Katharina Kreissig

Identify Common Tropical and Subtropical Ornamental Plants by Flower Colour

A Nature Guide for the Journey

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Foreword

» After women, flowers are the most lovely thing God has given the world (Christian Dior).

As a tour guide, Katharina Kreissig has very often experienced that striking flowers arouse great interest among tourists in countries of the tropics and subtropics. She was asked not only to say the name – if possible in the language of the participant – but also the origin of the plant, its use or toxicity. The ornamental plants that were planted in hotel gardens, parks and on streets, and often also those that had grown wild from them, were irresistibly appealing to photographers; one would have preferred to take an offshoot with one. Based on these experiences, Ms. Kreissig was able to make a selection of particularly beautiful (or "crazy") flowers and to illustrate, name and describe them in the present text and to compile interesting information about names, origin, use, biology and history in the accompanying texts. There are so many surprises in tropical countries, such as the adaptation to pollination by bats and birds or dangerous ingredients that served as arrow or fish poisons. It is not always easy to determine the species affiliation of the plants, because many genera comprise dozens of species, some species form bastards or are altered in culture; moreover, the floras of the most species-rich countries are still incompletely researched.

May the book be helpful in coping with the travel impressions and in labelling one's own photos and at the same time awaken love and understanding for the variety of plant shapes.

Eckehart J. Jäger
Halle, January 2017

Introduction

With this plant guide you can quickly and easily identify common ornamental plants from sunny countries by flower colour, for example in the Caribbean, Florida, the Canary Islands and the Mediterranean area such as in Spain, France or Portugal. It does not matter whether you are on a business trip, a short weekend trip, a cruise, a study trip or a beach holiday. As long as you like beautiful plants!

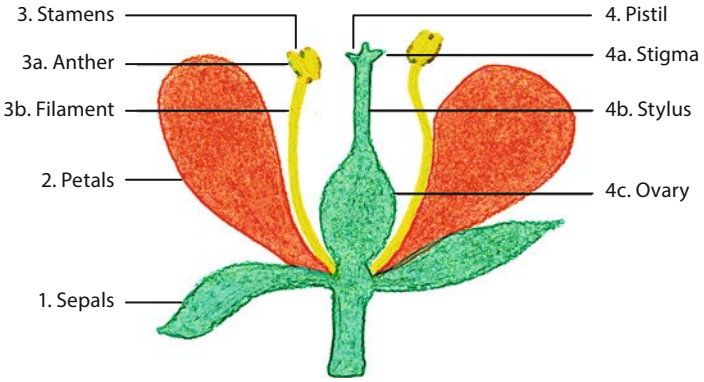
The large and colourful flowers of tropical and subtropical plants are so striking that it is impossible to ignore them. This does not require a five-hour excursion to the rainforest. One already meets them at the airport while waiting for the transfer to the hotel. Perhaps you will see a flower arrangement of orchids in the arrival hall or a magnificent hibiscus decorates the parking lot. Jacaranda trees line the roadsides, bougainvilleas green the walls of houses. Heliconias and strelitzias are found in gardens and in nature. However, they are often not typical for the country. Many plants are globetrotters, which can now be found in almost all warmer countries, even on remote island worlds like Hawaii. They are also present in Europe, in summer as tub and pot plants, but also in winter gardens and greenhouses during the cooler season.

You will find a plant in this book by its flower colour in the corresponding chapter, no expert knowledge is required. An unknown yellow flower can be found simply by looking in the chapter "Yellow Flowers". If you are unable to identify a plant immediately or simply have little time, you can quickly take one or two photos with your mobile phone. You can look it up later when at rest and quite often find out what it is.

Some flowers may occur in more than one colour and are therefore listed in more than one chapter. Some flowers even change colour over time. If you ask about a plant in the country to visit, you will not always receive an answer in your mother tongue. In addition to the English and scientific names, the German, Spanish, French and Dutch names of the plants are therefore listed. Interesting details on the original home, naming, biology, animal partners and habitat complete the profiles.

What is a flower and what is its natural function? The flower of a plant is used for sexual reproduction. It consists of specially formed leaves and sits on a special shoot with limited growth. To put it simply: Normally one plant shoot continues to grow steadily and forms one green leaf after the other. When a flower develops, however, the growth stops and special, transformed leaves, the petals, form.

The descriptions in this plant guide are kept simple and deliberately avoid scientific terms. At the following, a flower is shown schematically, and its components are briefly explained:



1. Sepals, also called calyx in their entirety.
2. Petals, together also called corolla. These are usually the coloured, large petals.
3. Stamens, consisting of the anther (3a) and the filament (3b), carry the pollen.
4. Carpels, they form the pistil, that consists of stigma (4a), stylus (4b) and ovary (4c).

Furthermore, floral bracts are mentioned; they are subtending bracts in the area of the flower. They can be coloured and are then easily mistaken for the actual petals. Subtending bracts carry a plant shoot, a single flower or an inflorescence in their axils.

Many flowers have such striking characteristics that they can be identified by comparison with the illustrations on the following pages. In addition, there are a number of species, the identification of which is more complex, for which there are correspondingly comprehensive books. In the large plant kingdom there are many representatives that are difficult even for the scientist to identify. Covering the extensive group of orchids, for example, would go beyond the scope of this book. But perhaps after the first successes and nature experiences you will feel the urge to go deeper and take a closer look at more specialised literature.

Given the beauty of exotic plants, it is all too understandable that the idea of taking a specimen home should arise. Please resist this temptation and take an exotic plant

home only as a photo. There are many good reasons for leaving plants at their sites. The vast majority of exotic plants do not survive improper transport and relocation. There are also many plant species whose populations are threatened. They are subject to species protection and may not be damaged or taken away. If you do it anyway, you will get into trouble when you enter or leave the country at the latest.

More robust ornamental plants have travelled with humans to many foreign countries, especially the easy-care species are becoming bestsellers and can be found in all locations where temperatures allow. Unfortunately, it often happens that the fosterlings leave the gardens and grow wild. This can be very problematic for the actual animal and plant community of an area. Optically a gain by human standards, a foreign plant can lead to great losses in nature. Since its natural enemies did not travel with it to its new home, it can reproduce unchecked and displaces the native plant species. This can deprive many animals of their livelihood, for example because they cannot simply switch to another source of food. In a number of countries, campaigns to eradicate such invasive plant species are being carried out with great effort.

Caution: Many plants contain toxic components. Whenever I found clues, they were mentioned. Despite careful research, errors cannot be ruled out and no liability can be accepted. I expressly advise against culinary or pharmaceutical experiments, even if the text reports on such uses by locals.

The selection from the thousands of plants in question for such a work was of course subjective. If you have any suggestions or hints for this plant guide, please send me an e-mail: Flora@kreissig.de. I look forward to hearing from you.

At this point I would like to thank everyone who supported the publication of this book. First and foremost these are Merlet Behncke-Braunbeck and Dr. Stephanie Preuss from Springer Spektrum: Thank you very much for the excellent support! I would like to thank Barbara Lühker, also from Springer Spektrum, for her extremely competent support and project management. I thank Katrin Petermann, Detlef Mädje and Michael Barton for the excellent production.

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Katharina Kreissig
Ladenburg, March 2017

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