APG III: Bibliographical Information and Synonymy of Magnoliidae

JAMES L. REVEAL¹ & MARK W. CHASE²

¹L.H. Bailey Hortorium, Department of Plant Biology, 412 Mann Building, Cornell University, Ithaca, NY 14853-4301, U.S.A. jlr326@cornell.edu
²Jodrell Laboratory, Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3DS, U.K. m.chase@kew.org

Abstract

An updated classification of the orders and families of flowering plants was published in 2009 by the Angiosperm Phylogeny Group along with two companion papers, one a linear arrangement of the taxa, and a second treating the land plants above the rank of order. These papers are combined with full synonymy and bibliographic information along with an index to the names.

Kew words: Angiosperms, flowering plants, nomenclature

Introduction

A revised and updated classification of the flowering plants at the ranks of orders and families was published by the Angiosperm Phylogeny Group (2009—APG III). A companion paper by Haston et al. (2009) arranged the orders and families into a linear sequence, while a second paper by Chase and Reveal (2009) provided a classification scheme with an arrangement of the classes, subclasses, and superorders of extant land plants. In the present paper, these schemes are summarized with authorships and places of publication provided for both accepted names and synonyms.

Work on the classification of flowering plants has resulted in seven schemes proposed from 2007 through 2009 (Heywood et al. 2007, Thorne & Reveal 2007, Mabberley 2008, Shipunov 2009, Stevens 2001-onward, Takhtajan 2009, APG 2009), with an eighth to be published shortly (Reveal 2011a). Each differs in various aspects as outlined by Reveal (2010), but all except the last lacked some of the information provided here. For example, both Mabberley and Takhtajan attempted to account for the generic make up of each family, with Heywood et al. and Stevens informative but less rigorous in this regard. Numbers of genera and species were indicated by Thorne and Reveal, as well as by Mabberley, the latter providing far more detail. Synonymy was mentioned by most, but it was usually incomplete and rarely treated all ranks.

With the widespread adoption of the APG schemes, only Stevens (2001-onward) provides any kind of summary of infrafamilial taxa, although his scheme too differs in some significant ways from APG III. Thorne and Reveal (2007), Takhtajan (2009) and Reveal (2011b) attempted to be more thorough in their treatment of taxa below the rank of family, although these schemes depart significantly from APG III. Recent textbooks by Judd et al. (2007) and Woodland (2009) have varied in their treatment of infrafamilial taxa, but at least they more closely approach APG III.

Some minor nomenclatural matters require mention. Names at the rank of family are subject to the principle of priority, although this may be overridden by conservation. Names above the rank of family are not subject to priority, so one is free to select any name one might wish. Infrafamilial names at the ranks of subfamily, tribe and subtribe are subject to priority and may not be conserved. When a taxon at one of those ranks includes the type of the accepted name of the family to which it is assigned, one must use the name based on the same generic name as the family name, regardless of priority. Thus, if one accepts Rosaceae,