

## Wild Flowers In Brazil

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### THE GEOGRAPHY OF BRAZIL

Brazil is located in the eastern part of South America and in area covers nearly half of that continent (85,110,000 km<sup>2</sup>). Brazil is the fifth largest country in the world and second largest in the Americas. Its area is about 23 times that of Japan and the population is about 160 million, the sixth largest in the world following Indonesia. The country lies from 5°16'N to 33°45'S across the equator. The northern region of Brazil, the Amazon, has a tropical climate, while the southern part is temperate and it snows there every year. Apart from the highest mountain, Mt. Neburina located on the border with Venezuela, the other mountains are below 3,000 m high and are concentrated around the southeast coastal region.

The largest area in vegetation is the tropical rain forest along the Amazon river and it covers 54% of northern Brazil. The central part of the country is savanna, called Cerrado, which is covered with weeds and low scrub and comprises 22% of the country. The northeast is drier, called *Cantiga*, and covers 10% of Brazil. The plants in this region are mainly cactus and thorny shrubs, hence the English name Thorn Bush. The east coast area along the Atlantic ocean was a subtropical forest region, but because of land development only 5% remains. In the south 4% is steppe and is used as grazing land. There is also the Parana pine area and a unique feature of the center-west, upstream of the Paraguay river, is a big wetland called Pantanal, as large as the Japanese mainland and a treasure house of flora and fauna. Also, there are palm forests in the central northern region and wet lands called *Resutinga* in the low coastal area.

Brazil is divided into five administrative parts and is a federal republic consisting of 26 states and one direct control area. Because of its size, only several southern states are developed and there is a tremendous gap between the rich and the poor. At present, ecological destruction is a serious problem in the world and from 60 years personal experience, particularly so in Brazil. Seventy percent of the land in Brazil has the capacity to be developed because there are few mountains and it is easy to create farms. Recently, the speed of development has increased rapidly and the extinction of biological species is immeasurable, including many useful species now lost forever.

### THE HISTORY OF THE CULTIVATION OF FLOWERING PLANTS

Before World War II in South America the cultivation of flowers was popular in Argentina. It employed introduced European technology and this resulted in increased consumption. In Brazil, however, only in Rio-de-Janeiro were flowers produced and sold using the techniques introduced from Argentina, orchid production was especially popular. After the war, as economic conditions improved, the consumption of flowers increased with a resultant increase in cultivation. Particularly in the 1980s, many growers started operations around Sao-Paulo. A flower market was held twice a week in Sao-Paulo central market and the distribution of

flowers improved rapidly. Dutch growers introduced good cultivars from the Netherlands, under a big cooperative association and improved cultivation techniques. Japanese growers also increased around Sao-Paulo, improving culture techniques, and the number of visitors from Argentina is on the rise.

*Cymbidium*, *Dendrobium*, *Phalaenopsis*, *Cattleya*, and *Oncidium* species are the mainstays of orchid production. Large-scale production also occurs with roses, chrysanthemums, limoniums, dianthus, cyclamen, and Cactaceae. In the Brazilian spring, flower exhibitions and competitions are held in various places.

### WILD FLOWERING PLANTS

The number of native higher plants in Brazil is about 30,000 species, comparable to that of China. Many useful plants are included, I summarized and published 2168 species of known Brazilian medicinal plants in 1966. It is difficult to give a total of useful plants because the number is increasing daily. It is also difficult to count the number of flowering plants of horticultural merit, but I will record here some wild species and related species which are cultivated at present or show horticultural potential.

In the south of Brazil, there are many plants that could grow well in Japan because the climate is similar. Wild species of petunia and verbena bloom and decorate the moors there nowadays. Cacti also show a rich variation. *Schlumbergera russelliana* and *Zygocactus* (syn. *Schlumbergera*) grow on trees in the mountains in Rio state, in the northeast dry areas many *Melocactus* species grow in conjunction with tree cactus and *Rhipsalis* grows hanging down from the trees in the forest. Orchids are present in great variety, beautifully flowered species are found growing on trees and rocks. *Cattleya* and *Oncidium* species are plentiful as well as many other interesting and rare orchid species.