

# Bachelor of Science (BSc) in Biological Sciences

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**Fundamentals of Botanical  
Science**



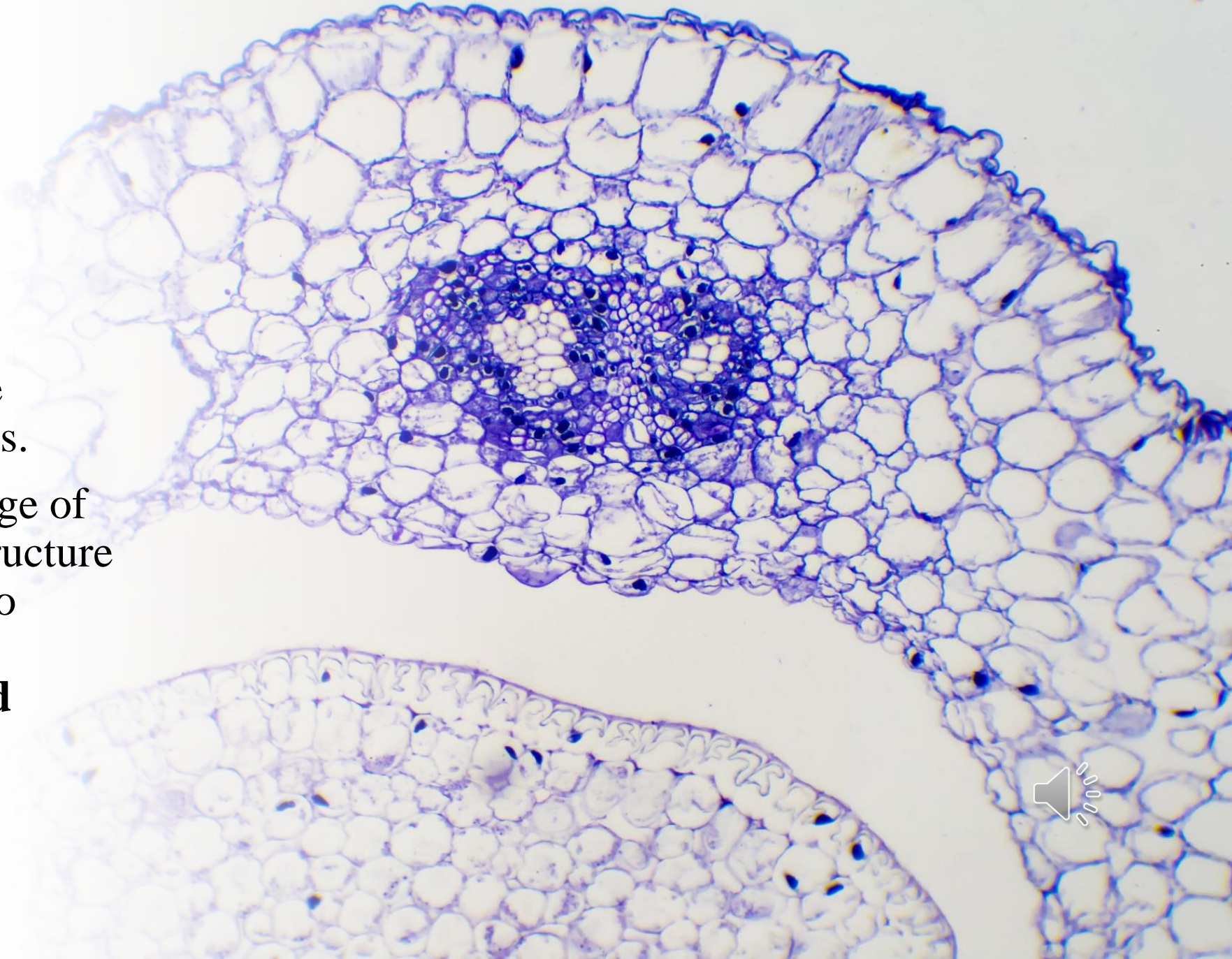
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# Botanical Science

*Botanical science*, also known as *botany*, is the scientific study of plants.

It represents a wide range of disciplines, from the structure and function of plants to **their classification, evolution, ecology, and economic importance.**





# Plant Diversity

Botany explores the incredible diversity of plant life, ranging from microscopic algae to towering trees.

It includes the study of *flowering plants (angiosperms)*, *gymnosperms*, *ferns*, *mosses*, and *other plant groups*.



