

Synclita oblitalis (Walker), the waterlily leafcutter.¹
(Lepidoptera : Pyralidae : Nymphulinae)

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INTRODUCTION: Members of the pyralid subfamily Nymphulinae have aquatic larvae. Of the more than twenty nymphuline species occurring in Florida, *Synclita oblitalis* (Walker) is the most common. While its common name implies that it is a pest of waterlilies, it has a wide host range. However, most of the damage it does is superficial and rarely endangers the plant. The caterpillar of this moth is sometimes referred to as "the sandwich man" due to its habit of living between two pieces of leaf it has cut from its host plant (Fig. 1).

DESCRIPTION: Adults are sexually dimorphic. Females have a 15-19 mm wingspan; the male wingspan is about 11-13 mm. Wings of the male are fuscous suffused with brownish and white markings (Fig. 2). Female wings are paler being grayish-brown with orange-brown and fuscous markings (Fig. 3). Larvae live in air-filled portable cases made from aquatic plants. The case may consist of two entire leaves, parts of leaves, or of parts of many plants tied together with silk. Larvae are characterized as follows: gills absent; body creamy-white, but increasingly brownish from abdominal segment four forward to the prothorax; prothoracic coxae touching; mesothoracic coxae nearly touching; head yellowish-brown with a faint brown genal stripe; prothoracic spiracle vestigial; spiracles on abdominal segments three and four distinctly larger than others; crochets arranged in two biordinal, (sometimes partially triordinal) transverse bands, with the anterior band distinctly larger than the posterior band. Pupation occurs within the case.

