

Ministry of Agriculture, Land and Fisheries
Extension Training and Information Services Division
FACT SHEET

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GIANT AFRICAN SNAIL (GAS)

What is the Giant African Snail (GAS)?

The Giant African Snail (*Lissachatina fulica*) is native to East Africa and was introduced into the Caribbean in the 1980's. It was first discovered in Diego Martin, Trinidad in October 2008. Since then it has spread to other areas of Trinidad including Aranguez, Golden Grove, Chase Village and San Fernando.

It is a land snail that can grow up to 20 cm (7.9 inches) in length. It is on the list of the world's 100 most destructive pests. Its presence in a country can affect trading with other nations.

Description of Giant African Snail

The shell of the GAS is reddish brown with cream to yellow stripes running in one direction along the length from the pointed part of the shell (Figure 1). The shell has five or more whorls.

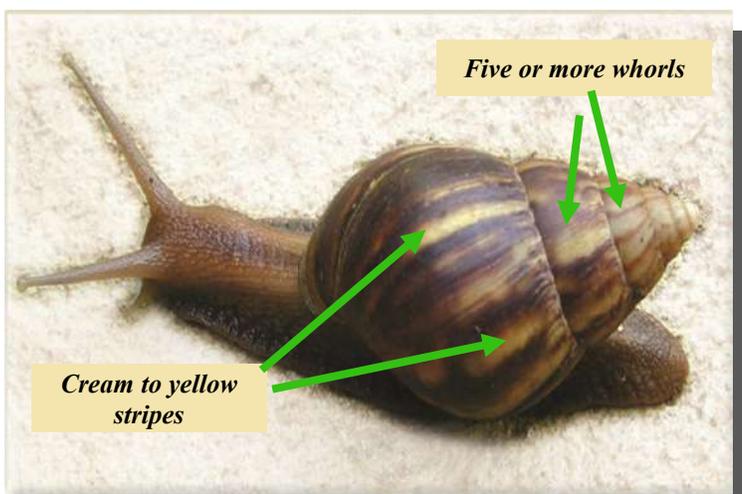


Figure 1: Giant African Snail (GAS)

The number of whorls allows GAS to be easily distinguished from two local snails (*Orthalicus sp.* and *Megalobulimus sp.*). The *Orthalicus sp.* usually has less than five whorls and a black X on its' back (Figure 2a). The *Megalobulimus sp.* (Figure 2b) has a pale white shell and can grow as large as the GAS. **Local snails are harmless. DO NOT KILL local snails.**



Figure 2a: Local snail: *Orthalicus sp.*



Figure 2b: Local snail: *Megalobulimus sp.*

The younger stages of GAS are similar in appearance to the adults; they are just smaller (Figure 3).



**Figure 3: Giant African Snail (GAS)
(Different growth stages)**

These snails are hermaphrodites (have both male and female reproductive organs) but need to mate with other snails in order to produce fertile eggs. They reach sexual maturity at 5 months and each snail can produce up to 1200 eggs in its lifetime. If the snail faces the threat of death, its response would be to release eggs.

Where Can GAS be Found?

GAS can be found on and under leaves, along the drains, on walls, in shrub borders, under garbage, in dirt, on vehicles and dark moist areas. The snail leaves a characteristic thick slime trail and clumps of faeces.

What Does it Eat?

Giant African Snail is a scavenger and feeds on decayed vegetation in its natural habitat but it also feeds on plants. The Giant African Snail feeds on over 500 plant species including vegetables, fruit trees, field crops, forest trees and ornamentals. It has a preference for papaya and banana.

How is GAS Spread?

Live snails and eggs can be spread in several ways:

- * Movement of soil with snail
- * As hitchhikers on vehicles
- * On/in planting material
- * In garbage
- * Through water courses.

Managing Giant African Snail (GAS)

The Giant African Snail can be managed and prevented from spreading to new areas using a number of methods or approaches. These methods can be cultural or chemical.

Each method can be adopted by householders in and around their homes or gardens and farmers in and around their fields.

Cultural Method for Managing GAS

- * Collect and place snails in a plastic container with a fitted cover.
- * Make a solution by dissolving:
 - ◆ 400 grams (2 cups) of table/cooking salt in 4 litres (1 gallon) water at room temperature.
 - Or**
 - ◆ 500 ml (2 cups) of household bleach in 4 litres (1 gallon) of water at room temperature.
- * Put the snails in the salt/bleach solution.
- * Cover the container and leave for 24 hours. During this period the snails will drown and die in the salt/bleach solution.

