

Identity: *Achatina achatina* (Linné, 1758)

Systematics: Achatinidae, Pulmonata, Gastropoda, Mollusca

Common names: Giant African Snail, Escargot Géant.



USDA Photo by David G. Robinson

Description

Dimensions

Up to 20 cm in height, and 10 cm in maximum diameter.

Shell description

“The full-grown shell ... has from seven to eight whorls and is very broadly ovate, with a long and greatly swollen body-whorl comprising most of the bulky shell. The regularly conical, relatively short spire, occupying only about one-fourth of the total length, is considerably narrower than the base and its whorls are only slightly convex. As a result, immature shells are relatively more slender than adults. In the smaller races, the fully-grown shell is

narrower, more elongate -oval, with the body-whorl moderately inflated, while by contrast the spire appears longer and wider...” “The sutures are shallow, the upper part of each whorl being flattened against the periphery of the preceding whorl. This subsutural area is covered with coarse vertical folds and set off by a strong impressed line on the penultimate and body-whorl. The suture itself is finely and irregularly crenulate. On full-grown shells the first two or three whorls are either worn smooth or corroded or show traces only of the granulation which originally covered them. The succeeding whorls show typically a decussate sculpture of elongate welts, best developed on the penultimate whorl and gradually weaker on the body-whorl, particularly below the periphery; a few traces only of the sculpture remain on the last portion of the body-whorl, behind the outer lip. The welts are produced by the decussation of moderately strong growth-striae by weak or superficial spiral engraved lines, placed rather far apart and at irregular intervals. In some specimens the decussate sculpture is barely indicated. The glazing of the parietal wall is slight, the outer lip sharp and thin and the columella strongly concave, slightly curved upward at the base, which is almost squarely truncate some distance above the lower margin of the aperture.” “Columella and parietal wall vinaceous red.” (Bequaert, 1950)

Hosts

As a phytophagous gastropod, this species is not host-specific.

Pest Significance

Economic impact: Crops reported as affected by this species include cabbage, cassava, lettuce, papaya, sweet potato and yam in Ivory Coast, and lettuce, oil palm, orange, papaya and pear in Ghana.

Geographic Distribution

Original distribution: It is believed to be native to West Africa, within 100-180 miles of the coasts of Sierra Leone, Liberia, Ivory Coast, Togo, Dahomey, Ghana, and Nigeria. As yet not introduced outside of Africa, but routinely intercepted by Quarantine Authorities at US airports, especially Baltimore, Atlanta, Dulles, JFK, and San Francisco.

Life History

Little is known. From the size of the protoconch, the size of the eggs are probably like those of the giant African snail (GAS) (*Lissachatina fulica*), but the clutch size is unknown.

Movement and Dispersal

Natural spread is extremely slow. Man-assisted spread: Transportation on vehicles, on local produce, intentional spread by individuals for food and as folk medicine. Routinely intercepted by the USDA in baggage of international travelers from West Africa, particularly Nigeria, Ghana and Senegal.

Parasitology and Public Health Significance

Achatina achatina is potentially an intermediate vector of the Rat lungworm (*Angiostrongylus cantonensis*), causing eosinophilic meningoencephalitis in humans and livestock.

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.

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.