Contents

Part I  Defining the Needs of Educators and Students

1  Carrying Plant Knowledge Forward in the USA........................................... 3
   Patricia Harrison

2  Lessons Learned in Development of an Interdisciplinary
   Science Curriculum Support Organization.............................................. 21
   Will McClatchey and K. W. Bridges

3  The Contribution of Ethnobiology to Teaching Plant
   Sciences: Student and Faculty Perspectives ............................................ 33
   Sofia A. Vougioukalou, Keri Barfield, Ryan D. Huish,
   Laura Shiels, Sunshine L. Brosi and Patricia Harrison

4  From Learning to Teaching: Bridging Students’ Experience
   and Teachers’ Expectations....................................................................... 47
   Valentina Savo and Ursula M. Arndt

Part II  Introducing Fundamental Skills

5  Research-Based Learning........................................................................ 61
   Gail E. Wagner

6  Aligning Plant Identification Curricula to Disciplinary
   Standards Through the Framework of Student-Centered
   Learning...................................................................................................... 83
   Sunshine L. Brosi and Ryan D. Huish

7  Cultivation of Local Botanical Knowledge or Knowledge
   of Nature Using Interdisciplinary, Innovative, and Mind/
   Brain-Based Techniques........................................................................... 101
   Karen C. Hall and April T. Sawey
### Part III  Connecting Students to Plants

8  “What’s That Called?” Folk Taxonomy and Connecting Students to the Human-Nature Interface ........................................ 121  
Nanci J. Ross

9  Learning from the Land: Incorporating Indigenous Perspectives into the Plant Sciences .................................................. 135  
Michael Benedict (Mohawk), Kelly Kindscher and Raymond Pierotti

10 Pedagogy and Botany of the Columbian Biological Exchange: The 1491 Meal ................................................................. 155  
John Richard Stepp

11 Teaching Plant Science in School and Community Settings .......................................................... 161  
Lisa Carolina Gonzalez

12 Using Community Resources for Ethnobotany Courses ................................................................. 187  
Al Keali‘i Chock

### Part IV  Teaching Through Field Experiences

13 Learning in Paradise: The Role of Botanic Gardens in University Education .................................................. 213  
Bradley C. Bennett

14 Teaching Ethnobotany Through Field Research: A Case Study Integrating Conservation with Tibetan Traditional Ecological Knowledge .................................................. 231  
Jan Salick

15 Excursions in Teaching Plant Science Through the Local Ethnobotany of the Food–Medicine Continuum: Field Trips to Traditional Specialty Food Markets .................................................. 245  
Cedric Barrett Baker and Gokhan Hacisalihoglu

16 Ecosystem Excitement: Using Everyday Items, Projects, Field Trips, and Exotic Images to Connect Students to Plants .......... 261  
Maria Fadiman
Part V  Integrating Technology

17  Teaching Ethnobiology Online at a Canadian Distance Learning University ................................................................. 277
    Leslie Main Johnson and Janelle Marie Baker

18  Linking Student Skill Building with Public Outreach and Education ................................................................. 291
    Cassandra L. Quave

Index ................................................................................................................................................................. 309
Innovative Strategies for Teaching in the Plant Sciences
Quave, C.L. (Ed.)
2014, XXV, 312 p. 46 illus., 25 illus. in color., Hardcover
ISBN: 978-1-4939-0421-1