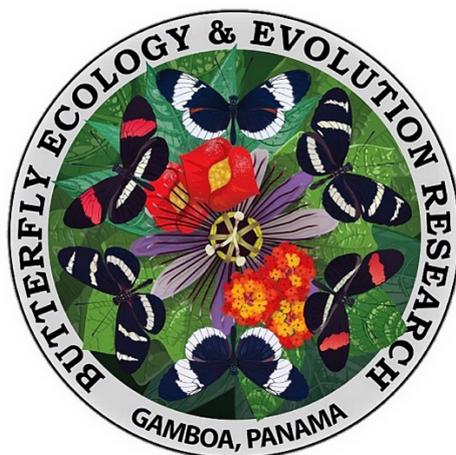




Smithsonian Tropical Research Institute



# A GUIDE TO THE BUTTERFLIES AND HOST PLANTS OF THE INSECTARIES

# GUIA DE LAS MARIPOSAS Y PLANTAS HOSPEDERAS DE LOS INSECTARIOS



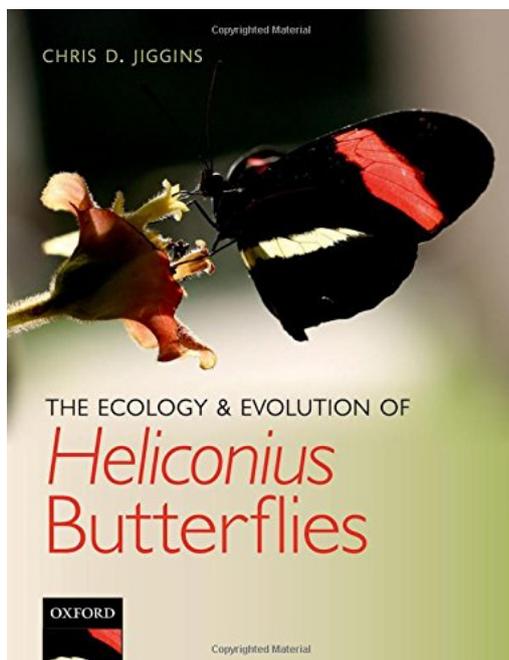
# Abstract / Abstracto:

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- If you have any questions about this booklet, you are welcome to refer to anyone of the permanent staff of the insectaries: Cruz, Oscar or Rémi.
- Note that *Heliconius* species are known to be polyphageous and eat several *Passiflora* species. This booklet summarizes the main host plants used in our insectaries per *Heliconius* species; although most of the butterflies species presented here can eat a majority of the hostplants grown at the insectaries.
- Some plants of our collection are not presented here, only the mainly used species are.
- Please, note that the comimics are gathered to facilitate differentiation.
- Note that the species and subspecies described in this booklet are the ones from Panama or the ones reared in our insectaries (Ecuador for most of them).
- We strongly recommend to read the Chris Jiggins Book “The Ecology and Evolution of the *Heliconius* Butterflies” in order to acquire the background knowledge needed for your time here among us.

ES

- Si usted tiene alguna pregunta sobre este folleto, puede dirigirse a cualquier miembro del personal de los insectarios: Cruz, Oscar o Rémi.
- Tenga en cuenta que las especies de *Heliconius* son polípagas y se alimentan de varias especies de *Passiflora*. Este folleto resume las principales plantas hospederas utilizadas en nuestros insectarios por especie de *Heliconius*; aunque la mayoría de las especies de mariposas presentadas aquí pueden comer la mayoría de las plantas hospederas cultivadas en los insectarios.
- Algunas plantas de nuestra colección no estan presentadas aquí, solo estan las especies principalmente usadas.
- Noten que las comimicas van juntas, para facilitar la diferenciacion.
- Noten que las especies y subspecies presentadas aqui son las de Panama o las que solemos criar en nuestros los insectarios (Ecuatorianas por la mayoría).
- Recomendamos lea el libro de Chris Jiggins “The Ecology and Evolution of the *Heliconius* Butterflies” para que adquiera una buena base de conocimientos sobre el tema de sus investigaciones.



