

An evo-devo tour de force through the flowering plants, written with the exceptional clarity that we have come to expect of Alessandro Minelli. The book encompasses long-established ideas such as heterochrony, newer approaches based on families of developmental genes, and controversial concepts such as a botanical phylotypic stage and the possible saltational evolution of floral organs. This is a scholarly work with considerable attention to detail, yet at the same time it is immensely readable.

Wallace Arthur, *Emeritus Professor of Zoology, National University of Ireland, Galway*

Compared to animals, plants have been largely neglected in evolutionary developmental biology. Mainstream research has focused on developmental genetics, while a rich body of knowledge in comparative morphology is still to be exploited. No integrated account has been available.

In this volume, Alessandro Minelli fills this gap using the same approach he gave to animals, revisiting traditional concepts and providing an articulated analysis of genetic and molecular data. Topics covered include leaf complexity and the evolution of flower organs, handedness, branching patterns, flower symmetry and synorganization, as well as less conventional topics such as fractal patterns of plant organization. Also discussed is the hitherto neglected topic of the evolvability of temporal phenotypes, including a plant's annual, biennial or perennial life cycle, flowering time, and the timing of abscission of flower organs.

This will be informative reading for anyone in the field of plant evo-devo, from students to lecturers and researchers.

Professor of Zoology at the University of Padova until 2011, **Alessandro Minelli** is currently serving as Specialty Chief Editor for evolutionary developmental biology for *Frontiers in Ecology and Evolutionary Biology*. He was previously Vice-President of the European Society for Evolutionary Biology. For several years his research focus was in biological systematics, but in the mid-1990s he moved his interest towards evolutionary developmental biology, the subject of his previous book *The Development of Animal Form* (Cambridge, 2003). On his retirement, he decided to study plants and write the botanical equivalent of his book on animal evo-devo.

Capitulum of a mutant cosmos (*Cosmos* sp., Asteraceae) with tubular ray florets replacing the usual flat, petal-like ligules in which the adaxial side is strongly reduced. Courtesy of Maria Pia Mannucci. Cover design by Zoe Naylor.

CAMBRIDGE
UNIVERSITY PRESS

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ISBN 978-1-107-03492-1



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