In section one although no conclusion can be reached concerning a universal mechanism(s) of desiccation tolerance, sufficient results are presented to assess the range of mechanisms that are currently proposed and the status of the research.

There are 20 papers on dormancy in section two. While several papers involve management of dormancy on specific species, some of which border on being exotic, others are good representations of the more advanced studies on mechanisms of dormancy.

Nearly one third (12) of the papers in section three are biochemical and molecular characterizations of reactions involved in various seed stages from quiescence through priming to germination. Other papers are concerned with new methods of measuring seed quality, recipes of how to enhance seed performance, and biological changes that occur during seed enhancement.

The section on ecophysiology consists of only four papers on the subject. These papers deal mainly with germination and dispersal strategies that make it possible for certain species to inhabit ecological niches that are less than desirable for most plants.

The subject of dehydration of recalcitrant seed is emphasized in the last section. Included are studies on chemical, physical and biological changes that occur in orthodox and recalcitrant seed during aging and storage. Some of the work on the role of free radicals in seed quality is reported as well as studies on storage fungi.

This book contains a number of good papers that represent some of the more basic research approaches to developing a better understanding of some of the mystical properties of seed. Other papers add to the knowledge base and form a basis for solving practical problems. The book is a wealth of information for everyone with an interest in seeds.

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For those involved in planting seed producing plants, this book is a long-awaited reference. Most texts in this field are out of date (and out of print) and cover all types of agricultural plants in a general manner. As the authors explain in their preface, the book is intended to serve both as a textbook and a reference and textbook for undergraduate students interested in seed production. However, it is likely to find a wider audience among researchers and professionals who need a single source to consult on seed production.

The book is divided into two parts, the first covering principles of seed production that are common among crops. Those who are familiar with Principles of Seed Science by M. B. F. MCDONALD AND L. W. COPELAND (3rd Edition) by these authors will recognize much of the same material here, although there is a major emphasis in emphasis and coverage. The individual chapters cover the evolution of the seed industry, seed certification, storage and quality. Among the topics covered are the development of synthetic seeds, processing and storage technology, and certification standards. A single section is devoted to high-tech methods for the production of seed.