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Snail-pace, a paradox in speed: Infestation of the giant African snail (*Achatina fulica*) in peri-urban horticulture of Bengaluru

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The giant African snail *Achatina fulica* (Bowdich) (Stylommatophora: Achatinidae) has an aura of enigma around it. During the last six months, we observed these snails in urban and terrace gardens in the city of Bengaluru (12° 57' N, E77° 38' E, 965 MSL). Its occurrence in Bengaluru (earlier Bangalore) was first reported in 1979 by Veeresh *et al*. (1979) more than a century after two specimens were introduced in a garden in Calcutta (Kolkata) by William Henry Benson in 1847. Since then it is assumed it had spread all over India, and much of Asia! The proof is genetic closeness, it seems, of all snails to the original halotype of Kolkata specimens (Jayashankar *et al*., 2013).

Considering the snail's longevity (2-5 years) and fecundity (up to 1000 progenies, staggered through its life time), we presume the two specimens (being hermaphrodites) must have beget at least 2000 'snaillings' which and their progenies would have traversed much of India and Asia! With its snail pace and literally 'sliding' its reach to Bengaluru across hills, valleys and rivers, is seemingly 'fast', indeed a paradox to the snail speed. Human aided movements though cannot be ruled out.

They are found all over- shrubs, walls, terrace, seed beds, lawns, etc. but are hardly seen moving! May be nocturnal? Evidence of feeding however is very indicative. In a continuous observation, we found its defoliation to be sizeable on lamina of ornamental *Hibiscus*, croton, and seedlings of *Dolichos lablab*, beans (*Phaseolus vulgaris*) and basil (*Ocimum basilicum*) (Plate 1). In basil, it cuts the stem to the ground and feeds on the leaves. In an urban locality in Bengaluru infestation was >50%; out of 280 houses, 161 faced infestation by the snails. Those houses which had fully concreted gardens still had them on their walls (Plate 2) and were more of nuisance value. In many other localities and outskirts, the infestation was less than 10 per cent. In another urban set up, Kochi in Kerala of south India, the infestation is being reported and many private pest control agencies are taking up the control.

Monsoons stir the snails. After every rain, snails appear, probably from soil. Scooping and throwing,

Plate 1. Dolichos seedling leaves being felled and damaged by giant African snail

Plate 2. Giant African snails on a garden wall in Bengaluru

though little repulsive, is a sure method of control as chemicals like methamidophos or carbamates cannot be used in home-steads or in organic horticulture. We found dusting potassium nitrate + lime in 1:1 ratio, on the snails and along borders, gave 100% mortality. Some people advocate dusting common salts, but this affects the soil and plant growth. This, however, from our experience, have to be repeated after each rains! Every snail has to be destroyed otherwise peri-urban horticulture will sooner or later will be affected. We just cannot take the snail pace for granted!

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