

LepIntercept

An identification resource for intercepted Lepidoptera larvae

[Keys](#)[About](#)[Fact Sheets](#)[Glossary](#)[Larval Morphology](#)[References](#)

[<< Previous fact sheet](#) [Next fact sheet >>](#)

LYCAENIDAE - *Strymon*

Taxonomy

Papilionoidea: Lycaenidae: Theclinae: *Strymon*

Common names: pineapple borer, hairstreak

Synonyms: *Callipareus*, *Callicista*, *Uranotes*, *Eiseliana*, *Heoda*

Larval diagnosis (Summary)

- Living larvae are cream, green, or bright red or pink
- Small honey (=Newcomer's) gland on the posterior portion of A7
- No modified or star shaped setae on body
- From pineapple in Latin America

Host/origin information

The majority (95%) of interceptions of *Strymon* are from Costa Rica on pineapple (*Ananas comosus*). A few other hosts are recorded in PestID.

Origin	Host(s)
Costa Rica	<i>Ananas comosus</i>

Recorded distribution

The complex of *Strymon* treated here is distributed throughout Latin America from Mexico to Argentina (Robbins 2010).

Identification authority (Summary)

Use "*Strymon* sp." for lycaenid larvae on pineapple from Latin America with relatively unmodified body setae and a honey (= Newcomer's) gland on A7.

Pest characterization

(Based on Cavey 2001, Robbins 2010)

- Taxonomy: **Medium**. Identification to genus is often possible.
- Distribution: **High**. The species in this complex are not present in the U.S.
- Potential Impact: **Medium**. Species in the complex could establish in tropical areas of the continental U.S. and Hawaii, potentially causing damage to ornamentals related to pineapple.

This ranking characterizes *Strymon* on pineapple as quarantine significant for the U.S.

Larval diagnosis (Detailed)

Several ports, mostly in the eastern United States, have intercepted lycaenid larvae on pineapple from Latin America over the last several decades (Weisman 1986, Kane 2008). These larvae have a short front that does not reach the epicranial notch, five teeth and two setae on the mandible, a very short second and third segment of the labial palpus, a small triangular prothoracic shield covered with setae, a small honey (= Newcomer's) gland on the posterior portion of A7, and the spiracle of A8 moved dorsad of the other abdominal spiracles. The body setae are pointed and unmodified except for those surrounding the gland. We did not find a detailed larval description of any New World pest species of Lycaenidae on pineapples; however, several lines of evidence support an identification of *Strymon*.

First, literature records associate *Strymon* with pineapple (see review in Robbins 2010). With regard to Costa Rica and Central America, where most recent port interceptions originated, *Strymon* is known as the pineapple borer (Saunders et al. 1983) or just fruit borer (Vargas Carrillo 2011). It is specifically mentioned as a pest of pineapple in Mexico (McGuire and Crandall



Fig. 1: Late instar, lateral view



Fig. 2: Head, thorax

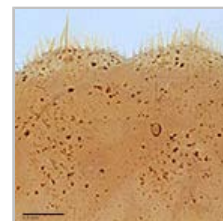


Fig. 3: Body setae

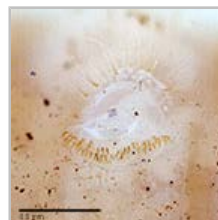


Fig. 4: Crochets

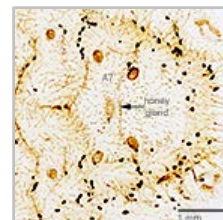


Fig. 5: Honey gland



Fig. 6: Head



Fig. 7: Hypo. complex

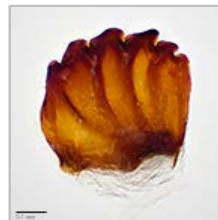


Fig. 8: Mandible

1967), Guatemala (Carter 1934), and Costa Rica (Coto and Saunders 2004). The study by Harris (1927) in Trinidad probably refers to this species as well.

At the species level, Robbins (2010) listed four taxa associated with pineapple: *Strymon ziba*, *S. megarus*, *S. lucena*, and *S. oreala*. The first two names are considered "superspecies" complexes that potentially could be divided in the future. He noted most published records lump *S. ziba* and *S. megarus* and misidentify them under the names *Thecla basilides*, *Thecla basalides*, or *Tmolus echion*. As defined by Robbins and Aiello (1982), *T. echion* feeds only on dicots. A recent host list of Neotropical butterflies (Beccaloni et al. 2008) listed four species of Lycaenidae on pineapple (*Strymon legota*, *S. megarus*, *S. oreala*, and a riodinid - *Napaea eucharila*) plus other doubtful or incomplete records (*Pseudolycaena marsyas*, either *S. megarus* or *S. ziba* in publications from Mexico to Uruguay, and an unidentified species from Colombia). If Riodinidae is considered a separate family, all Lycaenidae larvae that eat Bromeliaceae in Latin America belong to the *Strymon ziba* and *S. serapio* species groups (Robbins 2010).

