYPE (G. Anweiler image)

Image from
http://www.entomology.ualberta.ca/searching_species_details.php?s=6080

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Errata cont...

New AB Records:

33.01 *Paraclemensia acerifoliella* (Fitch, 1854). This species, known as the Maple Leafcutter Moth, was discovered at Lac La Biche in the summer of 2010, where it was present at high population levels on saskatoon trees (*Amelanchier* spp.; Rosaceae). Evidence of its distinctive larval damage was later found at several other sites in central AB. Identifications were confirmed via DNA barcoding of larvae; barcodes from AB specimens were an almost exact match with eastern material. This is the first confirmed report of *P. acerifoliella* from west of MB, the first record of the family Incurvariidae in AB, and the first global report of an incurvariid species feeding on *Amelanchier*; See Pohl (2011) for details.

A number of new bucculatricids were collected and identified recently via dissection by JJ Dombroskie, as follows:

62.6 *Bucculatrix angustata* Frey & Boll, 1876. This species was collected by JJ Dombroskie in Jasper National Park at the Palisades Centre and Maligne Canyon, at Kootenay Plains, and at Pakowki Dunes. It was previously known from eastern North America as far west as MB, as well as from WA.

62.7 *Bucculatrix leptalea* Braun, 1963. This species was collected by JJ Dombroskie in Jasper National Park, at the Athabasca River Dunes.

62.8 *Bucculatrix arnicella* Braun, 1925. This species was collected by JJ Dombroskie in the Porcupine Hills. It was previously known from BC.

62.9 *Bucculatrix tridenticola* Braun, 1963. This species was collected by JJ Dombroskie at Kootenay Plains. It was previously known from BC and WA.

Several new AB records of coleophorids were identified by J.-F. Landry from among a large number of specimens sent to him by CD Bird, from various sites sampled as part of his extensive survey work in the parkland of central AB. These records are as follows:

196.9 *Coleophora multipulvella* Chambers, 1878. Collected from near Nevis, from 8 km northwest of Winfield, and from Rochon Sands Provincial Park, collected between 1 and 18 July. Known as the Pistol Casebearer, for many years the name *C. malivorella* Riley was applied to this species, but *C. multipulvella* has taxonomic precedence (Baldizzone et al. 2006). It was previously known from BC and SK.

200.1 *Coleophora cretaticostella* Clemens, 1860. Collected from Big Knife Provincial Park, Buffalo Lake Conservation Area, Dry Island Buffalo Jump Provincial Park, and near Nevis, all collected between 27 May and 25 June. It was previously known from BC and eastern Canada.

202.1 *Coleophora kearfottella* Barnes & Busck, 1920. Collected near Nevis, 11 July 2003. It was previously known from BC and SK.

203.1 *Coleophora cornella* Walsingham, 1882. Known from two specimens collected 8 km northwest of Winfield, on 10 and 29 June. It was previously known from ON and QC.

Errata continued next page

Errata cont...

New AB Records cont...

209.1 *Coleophora sparsipuncta* Heinrich, 1929. Collected from Big Knife Provincial Park, Buffalo Lake Conservation Area, Dry Island Buffalo Jump Provincial Park, Lowden Springs, and near Nevis, between 21 June and 11 August. There are no previously published records of this species in Canada.

210.1 *Coleophora seminella* McDunnough, 1946. Collected from Buffalo Lake Conservation Area, and near Nevis, 11 to 15 July 2003. It was previously known in Canada from SK.

229.1 *Coleophora quadruplex* McDunnough, 1940. Collected from Big Knife Provincial Park and from 8 km northwest of Winfield, on 1 and 4 July 2006, respectively. It was previously known from ON and QC. In QC, larvae of this species feed on the seeds of *Achillea millefolium* (Asteraceae), in the fall (Landry 1998).

235.1 *Pigritia murtfeldtella* (Chambers, 1874). This species was collected at Tolman Bridge by CD Bird, 24 August 2002, and was identified recently by D Adamski. This is a new Canadian record; the closest previous record was SD, where it was reported by Forbes (1923) under the name *Dryoperia grisella* (Dietz), a recent synonym.

237.2 *Cosmopterix gemmiferella* Clemens, 1860. This species was listed as "probable" for AB, based on records in central SK. A specimen was collected near Bindloss, AB on 23 July 2008, by JJ Dombroskie and B Proshek, and identified recently by JJ Dombroskie.

237.3 *Cosmopterix clemensella* Stainton, 1860. A specimen of this species was collected in Jasper National Park, at Maligne Canyon, on 12 July 2007 by M Schwarzfeld, and identified recently by JJ Dombroskie. It was previously known from eastern Canada as far west as MB, although unconfirmed specimens exist from BC as well.

325.1 *Aroga unifasciella* (Busck, 1903). The range of this species was ambiguously reported to include AB in Powell & Opler (2009). The range is reported from "AB to western TX and CA" but then two sentences later they also state that it "occurs from Glacier National Park, MT, to western NM and ... CA". Pending clarification of its true range, we include this species as "unconfirmed" for AB.

Two new Gnorimoschemini species were cited from AB in an unpublished report on the Gnorimoschemini of Yukon, by Nazari and Landry (2009). They are as follows:

330.01 *Gnorimoschema herbichii* (Nowicki, 1864). Collected 27 June 2009, in Jasper National Park, Jasper Lake sand dunes, by B.C. Schmidt and G.G. Anweiler.