Dead snails must then be burnt in a metal barrel (Figure 4).

Metal barrel for burning snails must be 3m (10ft.) or more away from structures.

Barrel should be covered with a metal grill to prevent snails from escaping.



Why should dead snails be collected and burnt?

Dead snails release viable eggs into the soil. The eggs hatch and the snail population continues.

Dead snails give off a bad odour.

Dead snails attract birds, rodents and other creatures to the area.



Did you know?

The Giant African snail is a vector of the Rat Lungworm which can cause eosinophilic meningitis disease.

Do not handle the snail with your bare hands.

Use plastic gloves or any water proof material such as plastic bags when handling the snail.

Chemical Methods in Managing GAS

This method involves using traps or barriers (bait or spray) in and around the field.

Trap Method

Make a solution using one gallon of water and a pesticide with the active ingredient thiodicarb. Follow the manufacturers' recommendation.

Place green soft plant material (such as leaves from cabbage, pakchoi, papaya) into a container.

Pour the thiodicarb solution onto the leaves and soak for 1 hour.

Remove soaked leaves from the container and place in heaps in and around the field. Snails feed on the leaves and die.

Collect dead snails and burn in a metal barrel (Figure 4).

Barrier Method (Bait or Spray)

Bait

* Broadcast snail bait with the active ingredient methaldehyde around the field or place the bait in heaps in and around the field.

The adult snails would feed on the bait.

This causes them to stop feeding on plant material and they would die within 2 - 3 days. Collect dead snails and burn in a metal barrel (Figure 4).

Spray

- * Make a solution using a pesticide with the active ingredient thiodicarb. Follow the manufacturers' recommendation.
- * Apply this thiodicarb solution in and around the field, bushy areas using a spray bottle or a knapsack sprayer. This chemical spraying kills adults, juveniles and eggs.
- * Collect dead snails and burn in a metal barrel (Figure 4).

ALWAYS USE PROTECTIVE GEAR WHEN HANDLING CHEMICALS!!

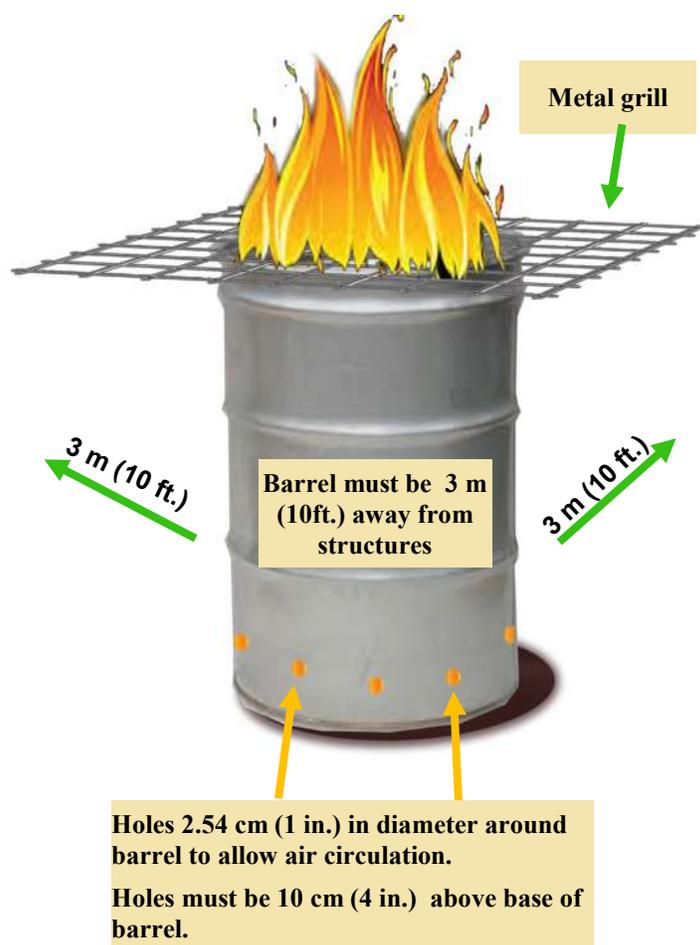


Figure 4: Metal barrel used for burning snails

The Giant African Snail is a Notifiable Pest.

By law, you are required to report any sighting to the Ministry of Agriculture, Land and Fisheries.

Call the snail hotline at **646 - 6284** or send email to: **snailreport@gmail.com**

You must take action to destroy this pest.

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