Imposex study on Thais tuberosa from port and non-port areas along the West Coast of Peninsular Malaysia.

ABSTRACT

Imposex was found to occur among Thais tuberosa snails collected from eight locations, consisting of port and non-port areas, along the west coast of Peninsular Malaysia. All (100%) female individuals of this species were found to have male sexual characteristics (imposex) at various stages. The highest discovered imposex level was Stage 5 with the Relative Penis Length Index (RPLI) of 56.35%; this was found in samples collected from Lumut Port (ALP; an area with high shipping and boating activities). On the other hand, samples collected from areas with lower maritime activities were observed to have moderate imposex stages (Stage 3 and Stage 2). Samples from an isolated area of NTP were recorded to have Stage 1 imposex. These results demonstrate the potential influence of maritime activities (a higher leachate of tributyltin (TBT)) on the degree of imposex in T. tuberose individuals.

Keyword: Imposex; Peninsular Malaysia; Port; Snail; Thais tuberosa; Tributyltin.