

De Kroon, H., van Groenendaal, J. (ed.): **The Ecology and Evolution of Clonal Plants**. - Backhuys Publishers, Leiden 1997. xii + 453 pp. Paperbound NLG 120.00. ISBN 90-73348-73-0.

Many-sided ecological and evolutionary impact of clonality has been extensively studied during the last two decades, and importance of clonality for genetic variation, demography, longevity of genotypes (genets), phenotypic plasticity, competition, resource acquisition, structure of plant communities, *etc.*, has been demonstrated in a lot of studies. The aim of this volume is "to bring together recent theoretical and empirical developments in clonal plant research within the appropriate broad range of plant growth forms".

The book is composed of eighteen chapters, each of them being a review of the respective topic: Clonal plant architecture: a comparative analysis of form and function (L. Klimeš, J. Klimešová, R. Hendriks and J. van Groenendaal), Developmental phenology and the timing of determination of shoot bud fates: ways in which the developmental program modulates fitness in clonal plants (M.A. Watson, M.J.M. Hay and P.C.D. Newton), What does a clonal organization suggest concerning clonal plants? (T. Sachs and A. Novoplansky), Sectoriality and its implications for physiological integration (C. Marshall and E.A.C. Price), Extensive physiological integration: an adaptive trait in resource-poor environments? (I.S. Jónsdóttir and M.A. Watson), Division of labour in clonal plants (P. Alpert and J.F. Stuefer), Models of spatial spread and foraging in clonal plants (B. Oborny and M.L. Cain), Structure and analysis of phenotypic and genetic variation in clonal plants (A.J. McLellan, D. Prati, O. Kaltz and B. Schmid), Clonal life histories and the evolution of seed recruitment (O. Eriksson), Somatic

mutation theory of clonality (E.J. Klekowski, Jr.), Hierarchical selection in clonal plants (T. Vuorisalo, J. Tuomi, B. Pedersen and P. Käär), Clonality in woody plants – a review and comparison with clonal herbs (C.J. Pedersen and R.H. Jones), Positive and negative interactions in bryophyte populations (E.C. van der Hoeven and H.J. During), Interactions between shoots in clonal plants and the effects of stored resources on the structure of shoot populations (J. Suzuki and M.J. Hutchings), Competition and spatial dynamics of clonal plants (T. Herben and T. Hara), Clonal plant dominance under elevated nitrogen deposition, with special reference to *Brachypodium pinnatum* in chalk grassland (H. de Kroon and R. Bobbink), Arctic clonal plants and global change (T.V. Callaghan, S. Jonasson and R.W. Brooker), Clonality and plant invasions: can a trait make a difference? (P. Pyšek).

As expected in such a proliferous field, many stimulating research questions and ideas are formulated in conclusions of most of chapters. A short glossary covering relevant terms of plant reproductive biology and clonal ecology is added.

Generally, the book provides a good overview of the ways of thinking and empirical working in the productive field of clonal plant ecology. It will be appreciated not only by scientists working in this branch of ecology, but I strongly recommend it to students of ecology and systematics in botany, and to everybody who would like to learn more about the role of clonality in ecological processes and microevolution.

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