

Preface

It is the valid experimentation that generates universal hypothesis in science. Theoretical information undoubtedly originates from practical and therefore a scientist through in modern practical orientation can be a scientist of high academic accomplishment.

Heavy emphasis on practical teaching is trusted upon with the understanding that mere theory won't help building personal career of an individual. We believe that teachers must exercise what they are supposed to demonstrate to their taught in a laboratory. The science is advancing fast and the knowledge based on swinging hypothesis becomes outdated. Today, we are in an electronic age of computer science and this leads us to unveil mysteries of various complex phenomenons. The older concepts are subject to change to the ever changing demands of the day. Therefore, a teacher or a student has to be toned up with the time.

Our attempts are to make both Post Graduate student as well as teachers familiar with such captive world. We do not claim current furnishings of techniques in any way exhaustive, but we do hope that it may certainly be to value to our readers. Techniques related to various physiological phenomenon are subject of tremendous interest and importance to plant physiologist, agronomist, horticulturist, ecologist, and biochemists. This book is intended to provide recognised methods related various plant processes in a comprehensive form. Text begins with what a researcher is primarily supposed to know before he actually goes for estimations. Further, you may see techniques on crop physiology such as hydroponics and plant nutrition, test for various stresses, water potential and water flow in plants, canopy gas measurements (Photosynthesis, Respiration and Transpiration), basic equations for growth studies and methods for estimations of plant products, microclimate. Efforts were also made to incorporate the topic like Climate Change and theory of phytotron as well as rhizotron in this book. In

this book research worker must be familiar with latest procedure to elucidate the problems. The validity of the results based on fundamentals principles of physics. This book is meant to be used in conjunction with a standard text of plant physiology though elementary principles relating to the techniques are briefed.

The subjects on hormones, tissue culture and seed technology are useful for students. Hope this book shall serve the need of students, teachers and researchers. The suggestions and advice are most welcome for the improvements in structural and for additions of current techniques. We shall feel successful in our efforts publishing this book if we know how this text has become meaningful to our readers in planning their research strategies. We would appreciate suggestions from teachers and students who use the book. Hope this book shall serve the need of students, teachers and researchers. The suggestions and advice are most welcome for the improvements in structural and for additions of current techniques. We shall feel successful in our efforts publishing this book if we know how this text has become meaningful to our readers in planning their research strategies. We would appreciate suggestions from teachers and students who use the book on how we could improve upon it.

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