Record Nr. UNINA9910639894903321 Autore Dehgan Bijan **Titolo** Garden Plants Taxonomy: Volume 1: Ferns, Gymnosperms, and Angiosperms (Monocots) / / by Bijan Dehgan Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2022 **ISBN** 9783031115615 9783031115608 Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (716 pages) Disciplina 582.13012 635.93 Soggetti Plant anatomy Plant physiology Landscape architecture Plant diseases Agriculture Plant Anatomy and Morphology Plant Physiology Landscape Architecture Plant Pathology **Falgueres** Gimnospermes **Angiospermes** Taxonomia botànica Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references (pages 653-664) and index.

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-- Index.

Preface -- Introduction -- 1. Nomenclature -- 2. Lycopods And

Monilophytes -- 3. Gymnosperms -- 4. Angiosperms: Flowering Plants

Horticulture has remained far behind in understanding of botanical

Nota di contenuto

Sommario/riassunto

principles. Recent phylogenetic (DNA-based) reorganization of higher plants has revolutionized taxonomic treatments of all biological entities, even when morphology does not completely agree with their organization. This book is an example of applying principals of botanical phylogenetic taxonomy to assemble genera, species, and cultivars of 200 vascular plant families of ferns, gymnosperms, and angiosperms that are cultivated for enhancement of human living space; homes, gardens, and parks. The emphases are on cultivated species but examples of some plants are often shown in the wild and in landscapes. In providing descriptions, it is assumed that students and other interested individuals have no background in general botany (plant characteristics), or nomenclature. Fundamental features of all plant groups discussed are fully illustrated by original watercolor drawings or photographs. Discussion of the families is grounded on recent botanical phylogenetic treatments, which is based on common ancestry (monophyly). Of course, phylogenetic taxonomy is not a new concept, and was originally based on morphological characteristics; it is the DNA-based phylogeny that has revolutionized modern biological classifications. In practical terms, this book represents the horticultural treatment that corresponds to phylogenetic-based botanical taxonomy, to which is added cultigens and cultivated genera and species. Hence, the harmony between horticultural and botanical taxonomy. This book covers phylogenetic-based taxonomy of Ferns, Gymnosperms, and Angiosperms (Monocots). A companion volume covers Angiosperms (Eudicots).