Links for further information / Paginas que puede consultar para mas informaciones:

- <https://www.tropicleps.ch/?page=1&id=main>
- [https://www.ucl.ac.uk/taxome/neil\\_rosser/](https://www.ucl.ac.uk/taxome/neil_rosser/)
- <https://www.butterfliesofamerica.com>
- <https://heliconius-maps.github.io>
- <http://www.nic.funet.fi/pub/sci/bio/life/intro.html>
- <http://www.tolweb.org/Heliconius/72231>
- <http://www.heliconius.org/biology/ecology/>
- <https://www.ucl.ac.uk/taxome/jim/heliconf.htm>
- <https://www.cliniquevetodax.com/Heliconius/index.html>
- <https://www.nhm.ac.uk/our-science/data/hostplants/search/list.dsml?searchpageurl=browse%2edsml&sort=family&beginIndex=83970&family=copromorphidae&>

- *Agraulis vanillae vanillae*:



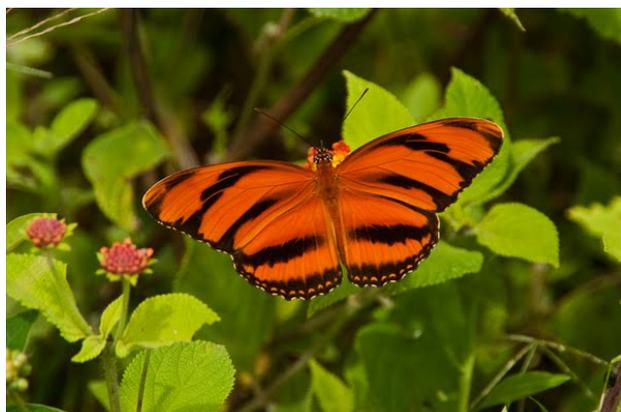
Host plants: *Passiflora biflora*, *Passiflora* sp « chica ». Very polyphagous.

- *Dione juno huascuma*:



Host plants: *Passiflora edulis*, *Passiflora seemanii*.

- *Dryadula phaetusa*:



Host plants: *Passiflora biflora*.

- *Dryas julia moderata*:



Host plants: *Passiflora auriculata*, *Passiflora biflora*, *Passiflora pittieri*.

- *Philaethria dido panamensis*:



Host plants: *Passiflora ambigua*, *Passiflora nítida*, *Passiflora riparia*, *Passiflora vitifolia*.

- *Eueides isabellae eva*:



Host plants: *Passiflora ambigua*, *Passiflora nítida*, *Passiflora riparia*, *Passiflora vitifolia*.

- *Heliconius atthis* & *Heliconius peruvianus*:



Host plants: *Passiflora reticulata*, *Passiflora sprucei*, *Passiflora* sp "chica".



Host plants: *Passiflora biflora*.

→ Note : *H.atthis* caterpillar and pupa are about the same as *H.hecale* but smaller. *H.peruvianus* caterpillar and pupa are the same as *H.charitonia*.

- *Heliconius charitonia vasquezea*:



Host plants: *Passiflora biflora*.

- *Heliconius cydno* & *Heliconius sapho* :  
*chioneus*
*sapho*





Host plants: *Passiflora biflora*, *Passiflora menispermifolia*, *Passiflora riparia*

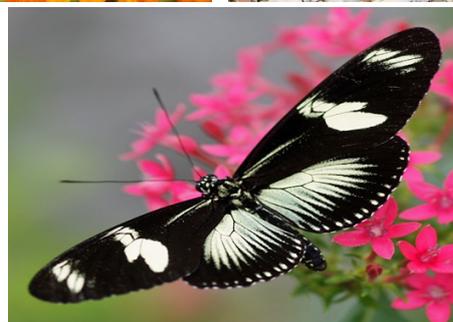


Host plants: *Passiflora pittieri*.

• *Heliconius doris*:



Host plants: *Passiflora ambigua*, *Passiflora riparia*.

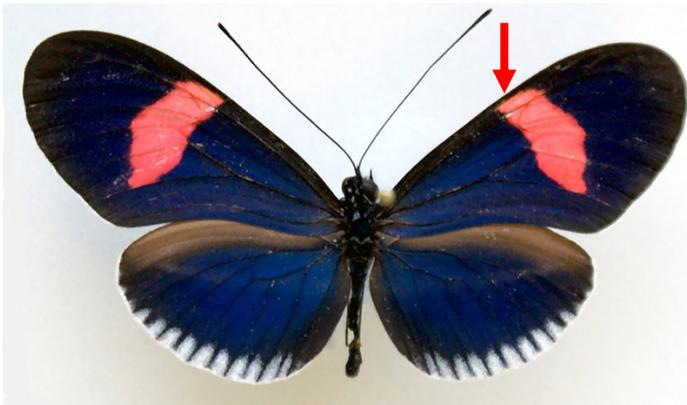


• *Heliconius erato* & *Heliconius melpomene*:

