***Exploring how climate will impact plant-insect distributions***

***and interactions using open data and informatics***

**SP-1: Natural History of Butterfly-Host Plant Interaction**

**- Assignment -**

**- Example -**

Student Name

**Butterfly Species:** Giant swallowtail, *Papilio cresphontes*

**Family:** Papilionidae

**Order or Suborder:** Lepidoptera

**Image of Butterfly:**



Photographed on August 12, 2011 Pointe Petre, Ontario Canada Photo credit: M Larrivee

**Physical appearance:** Upper-side of adult butterfly is a brownish black with large, yellow diagonal spots. Tails are yellow edged in black. Larvae are light brown or black with a highly reflective white spotting to resemble bird droppings. When disturbed, larvae will display the conspicuously colored osmeteria emitting a foul odor to further deter predation.

**Foraging behavior as larvae and adult:** Eats herbs and trees in the citrus family (Rutaceae) as a larva, then consumes a wide variety of nectar as an adult butterfly, males often found mud puddling on damp soil to acquire nutrients for mating.

**Habitat:** Often found in suburban and urban areas, citrus groves, or riparian areas

**Range:** Eastern North America to Rock Mountains

**Larval Host Plants:** Common North American larval host plants include prickly ash (*Zanthoxylum americanum*), hop tree (*Ptelea trifoliata*), and common rue (*Ruta graveolens*).

**Most Frequent Host Plant Reported on iNaturalist:**  prickly ash (*Zanthoxylum americanum*)

**Unusual Ecological Interactions:** This butterfly species uses multimodal signaling (visual and olfactory) to deter predators as larvae