

Table of Contents

Preface v
List of Topical Insights ix
List of Boxes xi

Volume 1

Introduction 1

Part I Structure 11
Gunther Neuhaus

1 Molecular Basics: The Building Blocks of Cells 13

2 The Structure and Ultrastructure of the Cell 39

3 The Tissues of Vascular Plants 129

4 Morphology and Anatomy of Vascular Plants 161

Part II Physiology 237
Uwe Sonnewald

5 Physiology of Metabolism 239

6 Physiology of Development 411

7 Physiology of Movement 531

8 Allelophysiology 569

Volume 2

Part III Evolution and Systematics 607
Joachim W. Kadereit · Andreas Bresinsky

9 Evolution 609

10 Systematics and Phylogeny 665

Part IV Ecology	1041
<i>Christian Körner</i>	
11 Basics of Plant Ecology	1043
12 Plant–Environment Interactions	1065
13 Ecology of Populations and Vegetation	1167
14 Vegetation of the Earth	1217
Timeline	1263
Sources	1267
Index	1273