

## Resources: Plant Anatomy and Physiology

### Suggested Readings for Students (see Print Resources for annotations and URLs)

Janick, Jules 1998. *Horticulture Science* (4th Edition). Freeman and Company.

McMahon, Margaret, Anton M. Kofranek, and Vincent E. Rubatzky. 2001. *Hartmann's Plant Science: Growth, Development, and Utilization of Cultivated Plants* (3rd Edition). Prentice Hall.

Poincelot, Raymond. 2003. *Sustainable Horticulture: Today and Tomorrow*. Pearson Books.

Raven, Peter R., Raymond Evert, and Susan E. Eichhorn. 2005. *The Biology of Plants* (7th Edition). W. H. Freeman.

### Print Resources

Janick, Jules. 1998. *Horticulture Science* (4th Edition). Freeman and Company.

An introductory text in horticulture. “Part I: Horticultural Biology” provides an overview of plant anatomy, physiology, growth, metabolism, development and reproduction.

McMahon, Margaret, Anton M. Kofranek, and Vincent E. Rubatzky. 2001. *Hartmann's Plant Science: Growth, Development, and Utilization of Cultivated Plants* (3rd Edition). Prentice Hall.

Poincelot, Raymond. 2003. *Sustainable Horticulture: Today and Tomorrow*. Pearson Books. [www.pearsoned.com/higher-ed/](http://www.pearsoned.com/higher-ed/)

This comprehensive introduction to the emerging discipline of sustainable horticulture provides students with the foundations of horticultural science that underlie all forms of horticulture from conventional through sustainable to certified organic. The text leads students through practices and production of alternative horticulture, and provides the necessary information to support a more sustainable and environmentally friendly horticulture. Part II: Introduction to Horticulture Science provides an overview of plant taxonomy, plant anatomy and functions, plant processes, plant development, and an overview of plants, the environment and natural resource sustainability.

Raven, Peter R., Raymond Evert and Susan E. Eichhorn. 2005. *The Biology of Plants* (7th Edition). W. H. Freeman.

An introduction to botany from the molecular and cellular through the whole organism to the ecosystem. The authors emphasize the relationships between growth and development, structure and function, and evolution and ecology. There are various instructional resource supplements for this book found on the Biology of Plants

website developed as a free resource to students and instructors using the *Biology of Plants* textbook. See: [www.whfreeman.com/RAVEN/INDEX.HTM](http://www.whfreeman.com/RAVEN/INDEX.HTM)

## Curricula

Journal of Natural Resources and Life Sciences Education

[www.jnrlse.org/index.html](http://www.jnrlse.org/index.html)

The *Journal of Natural Resources and Life Sciences Education* is a comprehensive database for life science educational resources. The Journal is continuously updated online during the year and one hard copy is published in December of each year by the American Society of Agronomy. Contains links to following associations, each with instructional resource components: American Association for Agricultural Education; American Institute of Biological Sciences; American Phytopathological Society; American Society for Horticultural Science; American Society of Plant Biologists; Crop Science Society of America; Ecological Society of America; Entomological Society of America; Soil Science Society of America

## Web Resources

Biology of Plants

[www.whfreeman.com/RAVEN/INDEX.HTM](http://www.whfreeman.com/RAVEN/INDEX.HTM)

Biology of Plants website has been developed as a free resource to students and instructors using the *Biology of Plants* textbook. Contains many instructional resources for both student and instructors to facilitate the delivery of plant science information.

Journal of Natural Resources and Life Sciences Education

[www.jnrlse.org/index.html](http://www.jnrlse.org/index.html)

The *Journal of Natural Resources and Life Sciences Education* is a comprehensive database for life science educational resources. The Journal is continuously updated online during the year and one hard copy is published in December of each year by the American Society of Agronomy. Contains links to following associations, each with instructional resource components: American Association for Agricultural Education; American Institute of Biological Sciences; American Phytopathological Society; American Society for Horticultural Science; American Society of Plant Biologists; Crop Science Society of America; Ecological Society of America; Entomological Society of America; Soil Science Society of America

## Video Resources

Introduction to Botany Part I and II. 2004. No. W – 486. 2 VHS. San Luis Video Publishing. San Luis Obispo, CA. Available from: [www.horticulturevideos.com](http://www.horticulturevideos.com)

Introduce students to the science of botany. This subject is examined from adaptation to life on land, through modern plants and human dependency and interaction with the

plant kingdom. Lab experiments that can easily be duplicated in the classroom illustrate plant structure and transport. Learn the plant kingdom via the organizing principles of plant classification and the development of modern land plants. Plant families, growth and development, soil and nutrition, transport and movement, and natural cycles relating to plant life all are examined. Chapters include Adaptations to Land, Non-Vascular Plants, Gymnosperms, Angiosperms, Structure and Growth of Vascular Plants, Movement and Response, Nutrition, and Plants and the Future.

### **PowerPoint Resources**

Basic Plant Science for Organic Gardeners, by Laura Mendes, Santa Rosa Jr. College. See The California Agriculture Teacher's Association (CATA) Sustainable Agriculture PowerPoint Resources: [www.ccagcans.com](http://www.ccagcans.com) (see "Course Curriculum").

Provides an overview of basic plant science with an emphasis on plant growth and nutrition. Provides an overview of plant anatomy and physiology as it relates to the growth and development of plants.

Understanding Plant Growth: Implications for Grazing/Harvesting Management, Natural Resource Conservation Service Natural Resource Conservation Service. See The California Agriculture Teacher's Association (CATA) Sustainable Agriculture PowerPoint Resources: [www.ccagcans.com](http://www.ccagcans.com) (see "Course Curriculum").

An overview of the growth and development of pasture species and its management implications.