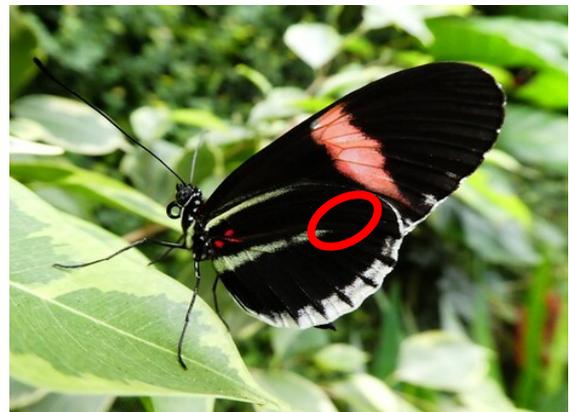
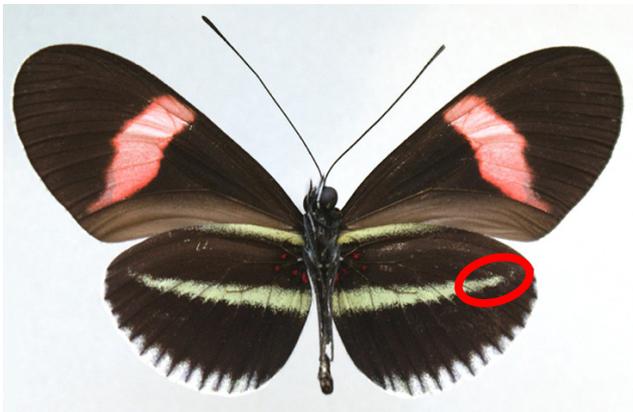


