

The horntail snail (*Macrochlamys indica* Benson)



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India, Nepal, Pakistan, Bangladesh, Sri Lanka, Europe and Brazil

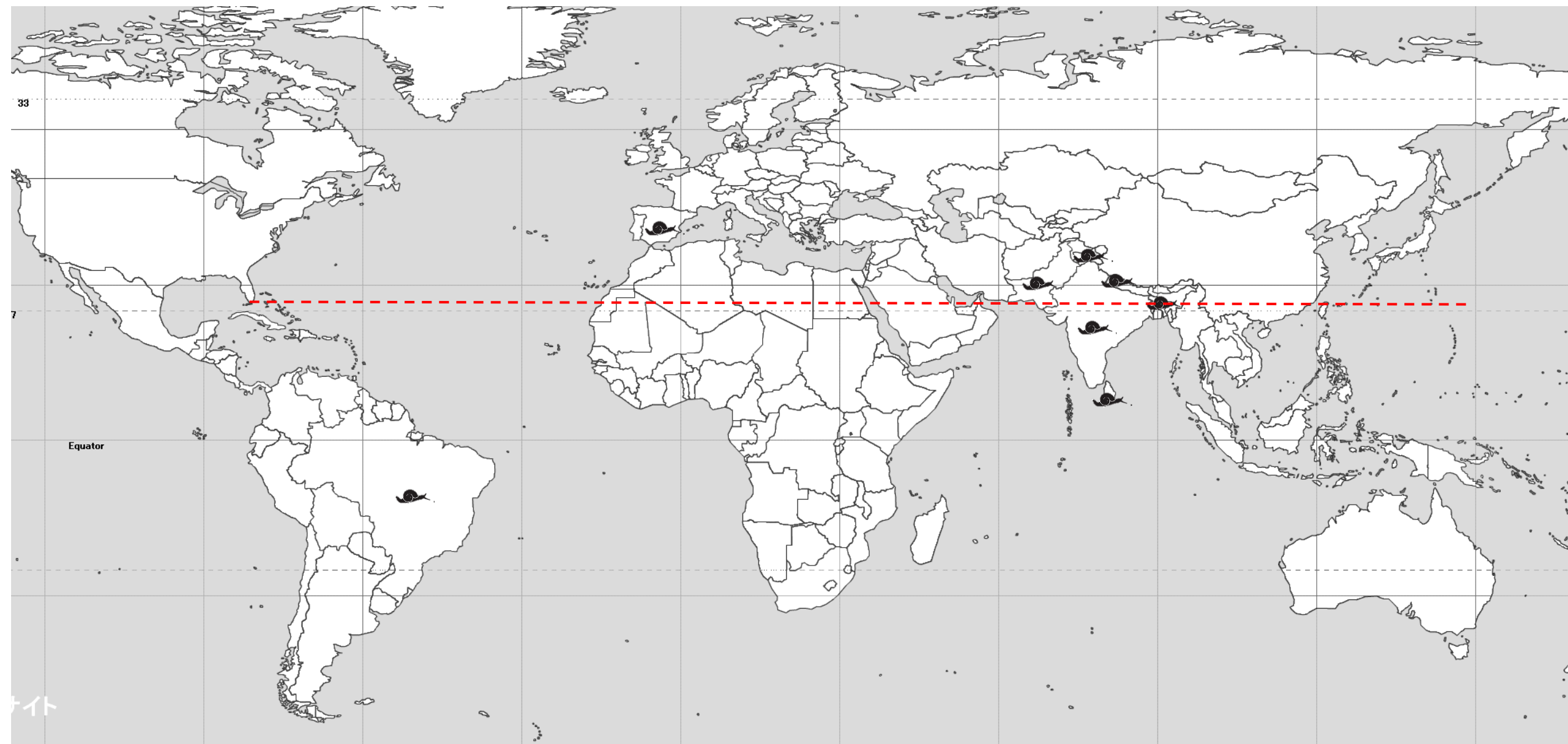




Photo: Amy Roda



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Photo FDACS



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Horntail snail
(*M. indica*)

vs

Cuban Brown Land snail
(*Zachrysia provisoria*)



