Land Isopods

Pillbugs and Sowbugs

Genus: *Oniscus, Porcellio* or *Armadillium*
Family: Oniscoidea
Order: Isopoda
Class: Malacostraca
Subphylum: Crustacea
Phylum: Arthropoda
Kingdom: Animalia

Conditions for Customer Ownership

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.

There are currently no USDA permits required for this organism. In order to protect our environment, never release a live laboratory organism into the wild.

Primary Hazard Considerations

Always wash your hands thoroughly after you handle your organism.

Availability

Land isopods supplied are either Sowbugs 87 W 5520 (*Oniscus* or *Porcellio*), package of 45 or Pillbugs 87 W 5525 (*Armadillium*), package of 45 and are generally available year-round, but they are wild-collected so shortages may occur. Substitutions of one species for the other may occur during shortages. Land isopods are shipped in plastic food containers with damp sphagnum moss or paper towel and a piece of potato or carrot. We over-pack each order of isopods. It is normal to have some deceased isopods in the container. You will receive at least the quantity of live isopods stated on the container. Average size of the land isopod is 1.0 centimeters. The isopods can survive up to one week in the shipping container.

Captive Care

Habitat:

- Use a small aquarium or plastic storage box to house your land isopods. The container should have a perforated lid to permit air exchange, but perforations should be small enough to prevent escape. Cover the floor of the container with five centimeters of rich soil. The soil in the habitat should be kept moist but not wet. Check daily and mist if necessary. Add stones, pieces of bark, or crumpled paper to the habitat to provide cover for the isopods.
- Maintain the habitat at room temperature. Soil should be replaced once or twice a year and any dead isopods should be removed from the container.

Care:

- Add a slice or two of potato per 50 pillbugs, which will provide the isopods with both food and moisture. Replace the potato weekly.

Information

- Method of reproduction: Sexual
- Determining Sex: Using a stereomicroscope or magnifying glass, observe the underside of the isopod near the posterior end. Males have two white, elongated appendages that serve as copulatory organs. These are modified "pleopods" and are absent in the females.
- Pillbugs have the ability to curl up into a ball when they feel threatened. Sowbugs cannot roll up into a ball.

Life Cycle

- Unlike other crustaceans which live on land, land isopods do not need to lay their eggs in an aquatic environment. Instead, the eggs of land isopods are brooded in a fluid-filled pouch on the underside of the female. After approximately three weeks, up to 200 young isopods, which are similar in appearance to the adults, emerge from the marsupium. They molt several times to grow. The entire life cycle takes two to three months.

Wild Habitat

Land isopods generally inhabit damp, dark environments such as gardens and woodlands where they hide under stones and logs. Land isopods are nocturnal, coming out at night to feed on plant matter and decayed wood.

Disposition

- We do not recommend releasing any laboratory animal into the wild, and especially not invertebrates that are not native to the environment.
- Adoption is the preferred disposition for any living animal.
- If the isopods 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 the organism in 70% isopropyl alcohol for 24 hours.
- A deceased specimen should be disposed of as soon as possible. Consult your school's recommended procedures for disposal. In general, dead insects should be handled as little as possible or with gloves, 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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