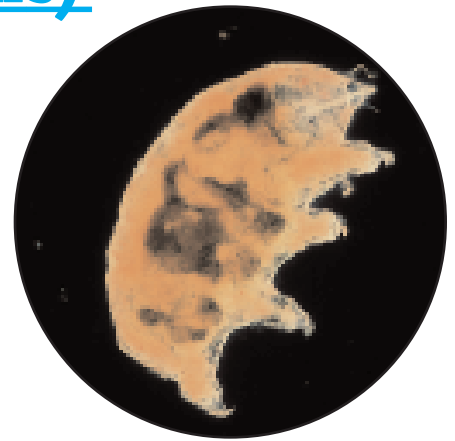


Tardigrades (Water Bears)



Genus: *Hypsibius* or similar genus

Family: Macrobiotidae

Order: Parachela

Class: Eutardigrada

Phylum: Tardigrada

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 requirements for this organism.

Primary Hazard Considerations

Wash your hands thoroughly after handling.

Availability

They are available year round. You will receive a jar of water-based medium containing tardigrades. We over-pack each order of tardigrades. It is normal to have some deceased tardigrades in the container. You will receive at least the quantity of live tardigrades stated on the container. Loosen the lid upon receipt to provide oxygen. Keep at room temperature away from direct sunlight and windows.

Hypsibius will be fine if left for a few days in this original jar with the lid unscrewed at room temperature. You will need a microscope to view this organism.

Captive Care

Habitat:

- Container and habitat requirements: *Hypsibius* can continue to be grown in a small culturing dish filled with [Hay Infusion Media 88 W 5300](#) and a few wheat grains in a loosely covered bowl under normal lighting at room temperature. Avoid direct sunlight. Under optimal conditions the *Hypsibius* population will double in about two months time, at which point you should split the culture into two dishes.

Care:

- *Hypsibius* feed mostly on plant material; they pierce the plant cells with their stylets and suck out the fluid. Keep filamentous algae such as [Spirogyra 86 W 0650](#) in the dish at all times. A small amount of algae may arrive in the jar with the *Hypsibius* but if you plan on keeping them longer than a week you should add a pipet full of filamentous algae. Keep adding food as needed. If the *Hypsibius* are unable to eat all the algae you provide, the algae may start growing in the bowl. This will not harm the *Hypsibius* but may make it difficult to view them.

Information

- Method of reproduction: While primarily sexual, some species reproduce by parthenogenesis. Truly aquatic species exhibit external fertilization; semi-aquatic species exhibit internal fertilization. Eggs are freely deposited singly or in groups. These are often sticky for attachment to substrate. *Hypsibius* females tend to lay their eggs inside their old cuticles as they molt; males then fertilize these eggs.
- Determining sex: Most species have both males and females, each with a single gonad. Dimorphism between the sexes is sometimes evident but not always.

Life Cycle

Tardigrades live between two months and two-and-a-half years. Tardigrades molt four to twelve times throughout their lifespan and reach sexual maturity after the second or third molt.

Wild Habitat

Tardigrades can be found almost everywhere around the world as long as there is some water. From mountaintops to deep sea, tropical rain forests to the Antarctic; different species of tardigrades exist in saltwater, freshwater, and terrestrial species can be found in damp mosses on land. They are active at temperatures ranging from near 0°C up to 30°C depending on the species. Arthropods are known to prey on tardigrades and some species of tardigrades are known to prey on rotifers, but most consume plant material.

Special Notes

They can survive drought by going into a shriveled anabiotic state, sometimes for many years. The head, posterior end, and legs retract to form dry tuns that can be spread by wind currents. When moisture returns, they resume their normal appearance and behavior.

Disposition

- In order to protect our environment, do not release this organism into the wild. If you cannot keep the tardigrades in your classroom, either:
 - Donate them to another teacher or
 - Treat culture with a 10% bleach solution for 24 hours (1 part bleach to 9 parts culture medium or water culture medium removed). Then rinse bleach solution down the drain with water until you can no longer smell bleach. Rinse remaining materials and containers with water and dispose of them in a general garbage container.