

NEW HOST RECORDS FOR OLETHREUTINAE (TORTRICIDAE)

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ABSTRACT. Host records are given for 33 species of Nearctic Olethreutinae in the genera *Epiblema*, *Eucosma*, *Pelochrista*, *Phaneta*, *Cydia*, *Ecdytoplopha*, *Ethelgoda*, *Grapholita*, *Satronia*, *Episimus*, *Larisa*, and *Zomaria*.

Host plant records have been published for nearly half of the approximately 800 species of Nearctic Olethreutinae. The following records are given for 33 species represented in the U.S. National Museum of Natural History and the Florida State Collection of Arthropods; specimens in the latter are indicated by FSCA following the entries. Identifications of the Olethreutinae were made by the senior author. Plant identifications have not been confirmed since their original identifications; host information is given as recorded on the label, except the nomenclature has been emended following Kartesz and Kartesz (1980). Family names of hosts are given after the initial listing of the plant genus. The letter (n) represents the number of specimens reared. Dates are given as on the specimen labels and do not imply natural emergence times because of the various rearing conditions.

The publication of host records should be tempered with a precautionary note. The following records do not imply that the listed plant species is the favored host. Some species may be incidental hosts, while others may represent the plant upon which the larva was collected and not necessarily the plant on which the larvae were feeding or the plant upon which the female oviposited. More than one larval collection record from a particular plant provides greater evidence of the preferred host. As some plant species might possibly be misidentified, it is here recommended that voucher specimens of host plants be maintained in a reference collection accompanying the reared insect.

EUCOSMINI

Epiblema benignata McDunnough

Artemisia dracunculus L. (Asteraceae)—Washington: Whitman Co., Snake River opp.

Clarkston, J. F. G. Clarke, gall maker on stem (6n).

Artemisia vulgaris L.—same data as *A. dracunculus* (49n). An additional series of 15 specimens has been reared from *A. vulgaris* at Wilma, Whitman Co., by Clarke. However, these individuals did not form galls on the stems. The reared adults are slightly smaller than those from Clarkston, but do not differ in maculation or genitalia.

