# Termite, Zootermopsis, Dampwood

**Genus:** Zootermopsis **Family:** Termopsidae **Order:** Isoptera **Class:** Insecta

**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.

Your termites have arrived! Termites are considered a plant pest by the United States Department of Agriculture. In order to continue to protect our environment; you must house your termites in escape-proof containers. With termites it is a good idea to "double container" them. This can be accomplished by placing a small container (such as sandwich size disposable container) inside a larger one (such as a casserole size disposable container.) Under no circumstances should you release your termites into the wild. Termites are restricted in some states, so an end user permit is required. Contact us for an up-to-date list of regulations or click here.

## **Primary Hazard Considerations**

Always wash your hands thoroughly before and after you handle your termites, its food, or anything it has touched. As in defending their colony in the wild, soldier termites can use their large mandible to pinch your skin!

### Availability

Termites are available year round, although in nature burrow deep into the ground during winter, and dry months. Termites will arrive in a plastic vial with vermiculite, a cardboard insert, and a small piece of wood. We over-pack each order of termites. It is normal to have some deceased termites in the container. You will receive at least the quantity of live termites stated on the container. If you don't see your termites, they may be hiding in the wood or cardboard insert. Break open and examine the wood. Do this carefully because the termites are delicate and can easily be crushed. The piece of cardboard can be pulled apart to release any hidden termites. You should place your termites into a new home as soon as possible. Termites should not be left in the shipping container for more than 2 days after arrival.

### Captive Care

#### Habitat:

- Any escape-proof container with holes for oxygen exchange. (We use a plastic shoe box sized container with a lid. The lid should have a 2" x 4" hole covered by a fabric or fine mesh screen. Line the container with sterile, organic soil or Vermiculite 20 W 8610. Provide pieces of damp, soft, wood for the termites to live in (these can be picked up in wooded areas. To ensure your wood is free of invasive creatures, freeze it overnight, and let it thaw before offering it to your termites). Push the wood about one-third of the way into the soil or vermiculite. A damp, paper towel (preferably un-printed) can be laid across the top of the wood to provide extra food and moisture. Make sure the lid is securely in place on the box. The closed box will help keep the humidity level up, but there should be some air circulation to prevent mold growth.
- Zootermopsis require relatively high humidity at ordinary room temperature (65-75°F), but can survive in a wide range of temperatures; ideally temperatures should not exceed 68°F.

#### **Termite Care:**

- Food: Termites will eat the wood that they are living in. Replenish wood supply when it appears they need more.
- · Water: Mist the paper towel daily with fresh water. Keep the habitat damp, but not soaking wet.
- Care: Habitat does not need to be cleaned, but if wood develops mold or fungus, remove immediately.

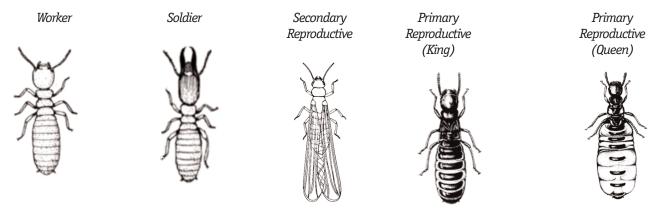
## *Information*

Method of Reproduction: Sexual, but most are sterile, non-reproducing members of a colony. Customer receives workers and/or soldiers, which are sterile and will not reproduce. Reproductive types are not included in purchased cultures due to State and Federal regulations.



### Life Cycle

- Termites have a simple metamorphic life cycle including egg and larval stages. Approximate lifespan of worker is about one year.
- Types of adult Zootermopsis and lifespan: The species is typically divided into castes of individuals: reproductive adults with wings, workers, and soldiers. Both workers and soldiers are sterile.



Scale is about four times larger than actual *Zootermposis*, with the worker approx. ½ inch long

Workers —have pale bodies and lack compound eyes and wings. Main duties include: collecting food, feeding the queen, soldiers, and young, and constructing galleries in the wood. Worker and soldier termites can live for up to a year when properly cared for.

Soldiers —have pale bodies, large jaws, and no wings; they are the defenders of the colony. They protect it by using their large mandibles.

Secondary Reproductives—have pale bodies, wing buds, and compound eyes. Has the ability to reproduce should the king or queen of the colony die.

Primary Reproductives (King and Queen)—have dark bodies, compound eyes and wings. Queens can lay thousands of eggs a day and can live for about 15 years.

### Wild Habitat

- Many species of termites live throughout world, North American termites are most prevalent in the south eastern states and in California. They live in colonies and can adapt to diverse habitats as long as food is available. They are preyed upon by many insectivores, but they are a primary food source for aardvarks. In North America, some types of ants are significant predators of termites.
- Dampwood termites are generally much larger than subterranean termites. They can be up to 1" long when swarming (secondary) reproductives looking to start new colonies). Dampwood termites always eat across the grain. They make a series of chambers connected by tunnels in the wood.

## Special Notes

Termites from the genus Zootermopsis are native to the West Coast of the United States and are the host organisms for many protozoa such as Trichonympha, Trichomonas, Streblomastix, and Hexamastix. The majority of these protozoa have a mutual relationship with the termite where each organism benefits from the relationship. In this particular relationship, the protozoa digest wood cellulose in order for the termites to absorb the nutrients.

# Disposition—Do one of the following:

We do not recommend releasing any laboratory animal into the wild, and especially not termites 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 the organism in 70% isopropyl alcohol for 24 hours
  - Autoclave the organism @ 121°C for 15 minutes.
- 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.