

The percentage is low compared to the West Indies but is similar to Costa Rica (Dressler 2003c, Ackerman 2014). At least *Arundina graminifolia* (D. Don) Hochr., *Spathoglottis plicata* Blume from Asia and *Oeceoclades maculata* (Lindl.) Lindl. from Africa and Madagascar are widely dispersed in the Neotropics. *Arundina graminifolia* and *S. plicata* plants are often grown as ornamentals in gardens and naturalization was recorded in Costa Rica, Cuba and Hawaii (Pupulin 2005b, Ackerman 2007). In the case of *A. graminifolia*, the flowers with a trumpet-like shaped lip (similar to *Sobralia*) apparently attract bees that pollinate them. *Spathoglottis plicata* plants are often self-pollinated and do not require native pollinators for reproduction. Both species are terrestrial and grow in places with direct sunlight such as rocky roadsides (Cohen & Ackerman 2009).

Oeceoclades maculata is a fast growing orchid and was classified as an invasive species (Ackerman 2007). It is perhaps the most common introduced orchid in

Panama. It is found throughout the Neotropics from Florida (USA) to Brazil. Populations of *O. maculata* are common along both the Caribbean and Pacific lowlands where they are often found among understory vegetation. The adaptation to grow in a wide variety of environments contributes to its invasive prowess. Reproductive success is due to self-pollination (it does not need native pollinators) and high rates of fruit production (Cohen & Ackerman 2009).

The most curious case is perhaps the naturalization of *Phalaenopsis stuartiana* Rehb.f., an endemic orchid from the island of Mindanao in the Philippines (Fig. 26B). It has only been reported from Isla Colón in Bocas del Toro Archipelago where it probably encountered climatic conditions and coastal environments like those on Mindanao. It is the only epiphytic orchid naturalized in Panama. Its introduction, population status and pollination have yet to be investigated. To date, the few herbarium records that exist are all known from this site.

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