Introduction
Species in the genus *Polygonia* are referred to collectively as the anglewings. The eastern comma, *Polygonia comma* (Harris), is also known as the hop merchant and the comma anglewing (Miller 1992). It is a relative small inconspicuous butterfly that is rather closely associated with moist woods where its preferred nettle hosts grow, but it sometimes strays into other areas. With its wings folded, it resembles a dead leaf and is highly cryptic.

Distribution
The eastern comma is found throughout most of the eastern U.S. south to north central Florida and the northern Gulf states, and west to eastern Wyoming and Colorado (Opler et al. 2009).

Description
Adults
The wing spread of adults is 1.75 to 2.0 inches (Allen 1997). The eastern comma can be differentiated from the closely related questionmark (*Polygonia interrogationis* [Fabricius]) by the silvery comma in the middle of the hind wing (lacking the dot of the questionmark), its smaller size, less strongly hooked forewing margin, and shorter hind wing tail. As with the questionmark, there are two color forms that generally correlate with the “summer” and “winter” adult generations. The upper side of the hind wings is predominantly black in the summer form and mostly orange in the winter generation.

Eggs
Eggs are green and the surface is sculptured with a series of vertical ridges

---

1. This document is EENY 455, one of a series of the Entomology and Nematology Department, UF/IFAS Extension. Original publication date June 2009. Reviewed January 2015. Visit the EDIS website at [http://edis.ifas.ufl.edu](http://edis.ifas.ufl.edu). This document is also available on the Feature Creature website at [http://entnemdept.ifas.ufl.edu/creatures/](http://entnemdept.ifas.ufl.edu/creatures/).

2. Donald W. Hall, professor; and Jerry F. Butler, professor, Department of Entomology and Nematology; UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county’s UF/IFAS Extension office.

U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place, dean for UF/IFAS Extension.
Larvae

Full grown larvae are approximately 1.2 inches in length (Minno et al. 2005). The head has short spines and a pair of branching spines on top. Body color is highly variable, from white to greenish-brown to black, and the branching spines (scoli) on the body are also variable from black to white with black tips (Opler and Krizek 1984, Scott 1984).

Pupae

Pupae are variable in color but always have prominent ventral gold or silver spots. The pupae are attached to a silk pad by the cremaster.

Life Cycle and Biology

There are two generations per year, with the summer brood probably estivating for much of the summer as adults and the fall-winter brood overwintering as adults (Opler et al. 2009). Adults feed on fermenting fruit and tree sap but rarely on flower nectar (Scott 1986). Males perch in the sun...
on foliage or tree trunks to await females (Opler and Krizek 1984) and defend territories (Bitzer and Shaw 1983).

Eggs are laid singly or in stacks on the undersides of leaves or less commonly on twigs. Larvae rest on the undersides of leaves and make nests by silking together the two sides. They hide in the nests during the daytime and feed at night.

**Hosts**

The larval hosts of the eastern comma are:

- Urticaceae - nettles
- Canadian woodnettle, *Laportea canadensis* [L.] Weddell
- *Urtica* species
- Ulmidae - elms
- American elm, *Ulmus Americana* L.
- Cannabaceae - hems
- common hop, *Humulus lupulus* L.

**Economic Importance**

Eastern comma larvae are occasionally found on common hops, *Humulus lupulus* L. The name hop merchant was originally assigned to the pupa (and later transferred to the adult butterfly) and is based on the practice of farmers predicting the future price of hops based on the variation in the silver and gold spots on the pupae (Weed 1917). The eastern comma does little damage to commercially grown hops and is of no economic importance (Hawley 1918). In fact, virtually all current commercial hops agriculture in the United States is in the Pacific Northwest and outside the distribution of the eastern comma.

**Selected References**


Hawley IM. 1918. Insects Injurious to the Hop in New York, with Special Reference to the Hop Grub and the
Hop Redbug. Cornell University Agricultural Experiment Station. November 15. pp. 147-224.