→ Ecuadorian subspecies

*cyrbia*



*cythera*



*lativitta*



*maletti*



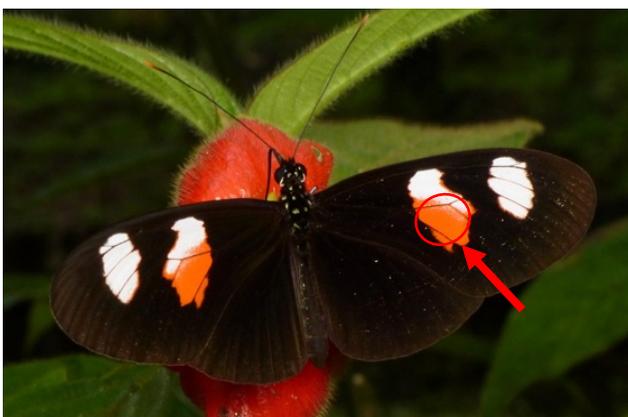
*etylus*



*ecuadoriensis*



*notabilis*



*plesseni*



→ Panamanian subspecies

*demophoon*



*rosina*



*hyدارa*



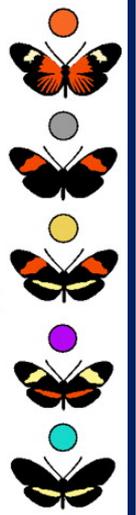
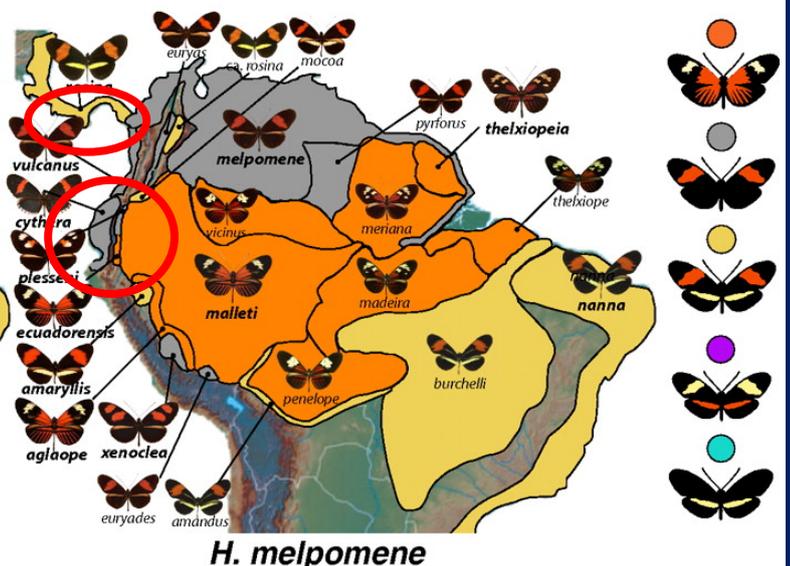
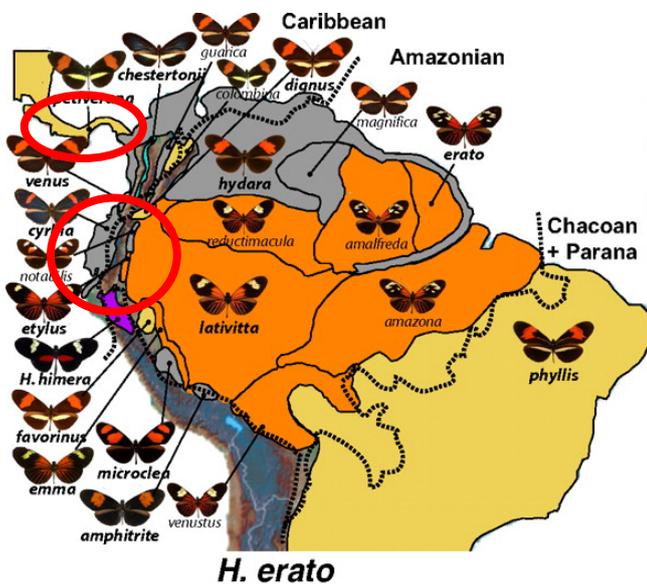
*melpomene*



Host plants: *Passiflora biflora*.

Host plants: *Passiflora menispermifolia*,  
*Passiflora riparia*, *Passiflora seemanii*,  
*Passiflora triloba*.

→ Geographic range:



• *Heliconius hecale* & *Heliconius ismenius*



→ ssp

*melicerta*

*boulleti*



!!! Careful, both species are variable on the forewings  
Cuidado, ambas especies son variables en las alas de arriba !!!



Host plants: *Passiflora nítida*, *Passiflora riparia*, *Passiflora triloba*, *Passiflora vitifolia*.

Host plants: *Passiflora quadrangularis*.

- *Heliconius hecale* & *Heliconius hecalesia*

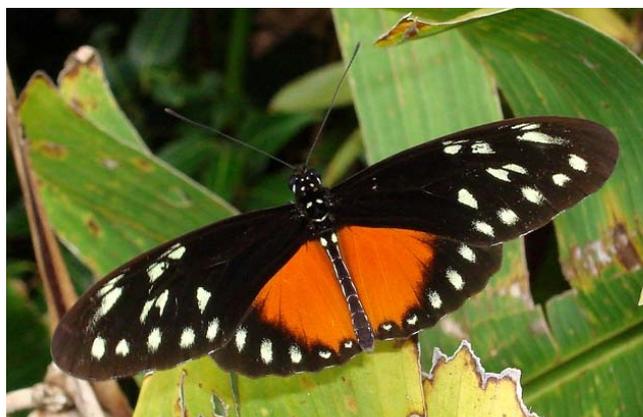


→ ssp      *zuleika*

*formosus*



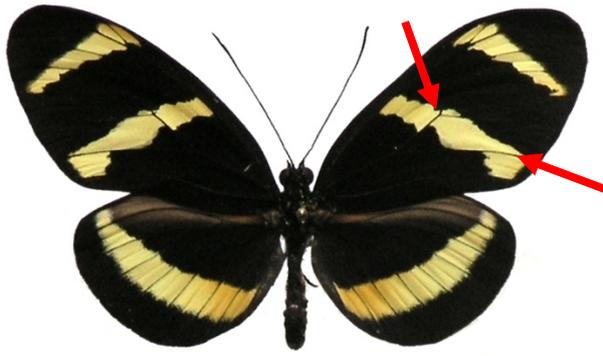
Host plants: *Passiflora nitida*, *Passiflora riparia*, *Passiflora triloba*, *Passiflora vitifolia*.