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- Epiblema sosana* (Kearfott)
Ambrosia acanthicarpa Hook. (Asteraceae)—CALIFORNIA: Los Angeles Co., Sierra Madre (1n); Riverside Co., Sunnymead (6n); San Bernardino Co., Cucamonga (5n); R. D. Goeden and D. W. Ricker; AA Lots 69-2A, 69-47A, 69-6B, 69-7B, 68-2B.
- Epiblema scudderiana* (Clemens)
Heterotheca subaxillaris (Lam.) Britt. & Rusby (Asteraceae)—FLORIDA: Alachua Co., Gainesville, 22 Aug. 1980, D. H. Habeck, A-2663, FSCA (3n).
- Eucosma agricolana* (Walsingham)
Artemisia vulgaris L.—WASHINGTON: Whitman Co., em. 8 May-5 Jun. 1932, J. F. G. Clarke (10n).
- Eucosma bilineana* Kearfott
Helianthus tuberosus L. (Asteraceae)—ILLINOIS: Du Page Co., Hinsdale, em. 24 Jan.-24 Feb., Satterthwait (10n).
- Eucosma bolanderana* (Walsingham)
Machaeranthera canescens (Pursh) Gray (Asteraceae)—ARIZONA: Pinal Co., Superior, em. 24 Sept. 1937; boring in roots (1n).
- Eucosma mandana* Kearfott
Solidago sp. (Asteraceae)—WASHINGTON: Whitman Co., Almota, em. 15 Mar.-16 May, J. F. G. Clarke; boring in roots (9n).
- Eucosma ridingsana* (Robinson)
Heterotheca villosa (Pursh) Shinnors (Asteraceae)—WASHINGTON: Whitman Co., Snake River opp. Clarkston, em. 13 Sept., J. F. G. Clarke (1n).
 "Greasewood"—COLORADO: El Paso Co., Garden of the Gods; root borer (1n).
- Eucosma totana* Kearfott
Chrysothamnus nauseosus (Pall.) Britt. (Asteraceae)—IDAHO: Lincoln Co., 4 mi. NE Richfield, 21 Jul. 1961, W. F. Barr (1n).
- Pelochrista rorana* (Kearfott)
Helianthus annuus L. (Asteraceae)—WASHINGTON: Whitman Co., Almota, em. Jan.-May, J. F. G. Clarke, in roots (12n).
- Phaneta amphorana* (Walsingham)
Grindelia sp. (Asteraceae)—WASHINGTON: Whatcom Co., Bellingham, em. 19 Oct.-20 Dec. 1932, 1933, J. F. G. Clarke (15n).
- Phaneta argenticostana* (Walsingham)
Artemisia dracuncululus L.—WASHINGTON: Whitman Co., Snake River opp. Clarkston, em. 13 May 1932, J. F. G. Clarke (4n); Wilma, em. 22 Mar.-5 May 1935, J. F. G. Clarke (3n).
- Phaneta dorsiatomana* (Kearfott)
Artemisia vulgaris L.—WASHINGTON: Whitman Co., Snake River opp. Clarkston, em. 31 Jan.-13 Mar. 1933, J. F. G. Clarke (7n); Wilma, em. 18 Feb.-17 Mar. 1934, J. F. G. Clarke (13n).
- Phaneta misturana* (Heinrich)
Artemisia tridentata Nutt.—IDAHO: Owyhee Co., 7 mi. S Bruneau, 10 Apr. 1963, O. O. Fillmore, 020-19 (1n); Twin Falls Co., 6 mi. W Rogerson, 11 Apr. 1963, W. F. Barr, 843-01 (3n).
- Atriplex confertifolia* (Torr. & Frem.) S. Wats (Chenopodiaceae)—IDAHO: Cassia Co., 6 mi. NE Malta, 22 May 1962, W. F. Barr, 764-01 (1n).
- Phaneta stramineana* (Walsingham)
Haplopappus sp. (Asteraceae)—TEXAS: Cameron Co., Brownsville, May 1945, Lot 45-13040, Brownsville 59044 (3n).
- Haplopappus suffruticosus* (Nutt.) Gray—ARIZONA: Pima Co., 35 mi. S Tucson, em. Oct. 22, 1937, A. Voth and L. P. Wehrle (2n).

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- Cydia populana* (Busck)
Populus tremuloides Michx. (Salicaceae)—ARIZONA: Kaibab National Forest. 4 Jun. 1965, D. A. Pierce, Hopk. #51106-6 (2n).

- Cydia flavicollis* Walsingham
Pithecellobium unguis-cati (L.) Benth. (Fabaceae)—FLORIDA: Sugarloaf Key, 22 Apr. 1945, Lot 45-8793 (1n).
P. arboreum (L.) Urb.—PUERTO RICO: Mayaguez, in seeds (2n).
- Cydia garacana* (Kearfott)
Populus sp.—ILLINOIS: Cook Co., Chicago, 16 Jun. 1920, E. Beer (1n).
- Cydia ingrata* (Heinrich)
Fraxinus pennsylvanica Marsh. (Oleaceae)—NORTH DAKOTA: Bottineau Co., 9 Jun. 1970, M. E. McKnight, Hopk. #54051 (1n).
- Cydia lautiuscula* (Heinrich)
Salix sp. (Salicaceae)—WASHINGTON: King Co., Seattle, 25-27 Apr. (6n).
- Ecdytolopha mana* (Kearfott)
Celtis sp. (Ulmaceae)—TEXAS: Cameron Co., Brownsville, 20 Apr. 1945, Lot 45-9929, in leaf gall (1n); Travis Co., Austin, 29 Jun., 3 Aug. 1953, J. Riemann, in petiole gall (6n).
- Ethelgoda texanana* (Walsingham)
Stillingia sylvatica Garden ex L. (Euphorbiaceae)—FLORIDA: Charlotte Co., 13 Sept. 1949 (1n).
Stillingia sp.—FLORIDA: Polk Co., Lake Alfred, 1 Jun.-16 Jul., L. J. Bottimer (3n).
Euphorbia sp.—TEXAS: "Monard," 18-20 Jun., L. J. Bottimer, in seed capsules (2n).
- Grapholita conversana* (Walsingham)
Trifolium douglasii House (Fabaceae)—IDAHO: Idaho Co., Grangeville, em. 6 Apr., T. R. Chamberlin and L. P. Rockwood (9n).
- Grapholita lana* (Kearfott)
Lupinus sp. (Fabaceae)—CALIFORNIA: San Diego Co., Cuyamaca Lake, 27 Apr. 1935, C. Dammers, on leaves (1n).
Sophora leachiana M. Peck (Fabaceae)—OREGON: Josephine Co., 6 May 1977, Cheryl Crowder (6n).
- Grapholita lunatana* (Walsingham)
Lathyrus sp. (Fabaceae)—OREGON: Washington Co., Forest Grove, July 1924, S. K. Keen (1n); Multnomah Co., Portland, em. 24 Apr.-2 May, S. K. Zimmerman (2n).
- Grapholita packardii* (Zeller)
Pyracantha sp. (Rosaceae)—TEXAS: Jefferson Co., Beaumont, 8-15 Jan. (2n).
- Grapholita vitrana* (Walsingham)
Astragalus sp. (Fabaceae)—CALIFORNIA: San Diego Co., Otay, 12 Mar. 1948, E. D. Algett (5n).
- Satronia tantilla* Heinrich
Pinus elliotii Engelm. (Pinaceae)—FLORIDA: Baker Co., em. 16 Apr., Hopk. #40169, B. H. Ebel, on male flowers (3n).
Pinus sp.—ARKANSAS: Johnson Co., "RP," em. 4 Apr. 1967, I. Brown on male flowers (2n).

