GREENHOUSE GARDENING



Greenhouse Gardening

G. F. Gardiner

Formerly Curator of the Botanic Gardens and Recognized Teacher of Gardening at the University of Bristol

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FOREWORD

I am very glad to have this opportunity of writing a foreword to Mr. G. F. Gardiner's book on greenhouse plants and their cultivation. It is now nearly fifty years since Mr. Gardiner came to Bristol from the Royal Botanic Gardens, Kew, to become the Curator of the University Botanic Gardens. Here he had a very wide experience in horticulture, both in the glasshouses and gardens.

His careful skill in the propagation and cultivation of the great range of plants has made an important contribution to botanical and horticultural work in the University.

In his retirement Mr. Gardiner has devoted much of his time to writing on horticultural topics, particularly on greenhouse decorative plants.

He has already published *Pictorial Plant Propagation* and *Modern Indoor Gardening*.

Many former students of the University will remember Mr. Gardiner as a helpful guide and an enthusiastic instructor in horticulture; it is very gratifying that his knowledge, firmly based on practical experience, is now reaching a wider audience.

Department of Botany, University of Bristol E. W. YEMM, Professor of Botany

INTRODUCTION

I have written this book for the benefit of those who wish to grow suitable plants to provide flowers in a greenhouse or conservatory or to use for room decoration, during all seasons of the year.

Plants which do not flower freely and are not of great decorative value have been omitted, and only those which I have found to be ideal for the purpose have been dealt with in this book. There is a vast number of greenhouse plants to be seen in botanical gardens and large private establishments, but only a limited number are offered for sale by nurserymen. From these plant catalogues, which they issue free of charge, I have selected the most decorative kinds and have given the fullest details of their cultivation.

Therefore, by choosing plants from the "lists of flowering plants for every season of the year" given on p. 203, it will be found possible to provide a continuous display of flowers in the heated or unheated greenhouse.

I am indebted to Messrs. T. Bath & Co., Ltd., Greenhouse Specialists, 14 Norwood Road, Herne Hill, London, S.E. 24, for supplying the photographs of types of greenhouses, ventilators and heating appliances.

I am also grateful to Dr. A. J. Willis, Reader in Botany in the University of Bristol, for advice and assistance in the preparation of this book.

G. F. GARDINER

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I

GREENHOUSES AND PLANT FRAMES

Greenhouse Siting and Orientation

Except in the case of Ferns, Selaginellas and other shade-loving plants, the greenhouse should be sited where it will receive the maximum amount of sunlight. It should run north to south, i.e. at right angles to morning and evening light, and it must not be set where it will be shaded by trees or tall buildings. Another point to bear in mind is that the greenhouse must be erected where it will not be flooded during heavy rain. If necessary, drains should be laid to carry away surplus water.

Permission to attach a greenhouse or concevatory to a dwelling house must also be obtained from the local housing authorities.

Choosing a Greenhouse

The three chief types of greenhouses are: (1) the span-roof house; (2) the lean-to house; and (3) the three-quarter span house.

The span-roofed house is the most useful, the simplest to erect, and is suitable for most types of plants. Being set in the garden, well away from buildings where it receives the maximum amount of light on all sides, the plants are not in danger of becoming drawn and spindly. The best plan is to have a long house which can be divided into two sections, so that one part can be used for raising the plants and the other for displaying them when they are in bloom. This is the ideal arrangement because the portion in which the plants are being raised can be kept at a higher temperature, if desired. When in bloom less heat is needed, in fact the cooler the house is kept the longer the flowers will last in full bloom. As a rule, the spanroofed house is fitted with a staging covered with stone chippings or similar materials which, when damped, help to maintain a moist atmosphere.

The Glass to Ground Span-roof

This type of greenhouse is fitted with glass right down to ground level and is popular with nurserymen and those who have to grow large batches of plants, such as Begonias, Chrysanthemums, Geraniums (Pelargoniums) and *Solanum capsicastrum* (Winter Cherry), but it is not suitable for the amateur who wishes to grow and display a great variety of plants.

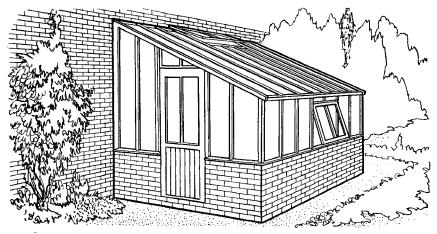


1 A lean-to greenhouse against a house wall.

The Lean-to Greenhouse

This is so called because it is erected against a wall or building. It is not the best type to have for growing pot plants because it receives most light

from the front and was originally designed for growing peaches and grapes. But where such a type of house exists, it may be fitted with a staging in the front upon which pot plants may be grown and receive a fair amount of light. The back of the house may be used for climbing plants such as *Plumbago capensis*, Fuchsias and *Passiflora caerulea* (Passion Flower), and Chrysanthemums when in bloom.



2 The lean-to greenhouse is suitable for erecting against a wall where it is sheltered from cold winds. It is often used for growing peaches and grapes.

The Three-quarter Span Greenhouse

This type is rarely built now. It is similar to a lean-to, but it does not reach to the back wall at the top. It is ridged at the top with a glazed section about 18", sloping backwards to allow more light and air to reach the plants at the top of the house. It is more expensive to build than a lean-to and more difficult to paint and repair.

Plant Frames

Cold frames set close to the greenhouse or other buildings are invaluable for sheltering many types of plants, from Spring to Autumn. In these frames they are protected from cold winds and make sturdy plants for setting in the greenhouse in October. Plants such as Cinerarias, *Primula obconica* and Cyclamen form sturdy specimens if they are set in the frame and given an abundance of fresh air on all favourable occasions. When bulbous plants such as Hyacinths, Tulips and Narcissi are removed from the plunging bed the shelter of a cold frame is beneficial before they are taken into the greenhouse for forcing. The unheated frame is also valuable for sheltering bedding plants from April until they are set out in the beds in June.

The frames are made of various materials such as brick, concrete and

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