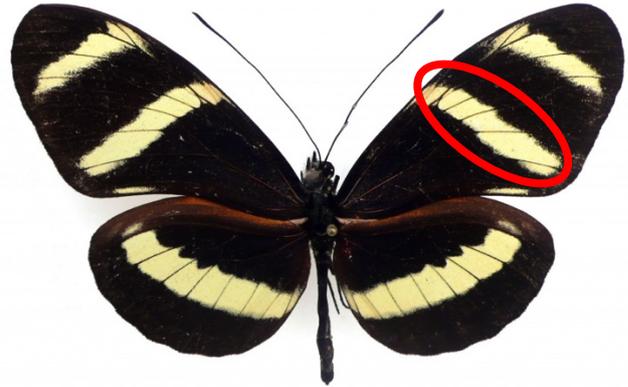
Host plants: *Passiflora biflora*.

- *Heliconius hewitsoni* & *Heliconius pachinus*:





Host plants: *Passiflora pittieri*.



Host plants: *Passiflora menispermifolia*,  
*Passiflora riparia*, *Passiflora triloba*,  
*Passiflora vitifolia*.

● *Heliconius himera*:



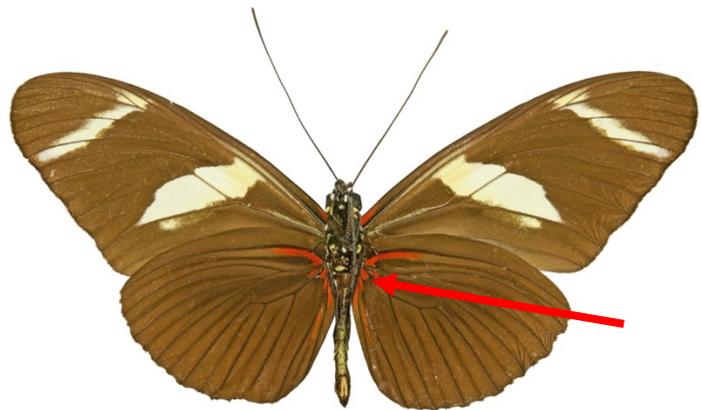
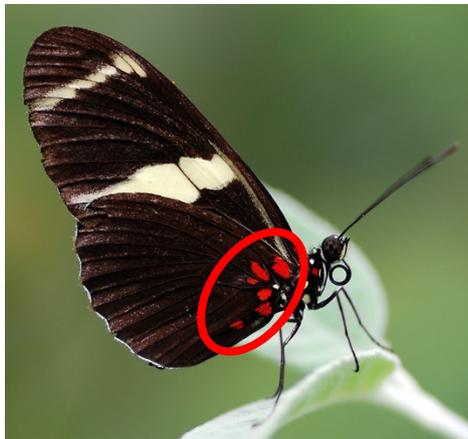
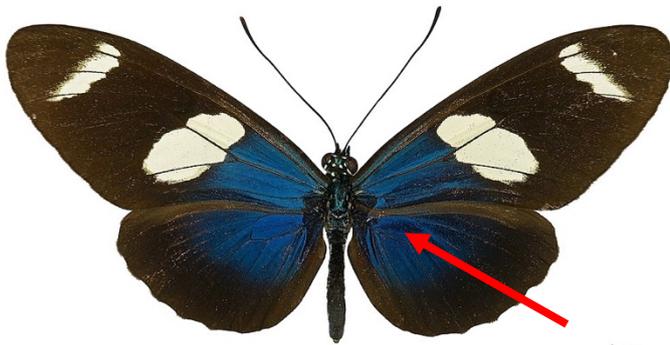
Host plants: *Passiflora biflora*.

● *Heliconius numata*:

Host plants: *Passiflora nitida*, *Passiflora riparia*, *Passiflora triloba*, *Passiflora vitifolia*.



● *Heliconius sara* & *Heliconius wallacei*:  
*magdalena* *flavescens*



**Host plants: *Passiflora auriculata***

**Host plants: *Passiflora edulis*, *Passiflora vitifolia***

Others species of Panama  
Otras especies de Panama

- *Heliconius antiochus aranea*:



Only found in Darien.

