

**Identity:** *Archachatina marginata* (Swainson, 1821)

**Systematics:** Achatininae, Achatinidae, Pulmonata, Gastropoda, Mollusca

**Common names:** Banana Rasp Snail, Escargot Géant.



USDA photo by Patrick Marquez



USDA photo by Brian B. Sullivan

## Description

### Dimensions

Up to 21 cm (over 8 inches) in height.

### Shell description

“Separated from *Achatina* species by its very large, bulbous protoconch, as compared with the narrow, pointed spire of those species. It is distinguished from related *Archachatina* species by two principal characters: its “subsutural, usually strongly marked engraved line, separated from the suture by a narrow, depressed area covered with irregular, low vertical folds, the suture itself being straight or very lightly wavy, not crenulate. The engraved line starts on the fourth or fifth whorl and is often deep and prominent, particularly on the body-whorl; the second feature is a peculiar micro-sculpture of the body-whorl, only visible with the proper magnification. It consists of numerous extremely fine, close-set, criss-cross or anastomosing lines, making the surface of the periostracum look as if it had been pressed with a very finely woven cloth .... The neopionic [=embryonic] whorls, when well preserved, ... are densely covered with regular spiral and vertical rows of minute granulations, which become coarser on the first post-neopionic whorls.... Shell fairly uniformly marked with numerous chestnut-brown or pale brown vertical streaks, stripes, zigzag lines, or blotches on a straw-yellow background.” (Bequaert, 1950)

Due to the wide distribution of the species, there are a number of named subspecies or forms, differing in overall shape, size and coloration.

**Typical *marginata*:** Large and broad, with a white or bluish white columella, parietal wall and outer lip.

**Subspecies/form *ovum*:** Large and broad, with a white or bluish white outer lip, but an apricot-yellow columella and parietal area. Yellowish apex.

**Subspecies/form *suturalis*:** Medium to large, slenderer and with a narrower body whorl. Columella and parietal wall more or less vinaceous red. Apex usually red.

## **Pest Significance**

As a generalist phytophagous gastropod, the Banana Rasp Snail is not host-specific. Crops reported affected by this species include banana, lettuce and papaya in Nigeria, and bananas elsewhere in West Africa. It has been reported to prefer fruit (Eichhorst, 2019), and plants with succulent growth.

## **Geographic Distribution**

**Original distribution:** Native to West Africa, from Benin to the Republic of Congo, including islands of the Gulf of Guinea, namely São Thomé and Bioko.

### **Introduced to:**

**West Africa** (beyond original distribution): southwestern **Ghana, Annobón Island and São Thomé.**

**West Indies: Martinique** (in 1987) from Benin (West Africa). It is often intercepted by Quarantine Authorities at US airports, especially Atlanta, Boston, Chicago, Detroit, Dulles, and New York (John F. Kennedy), and in packages intercepted in the US Mail.

## **Life History**

Very little is known. What is known is that each hermaphroditic snail can lay a typical clutch consists of just 4-5 large eggs, each the size of a pigeon egg. For this reason, the Banana Rasp Snail is not considered as a high invasive risk. Illegal shipment of an *Archachatina marginata* f. *ovum* intercepted in Detroit, MI, releasing its eggs [Photo courtesy of B. Sullivan]

## **Movement and Dispersal**

**Natural spread:** Natural spread is extremely slow.

**Human-assisted spread:** Transportation on local produce, intentional spread by individuals for food and as folk medicine.

Frequently intercepted by Agricultural Inspectors in baggage of international travelers from West Africa, particularly Nigeria, Ghana and Cameroon. Also found periodically in pet shops in the United States.

## **Parasitology and Public Health Significance**

The Banana Rasp Snail is potentially an intermediate vector of the Rat lungworm (*Angiostrongylus cantonensis*), a parasitic nematode worm causing eosinophilic meningoencephalitis/cerebral angiostrongyliasis in humans and similar conditions in livestock including household pets. The disease can be contracted from the consumption of undercooked snail meat and from the residual slime left on uncooked fruits and vegetables. This disease causes a wide variety of neurological disorders, permanent brain damage, blindness and even death.

## **Selected References**

- Bequaert, J.C.**, 1950, Studies in the Achatininae, a Group of African land Snails. *Bulletin of the Museum of Comparative Zoölogy at Harvard College*, **105**(1): 1-216, 81 pl.
- Eichhorst, T.**, 2019, The giant African snail – again. *American Conchologist*, **47**(4): 12-17
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