

Non-native species in floodplain secondary forests in Peninsular Malaysia.

ABSTRACT

There is an increasing concern of alien species invading our tropical ecosystems because anthropogenic land use can create conditions in which non-native species thrive. This study is an assessment of bioinvasion using a quantitative survey of non-native plant species in floodplain secondary forests in Peninsular Malaysia. The study area is known to have a long cultivation and settlement history that provides ample time for non-native species introduction. The survey results showed that introduced species constituted 23% of all the identified species, with seven species unique to riparian forest strips and eleven species unique to abandoned paddy fields and the remaining five species being shared between the two secondary forest types. There existed some habitat preferences amongst the species implying both secondary forests were potentially susceptible to bioinvasion. Fourteen species are also invasive elsewhere (PIER invasives) whereas fifteen species have acquired local uses such for traditional medicine and food products. The presence of these non-native species could alter native plant succession trajectory, and eventually leads to native species impoverishment if the exotics managed to outcompete the native species. As such, the findings of this study have a far-reaching application for the national biodiversity conservation efforts because it provides the required information on bioinvasion.

Keyword: Non-native species; Ecological invasion; Peninsular Malaysia.