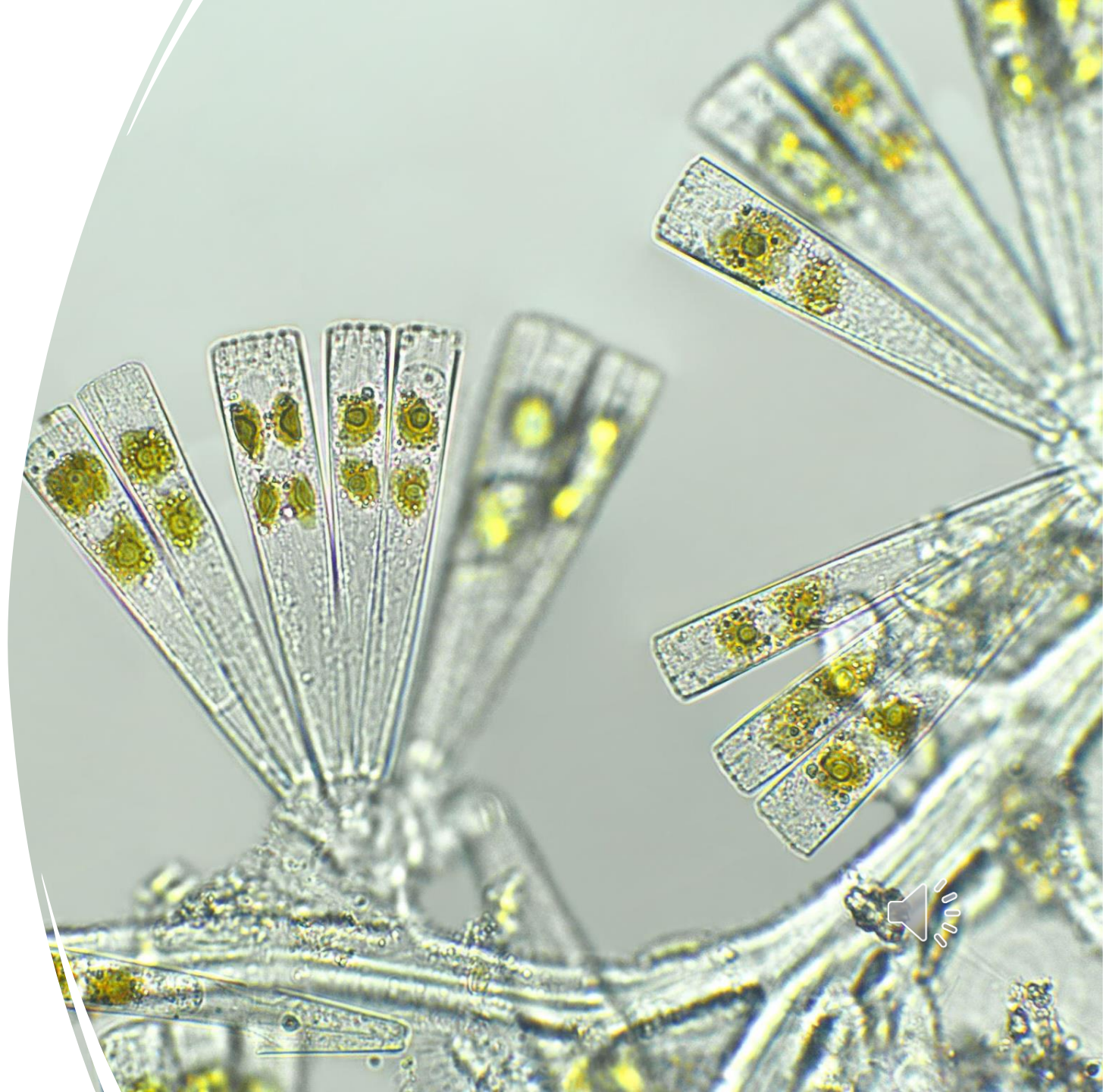


# Plant Structure & Function

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Botanists examine the anatomy and physiology of plants, understanding how **cells, tissues, and organs** work together.

Topics include *photosynthesis*, *respiration*, and *the mechanisms of nutrient uptake*.







# Taxonomy and Classification

The classification of plants based on their evolutionary relationships is a key aspect of botany.

Taxonomists categorize plants into hierarchical groups, from species to kingdoms.





# Plant Ecology

Botanists study the interactions between plants and their environment.

This includes the roles of plants in ecosystems, their adaptation to different habitats, and their responses to environmental factors.





# Plant Evolution

Understanding the evolutionary history of plants provides insights into the development of diverse plant forms and structures.

Evolutionary botany explores the relationships between different plant groups over time.



# Botanical Research Techniques



Researchers in botany employ various techniques, including

microscopy

molecular biology

fieldwork

to gather data and draw conclusions about plant life.





# Covered Points:

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- Introduction to Botany
- Plant Diversity
- Plant Structure and Functions
- Taxonomy and Classification
- Plant Ecology
- Plant Evolution
- Botanical Research Technique



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