Grey Flesh Flies

Species: *bullata*
Genus: *Sarcophaga*
Family: Sarcophagidae
Order: Diptera
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.

- 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

- It is recommended that you wear gloves when handling *Sarcophaga*.
- Always wash your hands after handling *Sarcophaga* larvae, pupae, adults, their food, or anything they have touched. Be sure to disinfect your work area.
- *Sarcophaga* do not bite.

Availability

- *Sarcophaga* larvae and pupae are generally available year-round.

How Will Animals Arrive and Immediate Requirements

- Your *Sarcophaga* pupae will arrive in a capped plastic vial .
- Your *Sarcophaga* larvae will arrive in a capped plastic vial with a small amount of food and wood chips.
- Both pupae and larvae can be stored in the vial in the refrigerator at 4°C (larvae for 1-2 weeks and pupae for 4-6 weeks). This effectively halts their development.
- Once removed from the refrigerator, the larvae will continue development and the flies will emerge from the pupae within 5-10 days.
- We over-pack each order of *Sarcophaga*. It is normal to have some deceased *Sarcophaga* in the container. You will receive at least the quantity of live *Sarcophaga* stated on the container.

Captive Care

Habitat:

- For the larvae, obtain a 2-1/2 gallon plastic container with a tight-fitting lid. Cut a 2 x 2 inch hole in the center of the lid and tape a piece of very fine mesh or muslin over the hole to seal it. Put 2-3 inches of substrate (soil or sawdust) in the bottom of the container. Place the larvae in a dish with raw meat (liver works well). The sides of the dish should only be an inch or so high. Place the dish on top of the substrate. Keep the container at room temperature (24-27°C). Add more meat/liver as needed. When the larvae are ready to pupate, they will migrate out of the dish and into the substrate to about 1" deep. The liver may be removed at this time.

- For the pupae, set up a 2′ x 2′ screen cage lined with paper towel. Hang a reflector light with a 60 watt bulb above the tank for added warmth and light. Plug the light into a timer set on a long day cycle (16 hours of light and 8 hours of dark). Place the pupae in a shallow dish and set it in the cage. For a source of water, use a dish with a non-chemical sponge or a plastic drink cup with a lid and a wick. Fill a small dish with a 1:1 mixture of powdered milk and sugar for a food source. Mist the cage daily to increase the humidity, but avoid getting the food dish wet. Mated females will begin to lay eggs within about 1 week of emergence. Place a small cup of raw meat or liver in the cage for egg collection. Females will lay eggs directly on the meat.

Information

- Method of reproduction: Sexual.
- The males emit pheromones to attract the females.

Life Cycle

- Complete metamorphosis, consisting of eggs, larvae, pupae and adults.
- Females are larviporous, meaning that the eggs hatch internally and the larvae are then "live-born."
- The larval stage lasts about 4 days . Each larva passes through 3 instars.
- The adults emerge from the pupae in about 1 week, depending on temperature.
- Egg-laying commences about 1 week after emergence.

Wild Habitat

- *Sarcophaga bullata* are found throughout the United States and in southern Canada from British Columbia to Quebec.
- They feed on carrion, fecal matter, and garbage.
- *Sarcophaga bullata* are harmless to humans.
- Flies overwinter in the ground as pupae.

Special Notes

- As decomposers, fly maggots are important players in keeping our environment "cleaned up."
- Fly larvae play an important part in modern forensics. Determination of the age of the larvae or pupae can indicate time of death.
- *Sarcophaga* are host to a small parasitic wasp, *Nasonia vitripennis*. This wasp is often used in genetic experimentation.

Disposition

- We do not recommend releasing any laboratory animal into the wild, and especially not organisms that are 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 min.
- A deceased specimen should be disposed of as soon as possible. Consult your school's recommended procedures for disposal. In general, dead crabs 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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