

Dijkstra, J., DeJager, C.P.: **Practical Plant Virology, Protocols and Exercises.** - Springer-Verlag, Berlin - Heidelberg - New York 1998. 459 pp. DM 148. ISBN 3-540-63759-1.

The publication is meant for students and teachers of plant virology, plant pathology, plant breeding and microbiology. This book tries to cover all relevant branches of plant virology, including the molecular aspects. The protocols are described in a manner which should be understandable to those with a basic knowledge of biology and chemistry. Although most of the methods and techniques used in plant virology have already been published in scientific papers, the latter seldom give sufficient practical details to enable an inexperienced student.

The 89 protocols and subprotocols are arranged in 14 different parts. Each of the protocols begins with a general introduction to the topic and a list of required materials (other than those found as standard laboratory equipment). Thereafter, a step-by-step procedure is given, in some instances preceded by preparations, and/or followed by interpretation of data, if applicable. Also included are tips and troubleshooting suggestions for facilitating the experiments and overcoming likely problems. At the end of a protocol or an introduction, a reference list is given that contains references mentioned in the text and other relevant publications. Whenever appropriate, detailed recipes and formulations of ingredients are appended at the end of the book.

Parts I-VII (Virus Inoculation, Symptomatology, Infectivity Assays, Infectivity of Virus in Crude Sap, Transmission of Viruses, Maintenance of Virus Isolates and Production of Virus-Free Material from Infected plants) are concerned with biological characteristics of viruses; whereas Parts VIII-XIII (Virus Isolation and Purification, Physicochemical Properties of Virus Particle, Properties of Viral Components, Serological Techniques for Detection and Identification of Viruses and Viral Products, Electron Microscope and Light Microscope Serology, and Detection of Viral RNA) deal with intrinsic viral properties. Part XIV (Diagnosis of a Disease and Identification of the Causal Viruses) serves as a guide to diagnosis and identification for which the necessary tools are provided in previous parts. Some parts contain class exercises; in addition, many of the protocols in other parts are suitable for student experiments.

Virus names in this book are basically those provided by the sixth Report of the International Committee on Taxonomy of Viruses (1995) with addition of the generic designation.

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