

The Malesian floristic region is comprised of the Malay Peninsula, Borneo, the Philippines, and the archipelago of islands stretching from Sumatra to New Guinea. It is one of the most botanically diverse regions on earth, with over 25,000 species of flowering plants - about 10% of the world's flora. Peninsular Malaysia and Singapore alone contain five times as many seed plant genera as the continent of Africa. The region contains some of the oldest forests on earth and one explanation for the region's unusually high biodiversity is that they survived through the Pleistocene Ice Ages due to their fortuitous location straddling the equator. The climate throughout much of the region is consistently hot and humid with high rainfall. Charles Darwin, on a visit to Borneo, described it as, "One great, wild, untidy, luxuriant hothouse, made by nature for herself".



About 27% of the higher plant genera found in Malesia are primarily Asian in origin and 4% are primarily Australian. Nearly 14% of the genera are endemic (found nowhere else in the world), while 27% have their centers of distribution primarily in Malesia. One of the explanations for the high number of endemic plants in this area is that the region is composed of so many islands. Isolation is very important for speciation (the evolution of new species).

In such a large group of islands many plants became isolated from their parent stock and

evolved into new forms. New Guinea, the largest island in the group (and second largest in the world, after Greenland), shares some plants with nearby Australia, but also contains an amazing 124 endemic genera. Borneo, only slightly smaller, has 59. Peninsular Malaysia and the Philippines are also rich in endemics. But Java, Sulawesi, and the smaller Moluccas and Sundas have fewer.

The largest plant group in the region is the family Orchidaceae, with over 4000 described species. The tree family Dipterocarpaceae contains over 500 species, many of which are very important for timber. There are two wild bananas, from which it is thought all cultivated varieties descend. Malesia is also home to the *Rafflesia* a completely parasitic plant with the world's largest flower. There are many beautiful (and sometimes bizarre) plants valued as ornamentals around the world including the tropical pitcher plants (*Nepenthes*), as well as plants with medicinal properties, many of which, undoubtedly, are so far undiscovered by scientists.

**Sources: The Hutchinson Dictionary of Science, Helicon Publishing Ltd. 1998. Van Steenis, C. (ed.) Flora Malesian Series 1, Volume 1. Noordhoff-Kolff N.V., Jakarta, 1950**