331.02. *Gnorimoschema obscurior* Povolny, 1998. Known in AB from a specimen collected at Waterton Lakes National Park, Bellevue Hill, 15 August 2006, and a specimen from Pakowki Dunes, 16 August 2006, both collected by J.J. Dombroskie.

369 *Paranthrene tabaniformis* (Rottemburg, 1775). This species was reported as "unconfirmed" for AB, because no voucher specimens were known to support the record by Bowman (1951). Recently an old FIDS specimen from Athabasca, AB has been discovered in the Royal British Columbia Museum, Victoria, BC.

450 *Platphalonidia dangi* Razowski, 1997. The second global record of this species was collected at Pakowki Dunes, 8 July 2008, by J.J. Dombroskie and A. Rose. It was previously known from a single specimen collected at Nordegg in 1923.

Errata continued next page

Errata cont...

New AB Records cont...

512.1 *Clepsis penetralis* Razowski, 1979. The identity of the specimens identified in Pohl et al. (2010) as #506 *Clepsis fucana* (Walsingham, 1879), are hereby corrected to *C. penetralis*, and *C. fucana* is hereby relegated to an expected AB species (it is still known from adjacent BC). This is the first report of *C. penetralis* from Canada; it is known from UT, CA, VT, and CT, but may be more widespread, misidentified in collections among the very similar, but slightly smaller *C. peritana*. AB specimens confirmed as *C. penetralis* are from Jasper National Park, Kootenay Plains, and Pakowki Dunes, collected by various ALG members between 27 June and 31 July.

519.1 *Sparganothis senecionana* (Walsingham, 1879). This species was reported from AB by Powell & Opler (2009), but we know of no AB specimens so it is added to the AB list as an "unconfirmed" species.

521.1 *Sparganothis flavibasana* (Fernald, 1882). A specimen collected at Big Knife Provincial Park, on 4 July 2006 by C.D. Bird, was identified recently by J.J. Dombroskie. This species was previously known from eastern Canada, as far west as central SK.

522.1 *Sparganothis directana* (Walker, 1863). Several specimens were collected at Lowden Springs by C.D. Bird in late July 2002 and 2009, and were identified recently by J.J. Dombroskie. This species was previously known from eastern Canada, as far west as central SK.

602.1 *Ancylis albacostana* Kearfott, 1905. A specimen tentatively identified by J.J. Dombroskie as this species was collected in Medicine Hat on 11 June 2009 by J. Scott. It is added to the AB list here as an unconfirmed record. This species is otherwise known from eastern North America, only as far west as MB and MN.

643.1 *Phaneta labiata* Wright, 2010. Wright (2010) indicates a record in southern AB on the distribution map, but there is no mention of this locality in the text where state and provincial records are summarized. Although this AB record is an outlier (the species is otherwise known from ID and WY), D. Wright (pers. comm.) confirmed that there is indeed an AB specimen, collected near Writing-On-Stone by J.-F. Landry on 12 July 1984. It is deposited in the CNC.

709.1 *Suleima baracana* (Kearfott, 1907). A specimen collected at Pakowki Dunes, 28 June 2008, by L Lumley is the first Canadian record of this species. The nearest previous record was from WA. The specimen was identified by J.J. Dombroskie.

923.1 *Homoeosoma uncanale* Hulst, 1886. As noted in the errata above, the report of this species by Bowman (1951) was misinterpreted by Pohl et al. (2010) as a synonym of *H. stypticellum* (*H. uncanale* was synonymized with *H. stypticellum* by Heinrich (1956), but reinstated as a full species by Neunzig [1997]). No voucher specimens are known to support Bowman's record, and this species is otherwise unknown from Canada. However, it is known from high altitude localities in western USA, and could conceivably occur in the Rocky Mountains of western AB. It is added herein as an unconfirmed record for AB.

1413.1 *Speranza hesperata* Ferguson, 2008. A specimen of this recently described species was collected at Pakowki Dunes by GG Anweiler. This represents a major range extension for this Great Basin species, otherwise known from western USA only as far north as NV and UT. There remains some uncertainty as to the validity of *S. hesperata* as a species distinct from *S. coortaria* (Hulst) (G.G. Anweiler, pers. comm.), but it is treated here as a valid species pending further research.

Errata continued next page

Errata cont...

New AB Records cont...

1940.1 *Oligia modica* (Guenée, 1852). This species was listed as "probable" for AB, being known from Saskatoon, SK and expected in eastern AB. In 2010, J. Scott collected a specimen at Medicine Hat. Its identity was confirmed by G.G. Anweiler.

2020.1 *Enargia fausta* Schmidt, 2010. As mentioned in Pohl et al. (2010) in the notes for *E. infumata* (#2020) and *E. mephisto* (#E-147), a cryptic new species of *Enargia* had been discovered among specimens of *E. infumata*. It was described as *E. fausta* (Schmidt 2010), just as Pohl et al. (2010) was going to press; too late for proper inclusion therein. It occurs in the boreal forest throughout central AB.

2166.1 "*Orthodes*" *delecta* (Barnes & McDunnough, 1916). This species was collected at Waterton Lakes National Park by B.C. Schmidt, on 7 July 2008, and identified by G.G. Anweiler. It was previously known from southern BC. This species is not a true *Orthodes*, but has been placed there pending taxonomic clarification, by Lafontaine & Schmidt (2010).

Acknowledgements:

We thank David Adamski, Gary Anweiler, and Don Wright for providing determinations and information, and we acknowledge the many collectors of AB Lepidoptera whose efforts have led to these new discoveries. We also thank Gary Anweiler and Chris Schmidt for reviewing this manuscript for us.

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