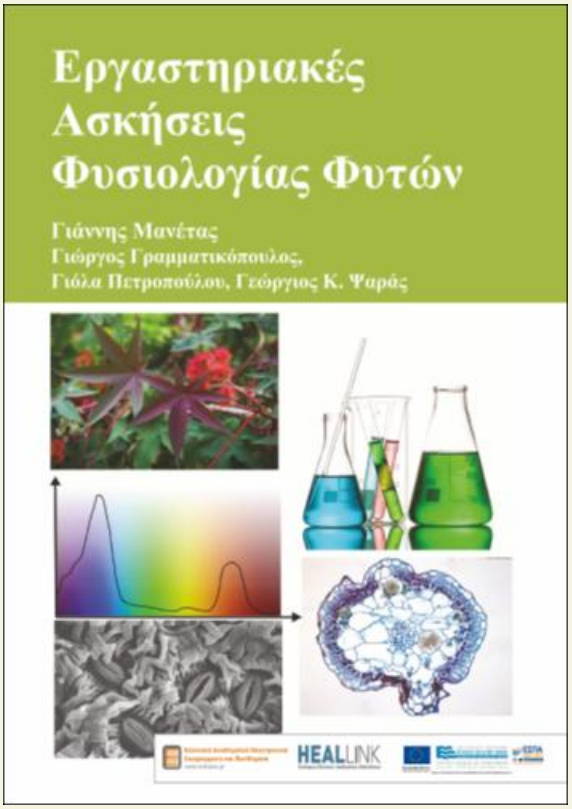

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Abstract

The book describes 21 laboratory exercises concerning plant physiology, i.e. their functions and how these functions are affected by the environment and their developmental stage. The corresponding course, with the same or a similar title, is taught as a compulsory subject in all Biology, Agriculture, and Forestry Departments/Schools of Universities, and in several TEIs with relevant study content. Therefore, it is mainly aimed at students in these fields. The exercises are divided into six chapters, roughly corresponding to the chapters in plant physiology textbooks. The obvious initial goal is to reinforce the theory in the laboratory. However, particular emphasis is placed on familiarizing students with experimental methodology and the quantification of measurements. In this sense, several exercises are in the form of a small 'research project', where students are asked to formulate hypotheses, organize the appropriate experiment, check the reliability of the methods and equipment, analyze the results quantitatively, process them statistically, and decide on the correctness or incorrectness of the initial hypothesis, discussing alternative interpretations. Most exercises require materials and equipment that are usually available in a typical plant physiology laboratory. However, in some exercises, the materials and equipment used are common enough that the exercise can be performed in a secondary school laboratory. In this sense, the manual is useful not only for students who will pursue this career, but also for secondary school teachers already in service. Finally, one of the chapters of the book (entitled 'Plants and the Environment') includes six exercises that are partly carried out in the field. These can be used in study programs that include courses on plant ecophysiology/environmental biology.

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