**Host plants:** *Passiflora citrifolia*, *Passiflora pittieri*.

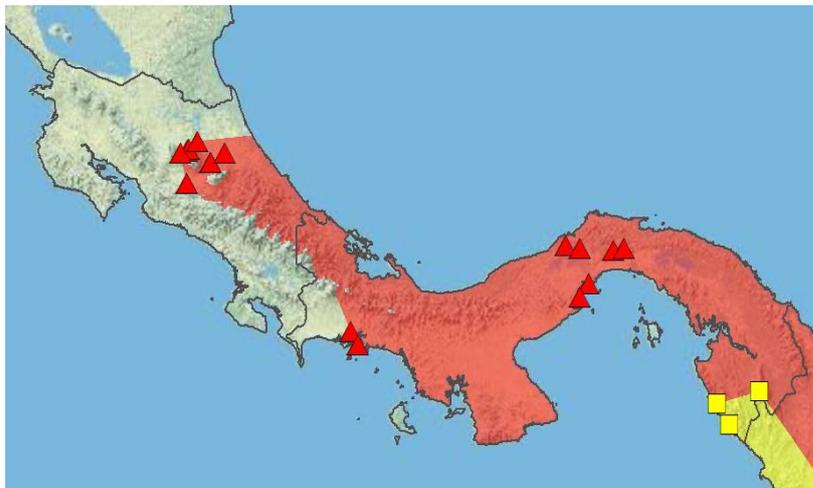
- *Heliconius clysonymus montanus*:



Only found in Chiriqui.

**Host plants:** *Passiflora biflora*.

- *Heliconius eleuchia eleuchia*:



Very sporadically found in Panama. Since 2018: 2 specimens sighted in Gamboa (cf Rémi Mauxion), 2 specimens sighted in San Lorenzo (cf. Rémi Mauxion), multiple times in Cerro Azul (cf. Oscar Paneso).

**Host plants:** *Passiflora arborea* (Synonyme *P.tica*), *Passiflora macrophylla*.

- *Heliconius ethilla claudia*:



Apparently common around the Canal Zone. Sighted a few times around Gamboa. Multiples times around Capira (Cf. Benita Hopkins).

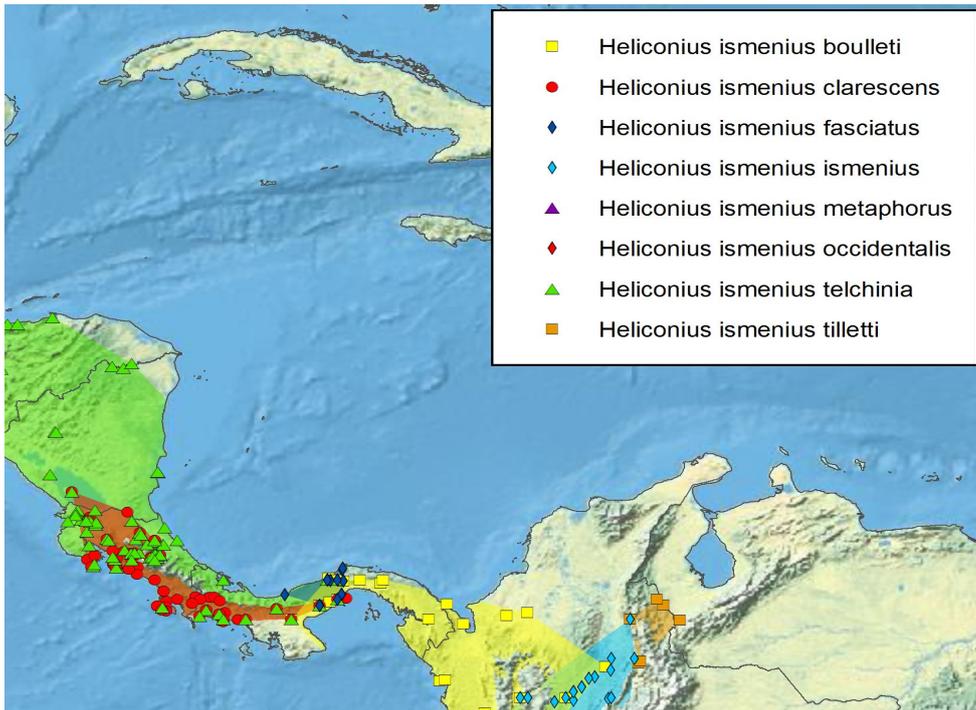
**Host plants:** Probably *Passiflora nitida* or *vitifolia*...?

● *Heliconius ismenius* ssp:

*clarescens*

*fasciatus*

*telchinia*



**Host plant: *Passiflora quadrangularis***

- *Heliconius melpomene vulcanus*:



Only found in Darien by the Colombian border.