Predicting the terminal velocity of dipterocarp fruit

Abstract

We measured the terminal velocity of helicopter-like fruit from the Dipterocarpaceae family and present a model predicting the terminal velocities for all dipterocarp species in the Malesiana region. A ballistic model of seed dispersal using the observed terminal velocities predicted dispersal distances of 17–77 m under normal atmospheric conditions. These data are of applied use in parametizing models of species coexistence, forest regeneration and habitat connectivity in Southeast Asian tropical forests.