The Development of Golden Apple Snail Eggs Picker

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ABSTRACT

Several potential benefits of Golden Apple Snail, or GAS have been reported, including its use as a source of food, use in the trade of aquariums, biological control of plants, as a source of protein for fish, ducks and crocodiles, and as a liquid biofertilizer. However, its physiological adaptability and capacity to travel a long distance within a water system has become an invader of new habitats. Thus, GAS is now a major pest in the cultivation of rice. Numerous research have shown that GAS can be managed at various stages of cultivation by combining chemical, mechanical, and biological steps. Nevertheless, GAS eradication has become a laborious and expensive task. This study aims to design the biological tool or prototype to eradicate this major pest. More particularly, the invention relates to a tool that adapts handpicking method in controlling and eradicating the eggs of these pests. This study provides a society implication for paddy farmers, in which the creation of this tool is effective and important to drive the farmers to better productivity with the eradication of GAS eggs.

KEYWORDS: Golden apple snails, Paddy farmers, Picking tool

DOI: https://doi.org/10.1007/978-981-16-4115-2 32

REFERENCES

- Yusa Y, Wada T (1999) Impact of the introduction of apple snails and their control in Japan. Naga ICLARM Q 22(3):9–13 Google Scholar
- Ranamukhaarachchi L, Wickramasinghe S (2006) Golden apple snails in the world: introduction, impact, and control measures. Global advances in ecology and management of golden apple snails. Philippine Rice Research Institute, Nueva Ecija, pp 133–152 Google Scholar
- Robert HC (2002) Apple snails (Ampullariidae) as agricultural pests: their biology, impacts and management. Barke. Centre for Agriculture and Bioscience International, pp 145–192 Google Scholar
- Sin TS (2003) Damage potential of the golden apple snail Pomacea canaliculata (Lamarck) in irrigated rice and its control by cultural approaches. Int J Pest Manag 49(1):49–55 CrossRef Google Scholar
- San Martin R, Mackenna AV (2006) Recent development in the use of botanical molluscicides against golden apple snails (Pomacea canaliculata) Google Scholar