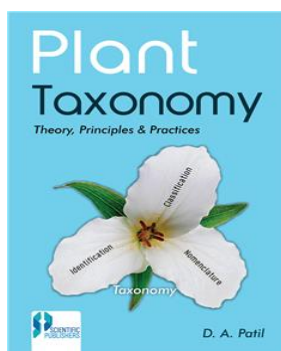


Plant Taxonomy Theory, Principles & Practices

[D.A. Patil](#)



ISBN	: 9789390495412	Book Format	: Book & eBook
E-ISBN	: 9789390495511	Binding	: Hard Bound
Language	: English	Edition	: 1
Imprint	: Scientific Publishers	© Year	: 2021
Pages	: 341	Trim Size	:
Weight	: Gms		

Print Book : ₹2,995.00

Individual E Book : ₹3,634.00

Institutional E Book : Price available on request

Blurb

Plant Taxonomy is a mother science. It is taught at graduate and post-graduate levels worldwide in colleges and universities. The science engulfs information from all sources, whether old and recent. It hence needs updating. This book is so designed with significant features: (i) explains aims, principles and approaches in taxonomy, (ii) describes lucidly the units of classification, (iii) reviews all round development of systems of plant classifications including recent ones chronologically and conceptually, (iv) synthetic nature is critically achieved imbibing recent information from different disciplines of morphology and technology, (v) brings round rules of nomenclature, gardens and herbaria in modern context, (vi) provides exhaustive bibliography supporting the information dilated in the text, (vii) also provides indexes for taxonomic terms, Latin plant names and features of taxonomic significance, (viii) reveals journey of researches in plant taxonomy, (ix) useful for learners, teachers and research workers in biodiversity study and taxonomy.

Table of Contents

1. INTRODUCTION TO TAXONOMY

(I) Taxonomy vis-à-vis Systematics:

(II) Functions of Taxonomy

(III) Principles of Taxonomy

(IV) Aims of Taxonomy

(V) Approaches To Taxonomy

(VI) Need and Importance of Taxonomy

2. CLASSIFICATIONS

(I) Need for Classification

(II) Process of Classification

(III) Classification and Aesthetics

(IV) Hierarchical Classifications

(V) General and Special Purpose Classifications

(VI) Horizontal and Vertical Classifications

(VII) Polythetic and Monothetic Classifications

(VIII) Folk Classifications

(VIII) FOR CLASSIFICATIONS

(IX) Phases of Classification

(X) Splitting and Lumping of Taxa

3. TAXONOMIC STRUCTURE

(I) Taxonomic Categories

(II) Major Categories

(III) Minor Categories

(IV) Historical Development of Concept of Species

(V) Concepts of Species

(VI) Intraspecific Categories

(VII) Deme Terminology

4. SYSTEMS OF CLASSIFICATION: GENESIS AND DEVELOPMENT

(I) Pre-Darwinian Systems of Classification

(II) Post-Darwinian Systems of Classification

5. SOURCES OF TAXONOMIC INFORMATION

(I) Exomorphology

(II) Anatomy

(III) Micromorphology and Ultrastructure

(IV) Embryology

(V) Palynology

(VI) Cytology

(VII) Chemistry

(VIII) Reproductive Biology

(IX) Genetics and Cytogenetics

(X) Plant Geography

(XI) Plant Ecology

(XII) Palaeobotany

6. Numerical Taxonomy

Principles

Operational Steps

Applications

Advantages

Demerits

7. Molecular Taxonomy (Systematics)

Molecular Approaches

Molecular Methods

Sequencing of DNA

DNA Bar Coding

Some Applications

Phylogenetics and Phylogenomics

Species Concepts

References

8. CHARACTERS

(I) Definitions of Character

(II) Kinds of Character

(III) Character Weighting

(IV) Presence or Absence of Characters

9. FLORISTICS

10. TAXONOMIC LITERATURE

(I) Floras and Manuals

(II) Monographs and Revisions

(III) Flora vs. Monographs

(IV) General Taxonomic Indexes

(V) Bibliographies, Catalogues and Review Serials

(VI) Periodicals

(VII) Glossaries and Dictionaries

(VIII) Cultivated and Economic plants

11. KEYS

(I) Key

(II) Synopsis

(III) Kinds of Keys

12. PLANT NOMENCLATURE

(I) Introduction

(II) Common Names

(III) Scientific Names

- (IV) Binomial Nomenclature
- (V) Early Attempts For Organised Nomenclature
- (VI) International Code of Nomenclature (ICN)
- (VII) Codes of Nomenclature
- (VIII) Preamble of ICN
- (IX) Principles of ICN
- (X) Rule of Priority
- (XI) Limitations of Priority
- (XII) Typification
- (XIII) Working of Type Method
- (XIV) Kinds of Nomenclatural Types
- (XV) Effective and Valid Publication
- (XVI) Type Concept and Population Concept
- (XVII) Rejection of Names
- (XVIII) Retention and Choice of Name

(XIX) Change of Names

(XX) Conservation of Names

(XXI) New Names

(XXII) Legitimate Names

(XXIII) Names of Cultivated Plants

(XXIV) Names of Hybrids

(XXV) Author Citation

(XXVI) Phylocode

13. HERBARIUM

(I) Development of Herbarium

(II) What is Herbarium

(III) Kinds of Herbaria

(IV) Functions of Herbarium

(V) Type Specimens : Importance and Care

14. BOTANIC GARDENS, MUSEUM AND LIBRARY

(A) Botanic Gardens

(I) What are Botanic Gardens

(II) Botanic Gardens:Historical Development

(III) Functions of Botanic Gardens

(IV) Botanic Gardens and Their Sections

(V) The Experimental Garden

(VI) Important Gardens of the World

(VII) Economic, Cultural And Historic Events In Botanic Gardens

(VIII) Historic Buildings And Architectural Features In Botanic Gardens

(IX) Documented Preserved Collections In Botanic Gardens

(X) Major Botanical And Horticultural Libraries In Botanic Gardens

(XI) Museum Collections In Botanic Gardens

(XII) Few Characteristic Botanic Gardens

(B) Botanical Museum

(I) What is Botanical Museum

(II) Functions and Importance

(III) Important Museums of The World

(C) Botanical Library

(I) What is a Botanical Library

(II) Functions of the Botanical Library:

(III) Important Botanical Libraries of The World

BIBLIOGRAPHY 283–326

Index-I: Latin Plant Names

Index-II: Taxonomic Terms

Index-III: Botanic Term

This is computer generated document and does not require signature

Scientific Publishers

Date :- Fri Mar 21 2025