



BOOK REVIEW - *Plant Invasions: Human perception, ecological impacts and management*

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Plant invasions: Human perception, ecological impacts and management. Edited by B Tokarska-Guzik, JH Brock, G Brundu, L Child, CC Daehler, and P Pyšek. 2008. Backhuys Publishers, Leiden. xvii + 427 pp., 103 figures, 50 tables. Paperback, Euro 126.00, ISBN 978-3-8236-1528-6.

Over the last two decades, plant invasions have become a subject of an increasing number of national and international meetings. This volume presents key contributions from the 8th International Conferences on the Ecology and Management of Alien Plant Invasions (EMAPi) held at the University of Silesia, Katowice, Poland, in 2005. In total, 27 chapters were written by 71 authors from 18 countries and four continents. The volume is divided into four sections: 1 – Human perception and role in biological invasions (four chapters), 2 – Biology, ecology and distribution of invasive species (seven chapters), 3 – Invasibility of habitats and impacts of invasive species (12 chapters), 4 – Control and management (four chapters). As in the previous EMAPi volumes, standardized international terminology is used (Richardson et al. 2000, Pyšek et al. 2004).

First, browsing through the Contents, we may be somewhat disappointed that only two contributions are from the USA (CC Daehler: Invasive plant problems in the Hawaiian Islands; JH Brock: Ecology and management of *Alhagi maurorum* in Arizona). Nevertheless, because plant invasions are a global problem, we can learn important lessons from studies conducted in Australia, Europe, or Africa. Moreover, several contributions in this volume are of general importance, addressing very basic questions of invasion biology. For example, Daehler's analysis of major motivations for plant introductions in Hawaii (nostalgia, neophilia, economics, improvement of ecosystem services) could serve as a model for similar studies in other countries. Similarly, approaches used in the chapter by Philip Hulme and co-authors on multiscale analyses of plant invasions to Mediterranean islands could be applied in different parts of the world. Twenty contributions from different parts of Europe serve as examples of a very well-organized research on plant invasions over this continent. Recent publication of the European catalogue of all known invasive species (DAISIE 2009) is an impressive result of cooperation across Europe.

The book is very well edited and packed with interesting data. However, as in the previous volume that I reviewed for Madroño (Rejmánek 2003), one chronic weakness of plant invasion biology still remains: a lack of rigorous evidence for assumed harmful impacts of invasive taxa in natural and seminatural areas. The phrase "ecological impacts" is in the title of this new volume, but only a very few contributors are dealing with this topic. Moreover, if they do, their conclusions are based on descriptions of pairs of invaded and non-invaded plots (space for time

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substitution). The only exception is experimental study on competition between *Acacia longifolia* and native woody species in Portugal (Christiane Werner et al.). Although, unfortunately, rather expensive for a paperback (\$161), this volume is definitely worth attention of all botanists interested in plant invasions.

Literature Cited

DAISIE 2009. Handbook of Alien Species in Europe. Springer.

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RICHARDSON, DM et al. 2000. Naturalization and invasion of alien plants: concepts and definitions. *Diversity and Distributions* 6: 93-107.

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