PEST ALERT

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Florida Department of Agriculture and Consumer Services
Division of Plant Industry

The Horntail Snail, *Macrochlamys indica* Benson, detected in South Florida

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INTRODUCTION
At the beginning of August 2020, a gastropod enthusiast collected unusual snails in Coconut Grove, Miami-Dade County, and sent them to the University of Florida where they were identified as *Macrochlamyis indica* Benson (Ariophantidae), a pest snail native to India. This identification was confirmed by the United States Department of Agriculture-Animal and Plant Inspection Service and the Molecular Diagnostics Laboratory at the Florida Department of Agriculture and Consumer Services-Division of Plant Industry. The genus *Macrochlamys* contains more than 100 species and is found throughout tropical Asia.

DESCRIPTION
The common name "horntail snail" is given to *M. indica* because of the pointed, fleshy protrusion (caudal horn) at the tip of its tail (Fig. 1). The caudal horn is found in only one other species in Florida, *Ovachlamys fulgens* (Gude) (Helicarionidae), known as the jumping snail. The horntail snail has a shell 16–18.5 mm in diameter, about the size of a dime, which is amber colored and delicate. When alive and relaxed, *M. indica* has a flap of flesh that extends backward onto or around the shell (Fig. 1). This character will separate *M. indica* from all other terrestrial snails in Florida. The shell is not ribbed and the umbilicus is partially open. The aperture of the shell is not flared around its edges.

BIOLOGY
The horntail snail feeds on a wide variety of plants as well as on dead members of its own species. It is most active at night and after rainfall. During periods of dry, hot weather, the snail will burrow into the ground or seek cool, damp places. The horntail snail is known to live up to four years and can lay 45–900 eggs per year after maturing at an approximate age of four months. The small, 3–3.5 mm eggs are translucent, round and tough. They are laid in soil or moist interspaces between bricks of old walls. Egg-laying starts when the shell length reaches 10.5 mm and the gestation period is 10–17 days.

ECONOMIC IMPORTANCE
Macrochlamys indica is a well-known, high-risk pest in India, feeding on a wide variety of commercially grown plants including cole crops, beans, lettuce, moringa, yams, chrysanthemum and cucurbits. The snails are voracious feeders and will consume seedlings entirely.

DISTRIBUTION
This snail is known from Bangladesh and throughout India. It has been reported from citrus in Egypt.

CONTROL
Little information is currently available on the best control methods available in the US.

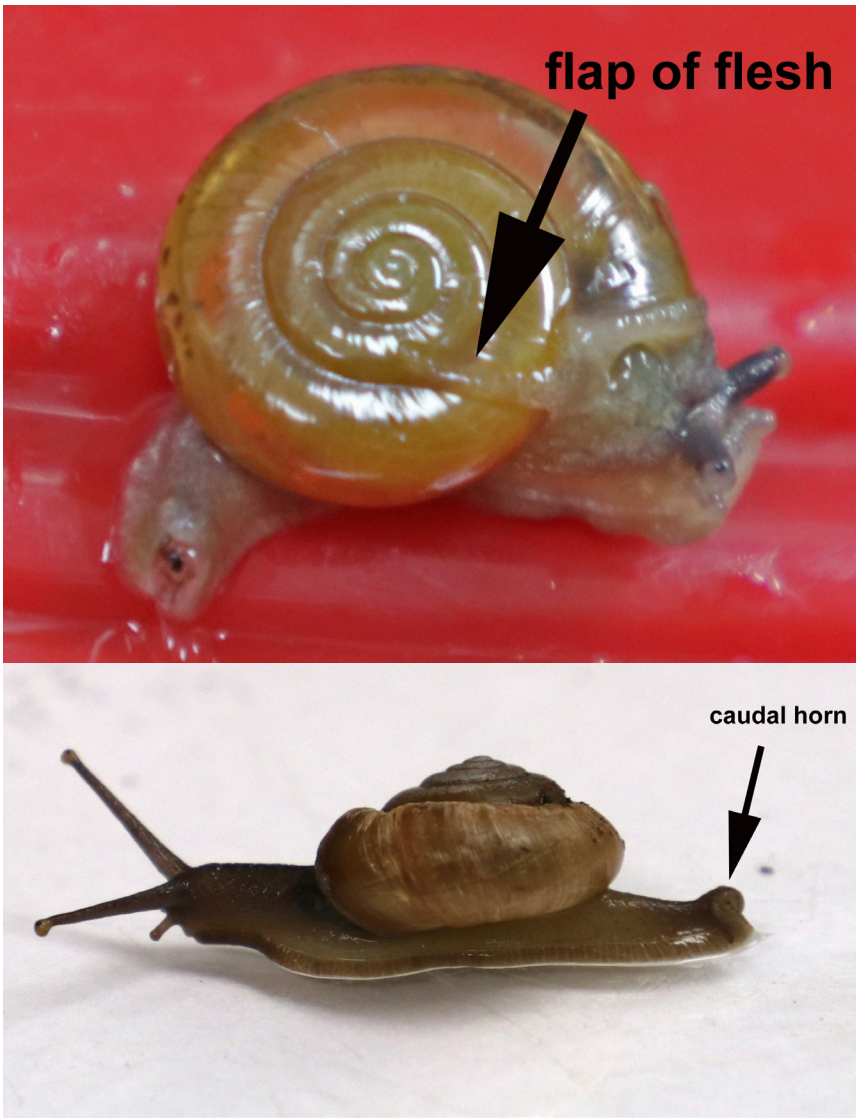

Figure 1. *Macrochlamys indica*, horntail snail, and some diagnostic characters. Photos by Elijah J. Talamas, FDACS-DPI.