

Economic contribution and attitude towards alien freshwater ornamental fishes of pet store owners in Klang Valley, Malaysia

ABSTRACT

Malaysia is one of the top ten countries in the world that produce freshwater ornamental fishes. This industry can offer better livelihood opportunities to many poor households. However, most of the produced ornamental fishes are alien to Malaysia. In this study, we explore the contribution of alien freshwater fishes to the income of ornamental fish store owners and their attitude towards alien freshwater fishes within Klang Valley, Malaysia. Using a structured questionnaire, we surveyed 70 pet stores out of which 54 (81.42%) store owners responded. Most of the pet store owners were male (72%), Chinese (83%), and the highest educational level was at the secondary level (79%). Most of the pet store owners reported a monthly income of RM 2001–RM 5000 (78%) and were married (73%). Using Chi-square (χ^2) test, significant relationships ($p < 0.05$) existed between the attitude of store owners towards alien ornamental fish species versus educational level ($\chi^2 = 16.424$, $p = 0.007$) and contribution of alien ornamental fishes to the pet store owners' income ($\chi^2 = 27.266$, $p = 0.003$). Fish sales as the main income source also related significantly with the impact of fish selling business on income level ($\chi^2 = 10.448$, $p = 0.007$). This study showed that the ornamental fish sales contributed over half of the income (51–100%) from the businesses of store owners. Almost half of the respondents (42%) reported that alien ornamental fish was the highest contributor to their income from the ornamental fish sale. While the mismanagement of alien ornamental fishes could give various negative ecological impacts, the socio-economic benefits of these fishes cannot be denied.

Keyword: Alien species; Ornamental fish; Livelihood opportunities; Socioeconomic; Questionnaire survey