Distribution of two Pomacea spp. in rice fields of Peninsular Malaysia

ABSTRACT

Aim: This study aims to understand the distribution of Pomaceaspp. in various rice fields of Peninsular Malaysia.

Place and Duration of study: The study was conducted at twenty five rice fields from five states in Peninsular Malaysia (Selangor, Perak, Penang, Kedah and Kelantan) during the sowing and harvesting of off rice season-2013.

Methodology: This study was carried out on rice fields of one acre in size which were further divided into four blocks. A 0.5m2 quadrate was used for sampling and snails within the quad rate were collected, counted and identified based on their shell morphology by the experts.

Results: Based on this study, Pomacea maculata was more abundant and widely distributed as compared to Pomacea canaliculata. Rice fields in Perak showed the highest population distribution of Pomacea spp. during both sowing and harvesting of rice. Meanwhile, the lowest population was observed in rice fields during the sowing of rice in Kelantan and during harvesting of rice in Kedah. Comparatively higher population of Pomacea spp. was recorded during sowing of rice than harvesting. No population of P. canaliculata was observed from the rice fields of Penang state. Water temperature, p Hand the number of rice seedlings does not have a significant effect on the distribution of Pomacea spp.

Conclusion: The results from this study could help in an area wide management program against Pomaceaspp., not only to minimize their damage to rice but also to control their further spread.

Keyword: Pomacea; Apple snails; Invasive; Distribution; Peninsular Malaysia; Rice