

Golden apple snail (441)

Summary

- Widespread. Asia, Africa (Egypt, South Africa), North and South America, the Caribbean (Dominican Republic), Europe (Spain), Oceania. In Papua New Guinea. Not in Australia (interception), nor Palau (eradicated).
- Serious invasive pest. Generalist on rice, taro, lotus, *kangkong*, wild species, and more. Responsible for yield loss, replanting costs, pesticide use, phytoplankton blooms, biodiversity decline (native snails and natural aquatic vegetation), human disease (harbours rat lung worm).
- Adults, shells thin, yellow brown, greenish-brown, dark brown, 35-60 mm high, coiling to right, with brown horny opening. Has gills and a lung. Female lays pink eggs above water on plants and rocks. Young hatch and fall into water.
- Spread floating in water, crawling. Over large distances by aquarium trade, purposely as human food, exchange of planting material. Survival by hibernation in soil for up to 6 months.
- Biosecurity: listed by IUCN among 100 of World's Worst Invasive Species. National legislation and awareness needed to prevent its introduction and/or further spread.
- Cultural control: plough land and harrow; transplant at 3-4 weeks when plants less palatable; periodically lower irrigation water to stop snails moving and feeding; hand collect; attract snails to lay eggs on stakes, then remove and destroy; weed; allow ducks (Indian runners) into fields when seedlings 3-4 weeks; burn straw and stubble after harvest; rotate with legumes.
- Chemical control: note, metaldehyde NOT recommended: toxic to livestock, pets and humans; use baits with iron phosphate, sodium ferric EDTA - effective and safer.



Photo 1. Golden apple snail, *Pomacea* species (Thailand). Note the 'operculum' closing the opening of the shell.



Photo 2. Golden apple snail, *Pomacea canaliculata*, tan with brown bands.



Photo 3. Golden form of the golden apple snail, *Pomacea canaliculata*.

Common Name

Golden apple snail. The name has been given to several *Pomacea* species, due to confused identification.

Scientific Name

Pomacea canaliculata. Other *Pomacea* species are similar, e.g., *Pomacea maculata*.



Photo 4. Eggs of the golden apple snail, *Pomacea canaliculata*, on a taro petiole (Thailand).

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Information from CABI (2019) *Pomacea canaliculata* (golden apple snail). Crop Protection Compendium. (<https://www.cabi.org/cpc/datasheet/68490>); and *Pomacea canaliculata*. Wikipedia. (https://en.wikipedia.org/wiki/Pomacea_canaliculata); and from Golden apple snail (undated) Rice Knowledge Bank. IRRI. (<http://www.knowledgebank.irri.org/step-by-step-production/growth/pests-and-diseases/golden-apple-snails>). Photo 2 H. Zell. *Pomacea canaliculata*, Ampullariidae: H Zell *Pomacea canaliculata*, Ampullariidae. Wikimedia Commons. (https://commons.wikimedia.org/wiki/File:Pomacea_canaliculata_01.JPG). Photo 3 Florida Division of Plant Industry. Florida Department of Agriculture and Consumer Services, Bugwood.org.

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