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Abstract

A list of 2510 vascular plant family names is provided, valid and not validly published as well as legitimate and not legitimate. Each entry has a full bibliographic reference, nomenclatural status, generic type (when based on a generic name), means of validation, original place of publication for pre-1789 works, synonyms, invalid names proposed prior to a name’s validation, first use of correct orthography (if not given in the original publication), first uses of other orthographic variations, divisional placements of typified names, indication of acceptance in the botanical literature after 1960, and a four-letter abbreviation for the legitimate family name. In addition, nomenclaturally correct, typified names are listed for the ranks of order, superorder, subclass, class, subdivision, division/phylum, and subkingdom (for a total of 753 names), with
full bibliographic citations. A similar list of 1569 currently available extant vascular plant family names is also given, of which 960 are considered to be in “current use.” A starting date for all names is assumed to be 4 August 1789 (Jussieu, Genera plantarum). Current difficulties with family nomenclature, and potential changes to bibliographic citations as a result of recently proposed changes to the International Code of Botanical Nomenclature, are noted.

Introduction

A BRIEF OVERVIEW

In vascular plant taxonomy, the most frequently used suprageneric rank is that of family. Conceived prior to 1753 as a “natural” unit of classification, it was largely ignored as a rank prior to 1789. With the publication of Genera plantarum by Antoine Laurent de Jussieu (1748–1836) in 1789, the concept gained widespread acceptance on the European continent, but not so in England, where the “artificial” units of class and order championed by Carl Linnaeus (1707–1778) remained dominant. Acceptance of natural family groupings increased significantly with the publications of John Lindley (1799–1865), starting in 1830, thereby bringing English plant classification into line with that of such continental students as Augustin Pyramus de Candolle (1778–1841), Barthélemy Charles Joseph Dumortier (1797–1878), and Friedrich Gottlieb Bartling (1798–1875), to mention but three.

Names at other modern ranks, notably order and class, also were proposed in the formative period from 1800 until the mid-1830s. The first to adopt a modern concept for order (in 1815) was Constantin Samuel Rafinesque (1783–1840). Although the rank of class was used widely in artificial schemes of arranging genera, its use in our modern sense was established mainly by August Johann Georg Carl Batsch (1761–1802) in a work published at the time of his death. Initially these ranks were descriptive; that is, they attempted to encapsulate some diagnostic feature of the group rather than being based upon a generic name. First Dumortier (in 1829) and then Lindley (in 1833) began the tradition of typified ordinal names; that is, a name based upon a generic name. At the rank of class, the use of typified class names did not happen to a significant degree until Paul Fedorowitsch Horaninov (1796–1865), Stephan Ladislaus Endlicher (1804–1849), and Adolphe Théodore Brongniart (1801–1876) began doing so starting in the mid-1830s.

Broad, natural schemes of classification for vascular plants flourished. Augustin Augier, in 1801, published one of the first major revisions after Jussieu, followed immediately by Batsch (in 1802). These were superseded by a scheme for all living creatures published by Rafinesque in 1815. Augier’s scientific names were in French, rather than Latin, and, according to our modern rules, his names were not validly published; Rafinesque described only a few of his taxa, meaning that the majority are nomen nuda. Thus it was Batsch’s scheme that held forth for a brief time. Candolle started a series of publications (first as Regni vegetabilis systema naturale in 1817 and then as Prodromus systematis naturalis regni vegetabilis in 1824) that attempted to fully classify plants using most of our modern taxonomic ranks (from class to variety). Friedrich Berchtold (1871–1876) and Jan Svatopluk Presl (1791–1849) produced a detailed treatise of vascular plant families in 1820. Written in Czech, the work was known but little consulted by their contemporaries, and thus it was largely ignored until the 1990s. Although Lindley concentrated mainly on groups at the ranks of order (what he termed “alliances”) and family, as did a fellow Londoner, Gilbert Thomas Burnett (1800–1835), their student textbooks did much to promote natural systems of classification. In doing so, Lindley ended the Linnaean artificial schemes of arranging plants and provided a consistent nomenclature used around the world. The monographic work of Endlicher, and his Swiss contemporary Carl Friedrich Meisner (1800–1874), provided the technical details of vascular plant families and their relationships. Their books greatly influenced the next generation of botanists, most notably George Bentham (1800–1884) and William Jackson Hooker (1817–1911). Their Genera plantarum would be the last of the natural schemes not influenced by the Darwinian revolution.

Evolutionary schemes of classification would be the centerpiece of numerous systems starting in the 1870s and ending just over a hundred years later. Foremost were the works of Heinrich Gustav Adolf Engler (1844–1930) and Karl Anton Eugen Prantl (1849–1893), notably Die natürlichen Pflanzenfamilien and Das Pflanzenreich. Their arrangements fundamentally altered plant classification, especially since they provided names at all modern ranks. Some differences of opinion were expressed using different evolutionary criteria. Charles Edwin Bessey (1845–1915) formulated the “ranalian” view of flowering plants, one that differed significantly from the “amentiferous” views of Engler and Prantl. John Hutchinson (1884–1972) divided the angiosperms into fundamentally woody and herbaceous groups, and although this concept was roundly rejected, his circumscriptions of families were highly respected. Arthur Cronquist (1919–1992) and Armen Leonovich Takhtajan (1910–) dominated the 1960s and 1970s, creating an innovative system based on