

# Madagascan Hissing Cockroach

Class	Order	Family	Genus species
Insecta	Blattaria	Blaberidae	<i>Gromphadorhina portentosa</i> (Schaum)

## Range

Cockroaches occur worldwide but this species of cockroach is restricted to the island of Madagascar

## Habitat

The hissing cockroaches occur in the dry spiny forests which occur in the southern regions of Madagascar.

## Niche

They live under bark, in leaf litter or in tree cavities.

## Diet

**In nature:** Cockroaches are scavengers and feed on decaying matter such as fallen fruit and other organic material found in the leaf litter.  
**In culture:** Romaine lettuce, apple, orange, mango, carrots, dog kibble, tetramin flakes.

## Reproduction

**Growth:** Gradual, they molt 6 times till adulthood.

**Egg:** Female hissing roaches lay their eggs in a purse-like capsule (ootheca) which is retained within the body until the eggs hatch. The female extrudes the egg case externally, exposing it as she is forming the ootheca and then she retracts (withdraws) it back into her abdominal cavity for 60 days or more.

**Immature:** resemble the adults but are smaller.

**Adult:** Unlike most insects both the males and females and males are sexually dimorphic.

Males have two large protuberances or bumps on their prothorax

**Lifespan:** It takes about 5 months for the nymphs to reach adulthood. They may live for two or more years.

**Behavior:** The male and female stroke each other's antenna, accompanied by a subdued mutual hissing. The pair progress to body stroking. Once attached to each other, male and female stretch out so they are facing in opposite directions for 20-30 minutes.

Adults can reach up to 10 cm in length and weigh up to 24 grams. Color ranges from brown on the pronotum to reddish-orange on the abdomen.

## Husbandry

**Substrate:** Vermiculite, soil, sand, or a combination works fine too. (1 to 2 inches in depth). Moisten one corner of the substrate to create a moisture gradient.

**Water** a shallow petri dish with cotton, discoloration from bacterial growth can be easily and quickly detected.

**Furniture: Vertical pieces of bark provide them with a place to molt, other** disposable or cleanable objects such as paper towel tubes, plastic tubes, etc) placed on the ground provide them with cover. Keep any "furniture" away from contact with the lid, juvenile can also climb up glass so some labs use a vaseline or flouon barrier at the top.

## Special Adaptations

Hissing cockroaches produce a hissing sound by forcing air from their air spiracles located on the sides of their abdomens (on the 4th abdominal segment). Hissing communication is used during courtship, fighting, copulation and for defense.

## Related Species

*Gromphadorhina picea*, *G. brunneri*, *G. javanica* and *Elliptorhina Chopardi*.

## Sources

[http://www.key-net.net/users/swb/pet\\_arthropod/hiss.htm](http://www.key-net.net/users/swb/pet_arthropod/hiss.htm)

Barth, R. H., Jr. 1968. *Psyche*, Vol. 75, pp. 124-131. (mating behavior)