

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

**Systematics:** ACHATINIDAE, PULMONATA, GASTROPODA, MOLLUSCA

**Common names:** Banana Rasp Snail.



**DESCRIPTION:**

**Dimensions:** Up to 21 cm in height, and 13 cm in maximum diameter.

**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 slightly 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 nepionic [=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 races or subspecies, which differ in terms of overall shape, size and coloration.

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

**Subspecies *ovum*:** Large and broad, with a white or bluish-white

outer lip, but an apricot-yellow columella and parietal area. Yellowish apex.

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

**HOSTS:** As a phytophagous gastropod, this species is not host-specific. It has been documented as causing economic damage to various crop plants.

**GEOGRAPHIC DISTRIBUTION:**

**Original distribution:** believed native to West Africa (Dahomey to Congo, including São Thomé).

**Introduced to:**

**WEST AFRICA** (beyond original distribution): southwestern Ghana; Annobón; and São Thomé.

**WEST INDIES:** Martinique (1987) from Benin (West Africa).

Routinely intercepted by Quarantine Authorities at US airports, especially Atlanta, Boston, Chicago, Detroit, Dulles, and JFKIA, and also in packages intercepted in the US Mail.

**LIFE HISTORY:**

Very little is known.

**MOVEMENT AND DISPERSAL**

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

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

Routinely intercepted by the USDA in baggage of international travellers from West Africa, particularly Nigeria, Ghana and Cameroon. Also found periodically in pet shops in the United States.

## **PEST SIGNIFICANCE**

**Economic impact:** Crops reported affected by this species include banana, lettuce and papaya in Nigeria, and bananas elsewhere in West Africa. It has been reported to have a preference for fruit, and plants with succulent growth.

## **PARASITOLOGY AND PUBLIC HEALTH SIGNIFICANCE**

*Archachatina marginata* is potentially an intermediate vector of the Rat lungworm *Angiostrongylus cantonensis*, causing eosinophilic meningoencephalitis in humans.

## **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.
- Palcy, L. & A. R. Mead** 1993 Les deux redoutables escargots géants a la Martinique. *Phytoma*, (449): 48-50.
- Raut, S.K. & G.M. Barker** 2002 *Achatina fulica* Bowdich and Other Achatinidae as Pests in Tropical Agriculture. In: Barker, G.M. (ed.) *Molluscs as Crop Pests*, CAB International 2002, pp. 55-114.