

Contents

Foreword	v
Preface	vii
Contributors	xvii

Section I. History of Mediterranean Floras

1. Quaternary History of the Mediterranean Vegetation of Chile Carolina M. Villagrán	3
2. Evolution and History of Mediterranean Vegetation Types in Australia John R. Dodson and A. Peter Kershaw	21

Section II. Comparative Biogeography

3. Convergence in the Mediterranean Floras in Central Chile and California: Insights from Comparative Biogeography Mary T. Kalin Arroyo, Lohengrin Cavieres, Clodomiro Marticorena, and Melica Muñoz-Schick	43
4. Plant Life History and Dynamic Specialization in the Chaparral/Coastal Sage Shrub Flora in Southern California Paul H. Zedler	89

5. Biogeography and Floral Evolution in the Geoblasteae
(Orchidaceae) 116
Peter Bernhardt

Section III. Vegetation Structure and Soils

6. Australian Mediterranean Vegetation: Intra- and
Intercontinental Comparisons 137
Marilyn D. Fox
7. Ecomorphological Characters as a Resource for Illustrating
Growth-Form Convergence in Matorral, Chaparral, and Mallee 160
Gloria Montenegro and Rosanna Ginocchio
8. Underground Structures of Woody Plants in Mediterranean
Ecosystems of Australia, California, and Chile 177
Josep Canadell and Paul H. Zedler
9. Mineral Nutrient Relations in Mediterranean Regions of
California, Chile, and Australia 211
Byron B. Lamont

Section IV. Seed and Fruits

10. Seed-Germination Patterns in Fire-Prone
Mediterranean-Climate Regions 239
Jon E. Keeley
11. Distribution and Ecological Significance of Seed-Embryo Types
in Mediterranean Climates in California, Chile, and Australia 274
Nancy J. Vivrette
12. Modes of Seed Dispersal in the Mediterranean Regions in Chile,
California, and Australia 289
Alicia J. Hoffmann and Juan J. Armesto
13. Effect of Seed Predation on Plant Regeneration: Evidence
from Pacific Basin Mediterranean Scrub Communities 311
Svatá M. Louda

Section V. Animal Physiology and Community Structure

14. Mediterranean Type of Climatic Adaptation in the Physiological
Ecology of Rodent Species 347
Francisco Bozinovic, Mario Rosenmann, F. Fernando Novoa,
and Rodrigo G. Medel
15. Multivariate Comparisons of the Small-Mammal Faunas in
Australian, Californian, and Chilean Shrublands 363
Barry J. Fox

16. Role of Fossorial Animals in Community Structure and Energetics of Pacific Mediterranean Ecosystems	383
George W. Cox, Luis C. Contreras, and A.V. Milewski	
 Section VI. Vegetation Change and Human Influences	
17. The Human Role in Changing Landscapes in Central Chile: Implications for Intercontinental Comparisons	401
Eduardo R. Fuentes and Mauricio R. Muñoz	
18. Evaluating Causes and Mechanisms of Succession in the Mediterranean Regions in Chile and California	418
Juan J. Armesto, Patricia E. Vidiella, and Hector E. Jiménez	
 Species Index	 435
Subject Index	449