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BOOK REVIEW

JACKSON, M. B. (ed.): NEW ROOT FORMATION IN PLANTS AND CUTTINGS. Developments in Plant and Soil Sciences, Vol. 20. — Kluwer Acad. Publ. Group, Dordrecht 1986. Dfl. 160.00; US \$ 69.50; £ 44.50.

New Root Formation in Plants and Cuttings is the 20 th volume of the monographs Developments in Plant and Soil Sciences. It fills a considerable gap in monographs on roots. Though the role of the root system, the key organ in the adaptive processes of plants, is obvious, rather little attention has been paid to root formation and development. The list of references is published in this book. 21 titles cover the period from 1926 to 1983. At the present time the root formation is getting more attention due to the increasing use of *in vitro* multiplication techniques. For this reason it was thought necessary to publish the book on root formation and development.

In this book the main features of the physiology of root formation are presented in seven chapters. The first two chapters are devoted to the ontogeny and anatomy of lateral roots (Peterson and Peterson); attention is paid to the exogenous factors affecting the lateral root formation and development (Torrey). The following chapters discuss the adventitious root formation development and functions. The development and function of adventitious roots is described by Barlow. A thorough description of the anatomic changes accompanying the adventitious root formation is given by Lowell and White. The fifth and sixth chapters are devoted to the endogenous control of adventitious rooting, especially to the role of phytohormones (Haisig, Jarvis). The last chapter deals with the environmental effects on root formation (Andersen).

The book is arranged very well, it is written in clear style and above all it contains numerous valuable references to original literature recently published. It will be a comprehensive reference source for research workers in both basic and applied plant sciences. The main merit of this book as a whole is in bringing together different views on this important topic.

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