

Species: domesticus Genus: Acheta Family: Gryllidae Order: Orthoptera Class: Insecta Phylum: Arthropoda

**Phylum:** Arthropoda **Kingdom:** Animalia

### Conditions for Customer Ownership

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

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 after handling the crickets.
- There are no health risks from crickets, even if ingested. They will not bite.

# **Availability**

- Crickets are generally available year around, since they are commercially reared.
- Crickets will arrive packed in a small waxed cardboard container with a damp paper towel. We over-pack each order of crickets. It is normal to have some deceased crickets in the container. You will receive at least the quantity of live crickets stated on the container. Healthy nymphs and adults are very active. Two week old nymphs are about ¼ inch long and adults are about 1 inch long. They can live in the container they are shipped in for 1–2 days but should be transferred to their habitat as soon as possible to remain healthy.

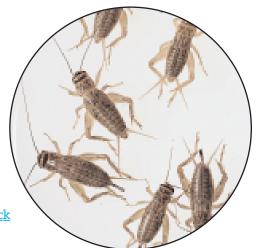
## Captive Care

#### **Habitat:**

- A small number of crickets (up to 50 adults or 200 nymphs) can be housed in a 2-gallon Terrarium 21 W 2101 with a screened or ventilated lid. Larger numbers, (50–1000 adults or 200 to 2000 nymphs), can be kept in a large 18–20 gallon plastic storage bin, with sides at least 16 inches high. Don't cover the bottom with any substrate and keep it dry. Place pieces of cardboard egg carton, empty paper towel rolls, or wadded up newspaper in the container for hiding places. Crickets are mostly nocturnal and tend to avoid light. They will survive well at room temperature, but prefer temperatures greater than 80°F to breed. Ventilation is important. For the storage bin, cut a large hole in the top and tape a piece of window screen over the hole (duct tape works well).
- Remove any dead crickets to extend the life of the remaining crickets. The container should be completely cleaned if it gets wet or moldy, a large number of crickets die or the fecal material (called frass) begins to build up.

#### Care:

- Food: Crickets will eat a variety of things. Dog or cat food in a shallow dish that they can climb into works well. (Use 1–2 Tbsp. for up to 50 crickets. For 50–1000 crickets in a large plastic bin, use ½ to 1 cup.) Food should be checked 1–2 times per week and should be changed if it becomes wet or moldy. Fresh fruits and vegetables are great for added nutrition. A few suggestions are a leaf of lettuce, a couple of slices of orange, apple, potato, or a few chunks of carrot. Do not put in more fresh food than they can eat in a day or two. Be sure to remove any fresh food that starts to rot or mold.
- Water: The water dish should also be shallow enough that the crickets can climb up or jump onto it. Crickets can drown easily, so to prevent this, you should place a piece of natural sponge (manufactured sponges sometimes contain unwanted chemicals) in the dish, or you could add enough clean, course gravel so that they have "stepping stones" through the water.





#### **Information**

- Method of Reproduction: Sexual. Fertilization is internal and females can store sperm. Females will lay 50–100 eggs beneath moist ground.
- Determining sex: Females have one long ovipositor for laying eggs underground, this projects out from the center of the end of the abdomen and is about as long as the abdomen. The paired cerci are sensory projections from the end of the abdomen and are seen in both males and females.

## Life Cycle

Incomplete metamorphosis. Eggs hatch in 2–3 weeks. Nymphs do not have fully formed wings and will become sexually mature in 2–3 months depending on temperature. Adult crickets live for another 2–3 months. Crickets survive winters by lowering their metabolic rate and going into diapause.

#### Wild Habitat

The cricket is probably native to Southwestern Asia or Northern Africa, but there are wild populations throughout the eastern half of temperate North America. They inhabit forest and grassland settings as well as human environments. They are omnivores, so they eat almost anything including leaves, fruit, and other insects (both dead and alive). Birds, frogs and lizards prey upon crickets.

### Special Notes

- Crickets are raised commercially for pet food and fishing bait.
- Male crickets stridulate or "chirp" by rubbing the "scraper" of one forewing across a "file" on the other. They use these noises to attract mates, define territory and give warnings. In ancient China, crickets were kept as pets in small decorative boxes, sometimes even made of gold. These boxes were often placed in their sleeping quarters, so that the crickets could sing them to sleep.
- Crickets have ears that are located on the inside of their front legs.
- Crickets can jump more than 20 times their own body length.

## 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.
- 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.

