Reviews and Abstracts

Nature of Plant Sports. 1960. By Haig Dermen. Amer. Hort. Mag. Vol. 39 No. 3, pages 123–173.

Dr. Haig Dermen has spent a good part of the past 20 years in making studies of plant sports, and this article summarizes much of this work. For years to come, this article will help clarify our understanding of how sports originate. It will also help the observer to distinguish sports from virus-infected plants, and will be valuable to students of developmental anatomy of plants, to horticulturists, and to nurserymen who wish to propagate color sports of apples and pears, early or late maturing peaches and plums, thornless blackberries and variegated foliage plants.

This extensively illustrated article starts out with a discussion of the anatomy and cytology of chimeras. Dr. Derman then reviews naturally occurring leaf variegations and fruit sports and their propagation. He finally discusses the so-called "graft-hybrids" and "graft-chimera". This excellent article could easily prove to be a major contribution to American horticulture.—*G. M. Darrow.*

Principles of Plant Breeding. 1960. By R. W. Allard. John Wiley & Sons. 485 pages. $9.00.

As the title of this book indicates, the author stresses principles rather than the details of breeding methods applied to specific crops. However, the applications of these principles are not neglected. The sections of the text devoted primarily to principles are immediately followed by related chapters on practices.

Each section of this book can "stand on its own", enabling instructors to select subject matter appropriate to the backgrounds or interests of their students. This is desirable in a text book in which certain aspects of inheritance such as population genetics, quantitative genetics and systems of mating are developed beyond the level of a first course in college genetics.

At least six chapters would probably be too difficult for many beginners. But appropriate chapters could be selected for an elementary course.

Although a variety of crops are used to illustrate principles, the book would be more useful to students of horticulture if more fruits and flowers and vegetables had been used as examples.

An interesting innovation in this book is a chapter on variability systems of pathogenic fungi. This is basic for a breeding program designed to develop disease-resistant varieties for one to understand variation and inheritance in parasitic organisms as well as differences in resistance to these fungi within host species.

A welcome omission from this text are sections on biometry and experimental design, so often included in books on plant breeding, but which would be more appropriate elsewhere.

This book is broad in scope, well written, and recommended as a text or reference to anyone with an interest in plant breeding.—*J. E. Moulton.*

Provence Quince Rootstocks for Pear

English pomologist R. J. Garner, points out the need for more vigorous quince rootstocks for pear, in the September 24, 1960 issue of "Grower." Selections are being made at East Malling from the French "Provence" quince stocks for this purpose.