Photo: Amy Roda

Horntail snail
(*M. indica*)
vs
Jumping snail
(*Ovachlamys fulgens*)



Photo FDACS



Photo from the web

Host range

- Seedlings, fallen, decomposed leaves
- Vegetables:
Beans, lettuce, cabbage, cauliflower, cucurbits
- Fruit crops:
Papaya, banana, guava
- Ornamentals:
Marigold, chrysanthemum, hibiscus, roses



Environmental Conditions

- Optimum temperature:

max T = 82.4- 87.8 F (28-31 °C) and min T = 66.2 F (19 °C)

- Optimum relative humidity:

85-100%





Aestivation

- A type of dormancy occurring due to low humidity in the environment
- Common in temperate and tropical zones
- Aestivation period: 2-8 months depending on geographical latitude
- During aestivation: hide, inactive and lose weight

Biology

When aestivation is 8 months and snails are active 4 months:

- Life span: 4 years
- Young snails require 130 days (4.3 months) to reach sexual maturity
- Copulation usually takes place after a rain event
- Gestation period 10-17 days
- Eggs are laid in clutches under loose soil
- Egg hatch within 8-12 days

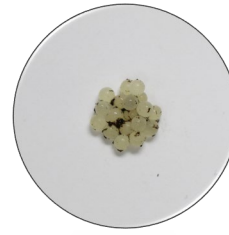
Snail age	Shell diameter (mm)
<div>1st year</div> 	10 - 11 (0.39-0.43 in.)
<div>2nd year</div> 	10-14 (0.39-0.55 in.)
<div>3rd year</div> 	14-18 (0.55-0.71 in.)
<div>4th year</div> 	18-21 (0.71-0.83 in.)

Biology

Under laboratory conditions at T= 69.8-89.6 F (21-32 °C) and 90% RH

- No aestivation
- Life span: 15-19 months

Up to 5 egg clutches/year
16 eggs/clutch



Egg hatch within 15-17 days
Egg hatchability 95-98%

Immature
snail

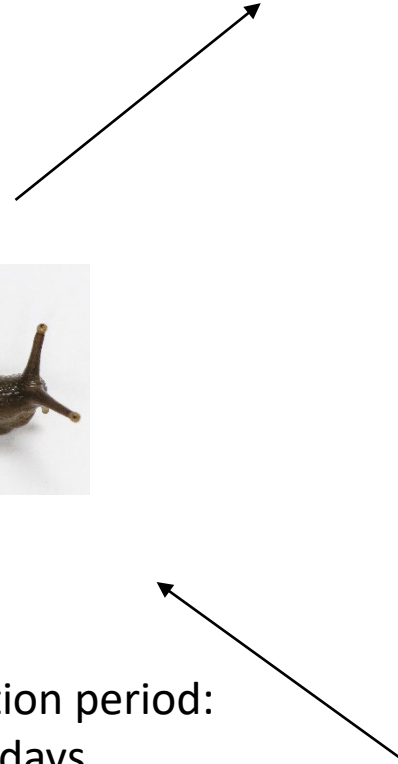


Young snails require 9-12 months
to reach sexual maturity

Adult snail



Gestation period:
10-17 days



Behavior

- Active at night
- Slow moving
- Scavengers
- Mating: after rain
- After oviposition, adults remain in the nest for approx. 11min
- During aestivation: hide, inactive and lose weight



Photo: Amy Roda

Association with nematodes

- No clear information
- Many snails and slugs are hosts for nematodes (worms)
- Association with nonparasitic *Rhabditis* sp. nematodes in West Bengal, India
- *Macrochlamys resplendens* and the Giant African Snail (*Achatina fulica*), are known hosts of *Angiostrongylus* nematodes that can cause Eosinophilic Meningitis in humans

Control/Management

No information is available in the literature



Photo FDACS

Thank You!

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