

*Growing*

# BULBOUS ORNAMENTAL PLANTS



S.N. DAS

# **GROWING BULBOUS ORNAMENTAL PLANTS**

**S.N. Das**



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**The Book  
“Growing Bulbous Ornamental Plants”**

**is  
Dedicated to  
My**

**Beloved Teacher**

**Late Dr. B.K. Jana**

## PREFACE

A large number of bulbous ornamental plants are grown in India for beautifying the gardens, parks and houses. Bulbous plants are cultivated especially for their attractive form, colour and fragrance of the flowers and foliage. They are increasingly used in borders, beds, rockeries and window boxes. Some plants with attractive shape, colour and pattern of work of the foliage are used as pot-plants for interior decoration. Some bulbous flowers like Tuberose, Gladiolus, Narcissus, Gerbera, Bird of Paradise, Heliconia and other lilies are cultivated commercially throughout India for production of high valued cut flowers.

At present the cultivation of bulbous ornamental plants has become a profitable agribusiness in India. The growers need a book having all aspects on scientific cultivation of bulbous plants. But it's unfortunate that there is no such book in the market. Therefore an endeavour has been made to provide all the useful practical information on various aspects of cultivation of bulbous plants grown in India. Brief description of the plants, varieties grown, agronomic and cultural practices have been presented in an interesting way.

The book is written in a very simple and understandable language. I hope that it will be a great help to U.G. and P.G. students of horticulture, researchers, horticulturists extension workers, nursery men and commercial growers.

I acknowledge with thanks the help and inspiration rendered by Dr. R.G. Maity, ex-professor of Department of Horticulture, B.C.K.V., Dr. B.C. Das and Dr. A.K. Pal, Department of Horticulture, B.C.K.V., Mohanpur and Dr. S Mukherjee of U.B.K.V., Coochbehar, W.B. have helped me to prepare this manuscript.

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Each and every member of my family have helped me a lot during the preparation of this book and I thank them all from my heart.

All constructive criticism and comments on the book by the readers are most welcome and shall be added to the future edition.

S.N. Das

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## INTRODUCTION

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The specialized underground modified plant organ in which the food material is stored for use in future and also to overcome the unfavourable season, is called the bulb. A bulb consists of greatly reduced stem called basal plate, surrounded by flesh modified leaves called the scales. Botanically, this bulb may be of different types like i). Bulb-Tuberose, Amaryllis, Eucharis, etc.; ii). Corm – Gladiolus, iii). Rhizome- Iris, canna etc. and iv). Tuber- Dahlia. The plants that are produced from all the above four types of bulbous organs are commonly called as bulbous plants.

Different types of bulbous plants are found to grow throughout the country. They can be divided into two main categories. They are hardy and tender types. The hardy type can be grown with less care and management and can be left in the ground for a few years. The plants are then lifted after three years of planting and then separated for further planting. Amaryllis, Tuberose, Canna, Crinum, Zephyranthes etc. are the hardy type of bulbous ornamental plants. On the other hand, the tender type is that which cannot be left in the ground after flowering but are lifted from the ground on maturity. After lifting the under ground bulbs are treated with the fungicides to control the attack of diseases and they are then stored in cold storage or cool places during off-season for next year planting. Tender type of bulbous ornamental plants are Gladiolus, Narcissus, Dahlia, etc.

A bulbous plant has three distinct phases in its life cycle during a year. These stages are growth, flowering and dormancy respectively. Vegetative growth stage starts with the sprouting of bulbs. The plant develops shoot with the emergence and development of the leaves. The plants store their food in the under ground bulbs which gradually increase in size. After completion of the vegetative growth the plants start flowering (as in gladiolus) or flowering starts before the

emergence of the leaves (as in Amaryllis, Football-lily, etc.). After completion of vegetative growths and flowering the plants usually enter into dormancy or rest period. However, the duration of rest period varies with the type of plant and environmental conditions like light, temperature and humidity.



## IMPORTANCE AND USES OF BULBOUS ORNAMENTAL PLANTS

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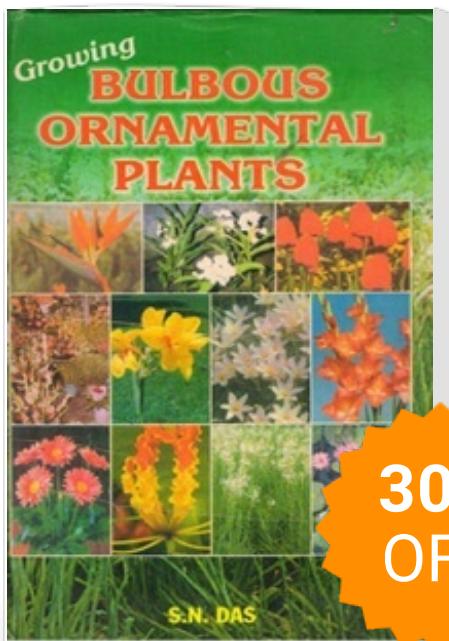
Bulbous plants are specially grown for their attractive flowers and foliage. These flowers and foliage have their ornamental value. Most of the bulbous plants are grown under wide variety of soil and climate conditions. Bulbous plants can be grown in the gardens to brighten up every nook and corner of the garden with their pleasing colour. They are also suitable for window and roof gardening. Many of the bulbous plants are capable of imparting colour and warmth when they are planted under the shade of the trees, at the foot of a wall, in parks and rockery and also in marshy areas. Plants like lotus and water lily can be successfully grown in the lily pool, which is an important feature of the water garden. Bulbous plants are often found to grow in the Moghal garden at Shalimar, Nishat and Casmishahi in Kashmir.

The lotus flower has a very special position in Hindu religion. Lotus is a national flower of India. It has become a symbol of purity in the Buddhist temple. The flower is held so sacred in Japan that it is never used during ceremonies other than Buddhist services. To the Bengalees it is must for Durga Puja.

Bulbous plants can easily be grown as pot-plant. Potted plants can be used for different purposes. It can be kept well in the lawns and along the roads of the gardens, verandah, roof, balcony and also inside the room for indoor decoration. Potgrown plants are also used for decoration of conference halls, stages, meeting places, etc. Dahlia, Tuberose, Gerbera, Amaryllis, Gladiolus, etc. may be the good pot-plants.

Most of the bulbous plants burst into glory once in a year either by producing handsome flowers or attractive foliage. During this time they are the loveliest objects of adoration in beds, pots or clumps.

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