Second, the intercepted lycaenid is morphologically similar to North American *Strymon* larvae. The distribution of body setae matches the figure of *Strymon melinus* in Peterson (1962: L23) and their morphology agrees with the magnified drawing in Schnitzler et al. (2011: fig. 205). Ballmer and Pratt (1988: tables 1, 2) noted that Lycaeninae lack a honey gland that is present in the Theclinae. The intercepted lycaenid larva from pineapple has this gland as is expected for *Strymon* and other Theclinae.

Finally, the only reared example we have from port interceptions is a larva from Costa Rica, on *Heliconia*, sent in by C. Olsen in 2005. The single adult was determined by R. Robbins as *S. megarus* (USNM lot 0508026). Although not from pineapple, it demonstrates that ports do intercept *Strymon* from Costa Rica. The bright red color of the reared larva on *Heliconia* matches the specimens from pineapple illustrated in color by Coto and Saunders (2004). The related *Strymon ziba* normally is reared from Heliconiaceae and Haemodoraceae, thus Robbins (2010) considered the above host association for *S. megarus* as needing confirmation. There have been many lycaenids intercepted from *Heliconia* at United States ports from Mexico to South America, especially from Costa Rica. Current knowledge would suggest most of these should be *S. ziba*, but without rearing or molecular studies, this shows the complexity of trying to evaluate port interceptions. There is a need to rear more of these *Heliconia* feeding Lycaenidae.

Identification authority (Detailed)

It seems relatively safe to use the name *Strymon* for lycaenid larvae on pineapple from Latin America that have relatively unmodified body setae and a honey gland on A7. One example of many interceptions from Philadelphia has the dorsum of A7 darkly pigmented. It is unclear if this is variation or another species. Living larvae can be cream, green, or bright red or pink (Coto and Saunders 2004, Robbins 2010).

The presence of a riodinid, *Napaea eucharila*, on pineapple is cause for concern. There are many species in this group with unknown larvae, some of which could eat or stray on pineapple. The larva of *N. eucharila* was illustrated by DeVries (1997: fig. 42). It is a leaf feeder with much longer hairs than *Strymon*.

If there are no determined *Strymon* larvae in the port collection, use our figures or those of *S. melinus* in Peterson (1962) for comparison. Anything that does not match *Strymon* should be left at family. In most cases, caterpillars of *Strymon* eat flowers and fruits, but larvae of *S. megarus* and *S. ziba* may also bore into leaves when flowers and fruits are unavailable (Robbins 2010). *Strymon* is a large genus and we normally cannot recognize the larvae outside of two exceptions. If the host is Bromeliaceae from Latin America, *Strymon* sp. may be justified on a case by case bases. The number of possible species quickly grows if the host is not pineapple. If the larva is on beans from the New World, *S. melinus* is a possibility.

Origin records

Strymon have been intercepted from the following locations:

Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Panama

Host records

Strymon have been intercepted on the following hosts:

Ananas comosus, *Ananas* sp., *Annona cherimola*, Bromeliaceae, *Chenopodium album*, *Chenopodium ambrosioides*, *Dendrobium* sp., *Heliconia* sp., *Heliconia spectabilis*, *Phaseolus vulgaris*, *Pithecellobium dulce*, *Punica granatum*, *Zea mays*

Records for *Annona cherimola*, *Chenopodium album*, *Chenopodium ambrosioides*, *Dendrobium*, *Heliconia*, *Phaseolus vulgaris*, *Pithecellobium dulce*, *Punica granatum*, and *Zea mays* need confirmation. See the Detailed Information tab for a discussion of *Heliconia*-feeding *Strymon*.

Larval Skin

Because primary setae are not evident in lycaenid larvae, we include a photograph of a slide-mounted larval skin instead of a setal map below:



Strymon larval skin (slide-mounted)

LepIntercept - An identification resource for intercepted Lepidoptera larvae
by Todd M. Gilligan and Steven C. Passoa

Identification Technology Program (ITP), Fort Collins, CO. Last updated February 2014.