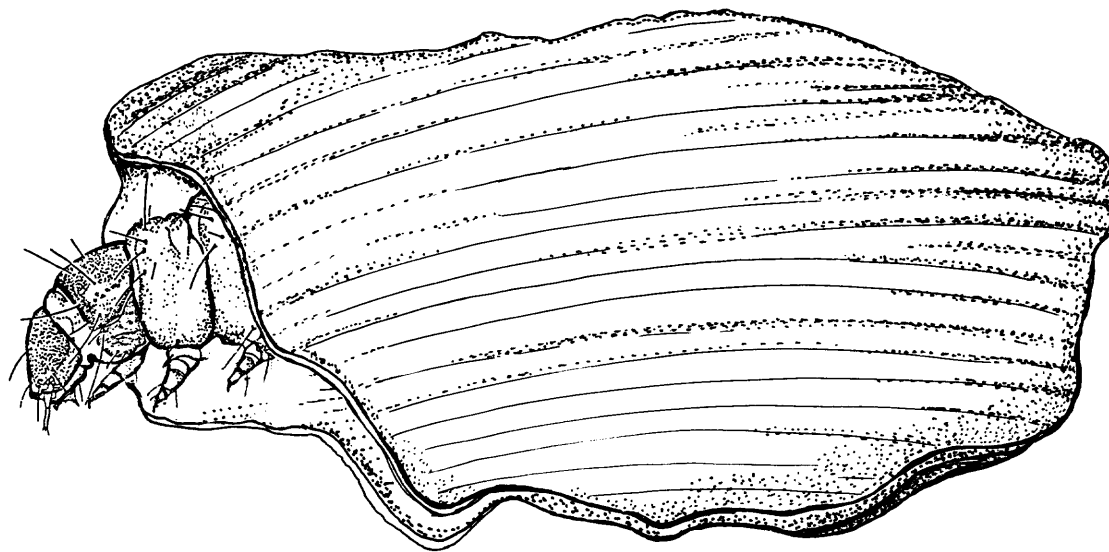


Figure 1. Caterpillar of *Synclita oblitalis*. Illustration by Margo Duncan

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RELATED SPECIES: Three other species of *Synclita* occur in the United States with one, *S. tinealis* Munroe, in Florida. The adult of *S. tinealis* is much smaller than that of the waterlily leafcutter and has longer, narrower, and darker wings. The larvae of the *S. tinealis* are not well known, but seem to feed on and most often make their cases of duckweed, *Lemna* sp. The larvae of *Munroessa gyralis* (Hulst) and *M. icciusalis* (Walker) are similar to those of the waterlily leafcutter, but the anterior and posterior transverse bands of crochets are the same size. *Munroessa* adults are more brightly colored than *Synclita* and are yellowish-orange and white or brownish in color. Although *Munroessa* larvae may make portable cases, they usually cut only one leaf piece and attach it to a whole leaf and live between.

DISTRIBUTION: This common moth occurs throughout Florida, westward to Texas and northward to western Nova Scotia and southern Manitoba (Munroe 1972). It also has been introduced into Hawaii (Williams 1944), England (Shaffer 1968), and British Columbia (Munroe 1972).

HOSTS: *Synclita oblitalis* has a wide host range and is known to feed on nearly 60 plant species. The following plants arranged by families and genera are known to be hosts. The number of species if more than one within each genus is in parenthesis. **Acanthaceae:** *Hygrophila*, *Nomophila*, *Synema*; **Alismataceae:** *Echinodorus* (3), *Sagittaria*; **Amaranthaceae:** *Amaranthus*; **Apiaceae:** *Hydrocotyle* (3); **Aponogetonaceae:** *Aponogeton* (3); **Araceae:** *Orontium*, *Pistia*; **Brassicaceae:** *Cardamine*, *Nasturtium*; **Cyperaceae:** *Eleocharis*; **Gentianaceae:** *Nymphoides* (2); **Haloragaceae:** *Myriophyllum* (2); **Hydrocharitaceae:** *Egeria*, *Elodea*, *Hydrilla*, *Limnobiium*; **Lemnaceae:** *Lemna*, *Spirodela*; **Lythraceae:** *Rotala*; **Marsileaceae:** *Marsilea*; **Nymphaeaceae:** *Brasenia*, *Nelumbo*, *Nuphar*, *Nymphaea* (7); **Onagraceae:** *Ludwigia* (2); **Poaceae:** *Hydrochloa*; **Polygonaceae:** *Polygonum* (3); **Pontederiaceae:** *Eichhornia*, *Pontederia*; **Potamogetonaceae:** *Potamogeton* (3); **Salicaceae:** *Salix*; **Salviniaceae:** *Azolla*, *Salvinia*; **Scrophulariaceae:** *Ambulia*, *Bacopa*, *Lindernia*, *Micranthemum*.



Figure 2. *Synclita oblitalis* male
Photos by Jeff Lotz

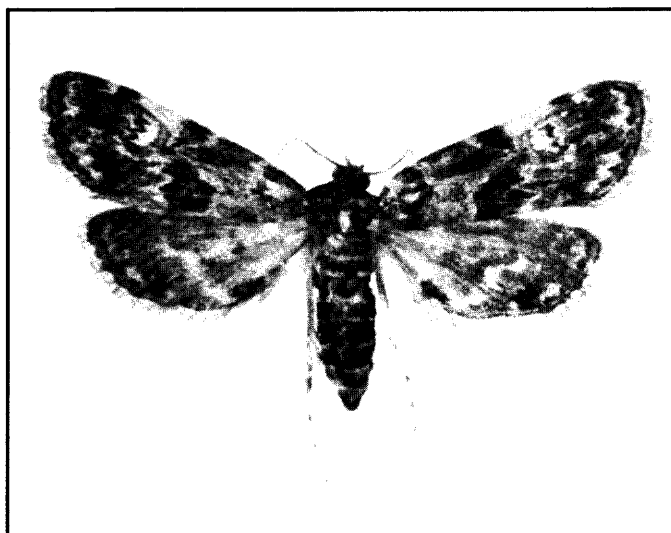


Figure 3. *Synclita oblitalis* female

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