doi: 10.17221/127/2016-PPS

Book Review

Profese rostlinolékaře

Uvedení do studia rostlinolékařství

Plant Health Science and Management Profession

Introduction in Plant Health Science and Management

(in Czech with English summary)

V. Kůdela

Česká společnost rostlinolékařská, Praha, Czech Republic, 2016, 269 pp.,

ISBN 978-80-02-02550-4. Price 185,- CZK

(available on e-mail address: sekretariat@rostlinolekari.cz)

Plant health science and management (PHSM) represent an enormously broad discipline, focused on plant diseases and health, including health quality of food of plant origin. It's based on numerous natural and agricultural sciences. As a scientific and practical discipline, it is extremelly difficult because of the huge number of plants (over 10 000 species) grown and used by man, when considering that each plant species has many different diseases, pests, and disorders of biotic and abiotic origin. In comparison with human and veterinary medicine, the profession of plant health science and management is still under appreciated from the viewpoint of its importance for the quality of natural and managed landscapes, and human and animal health, as well as in terms of its overall prestige in the scope of various human activities. The book reviewed here is primarilly focused on the topic of PHSM and step-by-step explanations of this exciting and very important profession.

This recently published book, is one of the first and most comprehensive treatments focused on the PHSM profession. In this book, a profession is defined as a type of job requiring highly advanced education, training or skills, and covering a very broad spectrum of activities. PHSM specialists are then compared to human physicians and veterinarians. The main purpose of this book is introduce the reader to the philosophy, concepts, and strategic framework of this profession and show in broadest sense what it represents from theoretical, practical, and educational viewpoints.

The author of this book is Prof. V. Kůdela, an extraordinary Czech phytopathologist, who has specialised in plant protection sciences and is a highly experienced university educator, as well as the author of many books on plant diseases and plant health science. The book is divided into four main sections and eleven chapters. All sections and chapters are very well arranged and logically linked, and cover all the most important theoretical and practical areas related to PHSM.

The first section serves as a fundamental introduction to PHSM and is focused on the definition and meaning of the PHSM profession as both a theoretical and practical discipline. He explains the basic terms used in the book (Chapter 1), the concepts common to human, animal, and plant health (Chapter 2), and the contributions of PHSM to agriculture, forestry, and human society (Chapter 3).

The second section, which is divided into three chapters (4–6), describes the prerequisities for the professionalisation of PHSM (Chapter 4), criteria for professionalisation and their fulfilment (Chapter 5), and PHSM organizations and their activities (Chapter 6).

The third section is composed of two chapters (7 and 8). They cover the conception, strategies and systems of plant health care (Chapter 7), and provide a comprehensive treatment of the present state of agriculture in the Czech Republic, European Union (EU), and other world countries in relation to PHSM.

doi: 10.17221/127/2016-PPS

The fourth section is divided into three chapters. Chapters 9 and 10 concentrate on institutions that can increase of effectiveness of the basic components of the plant health care system, touching upon education, research, extension, state plant health administration, and the activities and responsibilities of Ministries of Agriculture and other central authorities of state administration (Chapters 9 and 10). In the final chapter, the author gives both historical perspectives on PHSM in Czech Lands and a look to the future of this profession in the Czech Republic.

In a short Epilogue, the author concludes that PHSM at the beginning of 21th century has the same methodological background and power for determination of diseases and pests that is present within human and veterinary medicine; however, this power can only be efficiently exploited by highly qualified professionals with long experience. But PHSM professionals have a long and arduous path ahead to make these activities more efficient and more effectively applied in agricultural practice. Until now, there has not been a strong platform for the role of practical PHSM professionals and their advisory services nor a fully integrated system of plant health care and control, parallel to those in place for human and veterinary medicine. PHSM practitioners must be competent enough to meet the challenges they face, suggest suitable solutions, not only based on the application of chemical pesticides, but also on biological and genetical measures, such as complex systems of Integrated Pest Management (IPM). Also universities must develop suitable and progressive teaching programs focused on PHSM and establish a strong academic foundation for the widespread recognition of this profession as a discipline parallel to that of human and veterinary medicine.

This volume also includes eight appendices covering historical and recent aspects of plant health science, an English summary, a bibliography, and a subject index.

Prof. Kůdela's book represents a very valuable contribution to our general understanding of the plant health science and management profession. It will be an extremely useful source of information and inspiration not only for those working in plant health care and plant protection science, but also for plant pathologists, entomologists, weed scientists, agronomists and horticulturists, as well as for biologists and ecologists. The book will be also very valuable for university students and lecturers, researchers and professionals in state administration and politics. It is highly recommended to all readers interested in understanding the historical and recent background of this fascinating topic.

Aleš Lebeda (Olomouc, Czech Republic)