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Davis, T. D., Haissig, B. E., Sankhla, N. (ed.): Adventitious Root Formation in Cuttings. *Advances in Plant Sciences Series. Volume 2.* – Dioscorides Press, Portland, Oregon, 1988. 315 pp.,

Formation of adventitious roots has been of interest to plant sciences for many years and the interest still has not dropped especially due to the continually increasing number of economically important plants propagated by cuttings. In spite of concentrated effort of plant physiologists and biochemists to elucidate control mechanisms concerned with the initiation and development of new roots, much of the fundamental biology of these processes is still unsufficiently understood.

Because of intensive study the present literature on the subject is voluminous. The purpose of this book, as editors themselves declare, was to bring together, review, and interpret the research that has been done. According to my opinion, both authors and editors were exceedingly successful in fulfilment of their target. Twenty six contributors from 10 countries represent the entire range of plant sciences from plant physiology, genetics, molecular biology and biochemistry to horticulture and forestry concerning the biological and biochemical formation of roots.

The book has been divided into five sections: Development, Physiology and Biochemistry, Growth Regulators, Environmental Considerations, Future Outlook, comprising 22 chapters. The nature of rooting potential including possibilities for its affecting during maturation is especially dealt with in the first section. The second section brings information concerning some aspects of etiolation, mineral nutrition, photosynthesis, and water balance, related to adventitious rooting as well as roles of numerous enzymes and carbohydrates. The chapter about genetic effects on formation of adventitious roots is also a part of this section. The third section deals with an influence of auxins, gibberellins, cytokinins, ethylene, polyamines, growth inhibitors and other chemicals on adventitious rooting. The effects of the environment of stock plants, storage of unrooted cuttings and environmental conditions of cultivated cuttings on adventitious root formation are discussed in the fourth section. One must further appreciate valuable information on bioassays, immunochemical assays and physicochemical methods used in the rooting research, the possibilities of applying of microorganism *Agrobacterium rhizogenes* to stimulate rooting and data on the factors influencing rooting in tissue cultures. The last chapter deals with the future trends in adventitious rooting. The reader could miss concise survey of the anatomical data related to the root initiation and development but the editors refer to some excellent recent reviews.

Despite of the wide array of contributors the book can be considered exemplary in its compact style and balanced contents that demonstrates close co-operation and perfect action of both authors and editors. It could be of value as a rich information source, often exceeding the dealing topic, for plant physiologists, biochemists and genetists interested in theoretical aspects of adventitious root formation as well as for horticulturists, foresters, and agronomists using given data in practical applications.