CONTENTS

VOLUME I

Tropical Biology and Natural Resources: Historical Pathways and Perspectives  1
K. Del-Claro, Institute of Biology, Federal University of Uberlandia, Brazil

1. Introduction
2. The Foundations of Tropical Biology
   2.1. Linnaeus, Humboldt and the Illuminists.
   2.2. The Victorian Naturalists.
4. Important Topics in Tropical Biology.
   4.2. Tropical Botany.
   4.3. Tropical Zoology.
   4.4. Tropical Agriculture, Phytopathology and Entomology.
   4.5. Other Topics.
5. Conclusion and Outlook.

The Importance Of Natural History Studies To The Knowledge Of Tropical Plants  23
H. M. Torezan-Silingardi, Institute of Biology, Federal University of Uberlandia, Minas Gerais, Brazil

1. Introduction
2. This Session

Seasonally Dry Deciduous Forests: Diversity And Soils In Arboreal Communities  27
A. R. T. Nascimento, G. M. Araújo, Instituto de Biologia, Universidade Federal de Uberlândia (UFU), Brazil
J. M. Felfili, Departamento de Engenharia Florestal, Universidade de Brasília (UNB), Brazil

1. Introduction
2. Ecology and community structure
3. Arboreal vegetation in seasonally dry tropical forests in Central Brazil
4. Soils and Vegetation relationships
5. Final Remarks

Morphology And Anatomy Of Tropical Flowers      41
Luiz Antonio de Souza and Ismar Sebastião Moscheta, Universidade Estadual de Maringá, Departamento de Biologia, Avenida Colombo, 5790, (87020-900) Maringá, Paraná, Brasil

1. Introduction
2. Flower morphology and anatomy
   2.1. Hypsophylls
   2.2. Floral Pedicel
   2.3. Floral Receptacle
   2.4. Anthophylls
   2.5. Perianth/Perigone
      2.5.1. Calyx
      2.5.2. Corolla
      2.5.3. Perigone
   2.6. Hypanthium
   2.7. Androecium
2.8. Gynoecium
2.9. Ovule
3. Nectary
4. Flower diagram and formula
5. Prefloration or Aestivation
6. Inflorescences
7. Anthesis
8. Pollination
  8.1. Abiotic pollination
  8.2. Biotic Pollination
9. Fecundation

**Tropical Aquatic Plants: Morphoanatomical Adaptations**  
Edna Scremin-Dias, *Botany Laboratory, Biology Department, Federal University of Mato Grosso do Sul, Brazil*

1. Introduction and Definition
2. Origin, Distribution and Diversity of Aquatic Plants
3. Life Forms of Aquatic Plants
   3.1. Submerged Plants
   3.2. Floating Plants
   3.3. Emergent Plants
   3.4. Amphibian Plants
4. Morphological and Anatomical Adaptations
5. Organs Structure – Morphology and Anatomy
   5.1. Submerged Leaves: Structure and Adaptations
   5.2. Floating Leaves: Structure and Adaptations
   5.3. Emergent Leaves: Structure and Adaptations
   5.4. Aeriferous Chambers: Characteristics and Function
   5.5. Stem: Morphology and Anatomy
   5.6. Root: Morphology and Anatomy
6. Economic Importance
7. Importance to Preserve Wetland and Wetland Plants

**Natural History And Ecology Of Neotropical Mistletoes**  
Rafael Arruda and Rodrigo F. Fadini, *Coordenao de Pesquisas em Ecologia - CPEC, Instituto Nacional de Pesquisas da Amaznia - INPA, 69011-970, CP 478, Manaus - AM, Brazil*

Fabiana A. Mouro and Claudia M. Jacobi, *Laboratorio de Interacao Animal-Planta, Departamento de Biologia Geral, Instituto de Cincias Biolgicas, Universidade Federal de Minas Gerais - UFMG, 31270-901, CP 486, Belo Horizonte - MG, Brazil*

Grazielle Sales Teodoro, *Setor de Ecologia, Departamento de Biologia, Universidade Federal de Lavras - UFLA, Lavras - MG, Brazil*

1. Introduction
2. Taxonomical relationships, geographical distribution and mistletoe diversity in Brazil
3. Effects of mistletoe infestations on plant communities
4. Reproductive biology
5. Mistletoe-host interactions
6. Metapopulation dynamics of mistletoes in Brazilian savannas
7. Economical relevance: are mistletoes pests on agricultural systems or natural plant populations?
8. Conclusions and perspectives

**Plant Strategies For Seed Dispersal In Tropical Habitats: Patterns And Implications**  
Natália O. Leiner, André R.T. Nascimento and Céline Melo, *Universidade Federal de Uberlândia, Instituto de Biologia, Uberlândia, MG, Brazil*
1. Introduction
   1.1. Megafaunal Syndrome
2. Plant strategies to Attract Frugivores
   2.1. Fruit/Seed Size Constraints
   2.2. Visual and Olfactory Displays and Nutritional Rewards
   2.3. Phenological Strategies
   2.4. Opportunistic Specialized Plant Strategies
3. Fruit Choice by Animals
4. Deposition Patterns and Frugivore Efficiency as a Seed Disperser
5. Seed Dispersal and Restoration Ecology

Index

About EOLSS