Book review

Abiotikózy rostlin: poruchy, poškození a poranění – Plant abioticosis: disorders, damage and injuries

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In 2013, Academia published a book by a team of authors (Václav Kůdela, Petr Ackermann, Ilja Tom Prášil, Jaroslav Rod, and Karel Veverka) entitled Abiotikózy rostlin: poruchy, poškození a poranění (Plant abiotic diseases: disorders, damage and injuries). The publication is a unique work that provides broad coverage on the subject of abiotic injury to cultivated plants. The book is split into two parts. The first part offers a clear and well-organised overview of the abiotic factors that affect plants, plant responses, principles of diagnosis of abiotic disorders, and feasibility of regulation. A separate chapter of Part 1 is dedicated to the association of abiotic maladies with infectious diseases of plants. The book provides definitions of terms, which I find very useful and important for the reader. However, there were created some new terms, which are not generally accepted in international audience in this area. Its questionable if it is a weakness of the book or not, and if the terms will be more broadly accepted in the future.

The second section, a technical one, is devoted to specific types of abiotic injury of cultured plants – selected field crops, vegetables, woody fruiting species, strawberries, and vine crops. Mentioned also are abiotic factors affecting the health of selected forest trees and stored plant products. A range of symptoms of the disorders described is documented through quality colour photographs. The publication is completed, in a helpful manner, by an English-Czech dictionary of terms relating to abiotic injury to plants.

Abiotic plant injury has been neglected in the Czech plant pathology literature in recent years, in part due to the rapid development of modern diagnostic methods related to pathogens and pests that are the focus of many researchers. The textbook of Kůdela and Veverka published by South Bohemian University České Budějovice in 2005 – Poruchy, poškození a poranění rostlin abiotického původu (ZF JU, 118 pp.) – is the only exception in that it provides a brief overview of the issue.

With its focus, selection and organisation of the subject matter, the comprehensiveness of the view, and the extent (566 pages), the book is useful as a compact source of information not just for field and research phytopathology specialists but also for plant physiologists and ecologists. Plant abioticosis: disorders, damage and injuries, as a study material, can be strongly recommend to students of biology, agronomy, and environmental science. In addition, much of the information could be useful to growers. The book should not be missing in any professional library.

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