Moth Cocoons

Luna Moth Species: luna Genus: Actias Family: Saturniidae Order: Lepidoptera Class: Insecta Phylum: Arthropoda Kingdom: Animalia

Promethea Moth Species: promethea Genus: Callosamia Family: Saturniidae Order: Lepidoptera Class: Insecta Phylum: Arthropoda Kingdom: Animalia

Cynthia Moth

Species: cynthia Genus: Samia Family: Saturniidae Order: Lepidoptera Class: Insecta Phylum: Arthropoda Kingdom: Animalia



Conditions for Customer Ownership (per USDA Permits)

We hold permits allowing us to transport these organisms. To access permit conditions, click here.

Never purchase living specimens without having a disposition strategy in place.

The USDA considers these moths to be a plant pest. We hold a permit to transport these pests for some states, however, the following states require an end-user permit in order to receive moth cocoons: AL, AK, AZ, AR, CA, CO, DC, FL, GA, HI, ID, IA, LA, MD, MA, MT, NE, NV, NM, NC, OR, RI, SC, SD, TN, VA. As a condition for transporting these organisms, we are required to notify the end user of the following information: For no reason shall any of these plant pests be released into the environment. These organisms may not be indigenous to your area and, if released, they could adversely affect your local environment.

Primary Hazard Considerations

- Always wash your hands before and after handling pupae or adult moths.
- Moths can fly away. Be careful when opening their cages.
- Moths have scales on their wings that will fall off and make a dust-like material; this dust is an allergen to some people.

Availability

• All moth pupae are wild-collected at the end of October. Pupae will remain viable in the refrigerator for at least six months and up to one year. Shortages may occur if demand is high.

How Will Animals Arrive and Immediate Requirements

• All moth cocoons will arrive in a 4 oz jar with cotton balls. They can be placed in the refrigerator upon arrival and kept cold for approximately 6 months. If not refrigerated, they will emerge approximately 4-6 weeks from the time of arrival. (Please note these are wild-collected so it is difficult to know the specific age; emergence may vary widely.).

To Emerge Pupae

• The pupae should be placed in a glass or plastic terrarium (minimum 3 gallon size). A mesh enclosure may also be used. The enclosure must be able to receive air circulation but not be open on any side to prevent escape. The pupae may be placed on a small piece of tissue paper or paper towel to remain clean until emergence. You may lightly mist your pupae daily with dechlorinated water.

Captive Care

Habitat:

- A <u>3 or more gallon plastic cage</u> works well for keeping moths. You can add dirt, grass, moss, sticks, and/or branches to the habitat to give the moths something to climb on.
- The habitat can be misted daily with dechlorinated water, to provide the moths with some moisture. You can dechlorinate tap water by leaving it out for 24-48 hours, or adding a <u>dechlorinating agent</u> to it.
- The habitat should be kept at room temperature (70-80°F). No special lighting or heat is required.



Care:

- Adult moths are short-lived and do not feed during this stage of their life.
- If branches or leaves are present and you have more than one moth in your habitat, mating may occur. At this point eggs may be laid within the enclosure.

Sexing Moths

Male	Female
Promethea - Mostly black/purple wings with a pattern bor-	Promethea - More patterns on border than males and col-
der around.	ored red/brown.
Cynthia - Longer overall wing span.	Cynthia - Shorter overall wing span.
Luna - Longer extension to tail and larger, fuller antennae.	Luna - Shorter tail and slimmer antennae.

Life Cycle

- Complete metamorphosis.
 - Egg: This stage lasts about 10 days.
 - Larvae: They are voracious eaters, and go through five instars during this stage, which lasts about 3-1/2 4 weeks.
 - **Cocoon:** This stage lasts about 2-3 weeks.
 - Adult Moth: They do not eat. They only mate for the week that they will live.

Wild Habitat

• These moths are found in deciduous forests and have a distribution throughout the U.S. The larvae feed on the leaves of many different types of trees. Adults do not feed. The season for these moths is from March to September, depending on the part of the country you are in. They are subject to predation by birds.

Disposition

- We do not recommend releasing any laboratory animal into the wild, and especially not insects that are considered to be pests or not native to the environment.
- Adoption is the preferred disposition for any living animal.
- If the insects must be euthanized at the end of study, follow one of these procedures
 - Put them into a container or bag and freeze for 48 hours.
 - Place them in 70% isopropyl alcohol for 24 hours.
 - Autoclave them @ 121°C for 15 min.
- A deceased specimen should be disposed of as soon as possible. Consult your school's recommended procedures for disposal. In general, dead organisms should be handled as little as possible or with gloves, and wrapped in an opaque plastic bag that is sealed (tied tightly) before being placed in a general garbage container away from students.



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