

***Hortensia similis* (Walker 1851)**

Contributors

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Complete Latin Name + Higher Level Classification

Hortensia similis (Walker)

Domain: Eukaryota

Kingdom: Animalia

Phylum: Arthropoda

Subphylum: Mandibulata

Infraphylum: Atelocerata

Superclass: Panhexapoda

Class: Insecta

Subclass: Dicondylia

Infraclass: Pterygota

Superorder: Condylgnatha

Order: Hemiptera

Suborder: Auchenorrhyncha

Infraorder: Cicadomorpha

Superfamily: Cicadelloidea

Family: Cicadellidae

Genus: *Hortensia*

Specific name: *similis*

Scientific name: - *Hortensia similis* (Walker 1851)

1. Geographic Range

Hortensia similis se encuentra en América Central, Sur y Norte, es especial en las Antillas Mayores y Menores. También en el sur de los Estados Unidos en Florida y el oeste de California es questionable. Within Puerto Rico, the geographical distribution of *H. similis* is Rincón, Añasco, Mayagüez, Bayamón, Orocovis and most likely other territories.

2. Habitat

H. similis tends to prefer humid vegetations and vegetation surrounding plantations, such as sugarcane. There is a seasonal fluctuation in abundance, depending on rainfall and humidity. (Journal of Agriculture of University of Puerto Rico).

3. Physical Description

Head as wide as pronotum; vertex obtusely angulated, rounded to front, front tumid; pronotum slight larger than vertex, nearly truncate behind; elytral veins indistinct. (Broughton, 1932) Small insect that can vary between 5 to 7 mm long with a bright green color with black lines and strips on the head and pronotum (Guagliumi, 1962). The frontal part of the pronotum, the abdomen, and legs have a yellow color. The head has an ápice in a roman point that is three times thicker then longer and is thicker then the pronoto but half as long as this one. Its pronotum is also

thicker than it is long, round in the interior margin and concave posterior. The females have a tumid clypeus, abruptly folded backwards, a short distance from the anticielo. It can be seen at an obtuse angle while in the males it isn't so visible. The nymphs are a clear yellow-green color with eyes clearly differentiated but also the same color. (Arciniegas, 1991).

4. Development

H. similis Walter has three "life stages": egg, nymph, and adult. They lay the eggs in the sugarcane leaf tissue and can be observed when holding the leaf to the Light. These eggs, if not parasitized, hatch within seven days. (cita Journal of Agriculture of University of Puerto Rico). They shed 5 times during they're larval stage. The duration of the nymph stage is between 14 to 20 days. (Arciniegas, 1991).

5. Reproduction

Unknown

6. Lifespan/Longevity

Unknown

7. Behavior

In the commonly known "malojillo" they retreat to the wettest part during dry season (Martorell, 1976). Fitófagos, they insert they're stylet beak and maxiliaes into the plant tissue in order to feed on the savia of young plants. (Novoa y Alayo, 1986). The nymphs feed almost all the time. They insert they're tic beaks into the sugarcane plant and release they're legs, using them to remove the clear excrement that accumulated on the anus. (cita Journal of Agriculture of University of Puerto Rico).

8. Home Range

Not relevant

9. Communication and Perception

Unknown

10. Food Habits

In Puerto Rico *H. similis* feeds upon the following plants: *Cajanus cajan* (L.) Millsp., common names: "Gandul", "Grandur"; Pigeon-pea and Congo pea, *Cucubita moscata* (Duch.) Dúchense & Poir., common names: "Calabaza", Pumpkin or Squash, *Daucus carota* L., common names: "Zanahoria" and Carrot, *Eichhornia crassipes* (Mart.) Solms, common names: "Flor de Agua", Water hyacinth, *Erythrina berteroana* Urban, common names: "Machete", "Bucayo enano" and "Bucayo sin espinas", *Panicum muticum* Forsk, common names: "Malojillo", "Yerba Pará" and Pará grass, *Phaseolus vulgaris* L., common names: "Habichuela," Kidney bean and String bean, *Zea mays* L., common names: "Maíz", Corn and Indian Corn, *Oryza sativa* L., common names: "Arroz", and Rice, and also sugarcane plants. (Martorell, 1976).

11. Predation

This insect serves as a host for wasps. (Van Duzee, 1917). During the egg stage, they can be parasited by *Brachistella prima* Perkins, *Ufens niger* Asmead y *Oligosita comosipennis* Girault.

Los que no son parasitados salen del huevo a los siete días. Son depredados por lagartijos. Se han hallado algunos adultos muertos por lo que se sospecha fueron hongos: *Empusa muscae* (cita Journal of Agriculture of University of Puerto Rico).

12. Ecosystem Roles

H. similes (Walker) serves as a host for certain wasps and as a food source for other organisms such as lizards. Specific species are unknown.

13. Economic Importance for Humans: Negative

They are considered pests as far as farming is concerned, although a large amount is required in order to cause actual damage. It is suspected that they served as vectors for the “hoja blanca” virus in rice crops in Central and South America.

14. Economic Importance for Humans: Positive

None that could be found.

15. Conservational Status

Not endangered

16. Other Comments

Hortensia similis was reported for the first time by Dr. D. L. Van Dine (1911-31) as *Tettigonia*, and was then listed by the genus *Kolla* y *Cicadella*.

17. Contributors

Nico Franz and Juliana Cardona

18. References

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