PLANT PHYSIOLOGY IN RELATION TO HORTICULTURE

Science in Horticulture Series

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Published in collaboration with the Royal Horticultural Society and the Horticultural Education Association.

This series of texts has been designed for students on courses in horticulture at the Higher National Certificate or Diploma level, but care has been taken to ensure that they are not too specialised for lower-level courses, nor too superficial for university work.

All the contributors to the series have had experience in both the horticultural industry and education. Consequently, the books have a strong practical flavour which should reinforce their value as textbooks and also make them of interest to a wide audience, including growers and farmers, extension officers, research workers, workers in the agrochemical, marketing and allied industries, and the many gardeners who are interested in the science behind their hobby.

The authors are all British, but they have illustrated their books with examples drawn from many countries. As a result the texts should be of value to English-speaking students of horticulturalists throughout the world.

PLANT PHYSIOLOGY

IN RELATION TO HORTICULTURE

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PREFACE

This book is primarily intended for students of horticulture studying for a Higher National Diploma or Certificate, a National Diploma in Horticulture, or a university degree during the first year or where plant physiology is not a major option. I hope that anyone interested in the science behind modern horticulture will enjoy reading this book; a deeper understanding of the principles behind horticultural practices should be enriching.

It has been necessary, however, to be selective and the often difficult choice of topics has followed syllabuses for HNS, HND and NDH courses and drawn on my own experience of relating plant physiology to the practical needs of horticulturists.

Graduates may generally find this book useful if plant physiology enters into their work. For example, the plant breeder who needs to control flowering, produce good seed and compare the growth of breeding lines could find much of relevance here. Similarly, entomologists and chemists dealing with plants should understand better the behaviour of plants and be more able in discussions with plant physiologists.

If data or extensive conclusions are quoted then the reference has been given, and so have some suggestions for further reading. This limited acknowledgement of sources is intended to make for smoother reading, but it does not detract from my great indebtedness to those authors whose work was consulted but not cited here.

In writing this book I have had cause to be grateful for the kindness of many people, but particular thanks are due to those colleagues, authors and publishers who have allowed me to use their data or diagrams. The manuscript was prepared by Mrs L. Hobbs: I am greatly indebted to her for this. The patience and encouragement of my wife and family has never faltered and I deeply appreciate this.