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- Episimus tyrius* Heinrich
Prunus caroliniana (Mill.) Ait. (Rosaceae)—FLORIDA: Alachua Co., Gainesville, 21 May 1973, em. 11 Jun. 1973, D. H. Habeck (1n); 30 Jul. 1980, em. 16 Aug. 1980 (1n), FSCA.
- Larisa subsolana* Miller
Carya illinoensis (Wangenh.) C. Koch (Juglandaceae)—TEXAS: Brown Co., Brownwood, 26 May 1919, A. T. Fabis, Quaintance No. 18829 (1n); Menard Co., Ft. McKavett, em. 26 Jun. 1919, A. T. Fabis, Quaintance No. 188828 (1n).
- Zomaria andromedana* (Barnes and McDunnough)
Lyonia ferruginea (Walt.) Nutt. (Ericaceae)—FLORIDA: Marion Co., 11 mi. E Lynne, 17 Sept. 1980, em. 29 Sept.-13 Oct. 1980, D. H. Habeck, A-2684f, FSCA.
- Zomaria interruptolineana* (Fernald)
Befaria racemosa Venten. (Ericaceae)—FLORIDA: St. Johns Co., St. Augustine, 17 Jan. 1968, A. E. Graham, FSCA (1n).

- Bumelia lanuginosa* (Michx.) Pers. (Sapotaceae)—FLORIDA: Columbia Co., Ichetucknee Springs St. Pk., em. 12 Jun. 1973, D. H. Habeck, FSCA (1n).
- Leucothoe populifolia* (Lam.) Dipp. (Ericaceae)—FLORIDA: Marion Co., Juniper Springs, 30 Mar. 1979, D. H. Habeck, A-2349a, FSCA (1n).
- Vaccinium arboreum* Marsh.—FLORIDA: Columbia Co., Santa Fe River, 8 mi. S Ft. White, c. 6 Apr. 1974, p. 9 Apr. 1974, em. 15 Apr. 1974, D. H. Habeck, FSCA (2n).
- V. stamineum* L.—FLORIDA: Alachua Co., Gainesville, 30 Apr. 1972, em. 17 May 1972, D. H. Habeck, FSCA (2n).
- Zomaria rosaochreana* (Kearfott)
- Lyonia lucida* (Lam.) C. Koch—FLORIDA: Glades Co., Palmdale, 13 Mar. 1973, D. H. Habeck, FSCA (3n); Alachua Co., Gainesville, 13 Aug. 1972, D. H. Habeck, FSCA (40n).

LITERATURE CITED

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