WEBBIA Journal of Plant Taxonomy and Geography

Firenze University Press
www.fupress.com/webbia

OPEN ACCESS

Citation: Boyce P.C. (2020) Introduction. *Webbia. Journal of Plant Taxonomy and Geography* 75(1): 85-88. doi: 10.36253/jopt-9207

Received: May 14, 2020

Accepted: May 14, 2020

Published: June 30, 2020

Data Availability Statement: All relevant data are within the paper and its Supporting Information files.

Competing Interests: The Author(s) declare(s) no conflict of interest.

Editor: Riccardo M. Baldini, University of Florence, Italy

Special section on Araceae

Introduction

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The five papers in the Araceae special section of this issue of Webbia are noteworthy for authorships which embrace Araceae research stretching back from the present day to the mid-1970s.

Michael Grayum, began work on the Araceae began during a16 months posting as a resident researcher at Finca La Selva, Costa Rica, between 1978–1980 when he became fascinated by one of the most diverse and taxonomically challenging plant families at the site. An informal checklist of La Selva aroids was published in 1982 (Grayum 1982). After leaving La Selva Mike enrolled as a graduate student University of Massachusetts (Amherst) undertaking a survey of Araceae pollen using scanning-electron microscopy, complemented by an extensive literature review and pioneering the use of cladistic techniques to work out a phylogenetic classification. The resulting 1984 Ph.D. dissertation (*Palynology and phylogeny of the Araceae*) suggested changes to the prevailing classification of family, most notably, the removal of the genus *Acorus* (Grayum 1987). The radical new phylogenetic classification was presented at the second international workshop on aroid systematics at Harvard Forest in 1984 and published by in 1990 (Grayum 1990) and followed by a comprehensive survey of pollen morphology (Grayum 1992). Between 1986 and 1990, while resident in Costa Rica, Grayum undertook botanical exploration in that country, as well as Mexico, Panama, Colombia, Ecuador, Jamaica, and Dominica, focusing on *Philodendron* subgen. *Pteromischum* with a view to produce a regional revision of that taxon which he had identified as being particularly intractable during residence at La Selva). The revision of *Philodendron* subgen. *Pteromischum* was published in 1996 (Grayum 1996). In 2003 based principally on field studies in Costa Rica over a 20-year period (1978–1998), the treatment of Araceae for the *Manual de Plantas de Costa Rica* (initiated in 1986) was published (Grayum 2003). Since 2003, Grayum has been one of the editors for *Manual* project, although continuing to undertake field word in Costa Rica and Panamá.

Alistair Hay has been working on the Araceae, particularly in the Malesian region, for more than forty years. He is now retired from the Royal

Botanic Gardens Sydney, but is currently working on a book on the classification, natural history, evolution and biogeography of the Araceae world-wide. Among numerous taxonomic papers are revisionary taxonomic accounts for the Lasioids (Hay 1988, 1992), Malesian *Alocasia* (Hay and Wise 1991; Hay 1998, 1999a), *Colocasia* (Hay 1996a), Potheae (Hay 1995; Boyce and Hay 2000), and Schismatoglottideae (Hay 1996b, Hay and Yuzammi 2000, Bogner and Hay 2000), *Homalomena* for New Guinea (Hay 1999b), and the Araceae for the Flora of Australia (Hay 2011). One of Alistair's primary interests is the reinterpretation of the reproductive structure (the spathe-and-spadix) of Araceae arguing that it does not fully align with the concepts either of flower or inflorescence, but rather has properties of both (Hay and Mabberley 1991; Mabberley and Hay 1994; Hay 2019). Four of the papers presented here utilize these reinterpreted terminologies.

Peter Boyce has been working on aroids since the early 1980s, initially focussing on the genera of the Mediterranean basin, producing monographs on *Arum* (Boyce 1996), and *Biarum* (Boyce 2008), and since 1987 the aroids of the tropical Asia, in particular SE Asia, concentrating especially on the extraordinarily rich flora of Borneo. Aside from co-authoring *The Genera of Araceae* (Mayo et al. 1997), and floristic accounts for China (Li et al. 2010) and Thailand (Boyce et al. 2012) the main outputs for tropical Asia concern the genera *Epipremnum* (Boyce 1998), *Rhaphidophora* (Boyce 1999, 2000a, 2000b, 2001a, 2001b), and *Pothos* (Boyce 2000c; Boyce and Hay 2000), and over 100 papers on the tribes Homalomenaeae and Schismatoglottideae, including a major reworking of generic boundaries (Low et al. 2018). In recent years he and his co-authors have incorporated Hay's reinterpretation of reproductive structures as standard.

Wong Sin Yeng began work on Araceae in 2005, publishing her first taxonomic paper the following year. Wong's taxonomic and phylogenetic outputs have concentrated primarily on the Homalomenaeae and Schismatoglottideae (Wong et al. 2010, 2013; Low et al. 2018), although her primary foci are the occurrence, morphological adaptations, categories, and evolution of rheophytism in the these tribes (Wong 2013; Boyce and Wong 2019), and the pollination biology for aroids (Hoe et al. 2016, 2018; Low et al. 2016; Chai and Wong 2019), *Tacca* (Chua et al. 2020), and *Scaphochlamys* (Ooi and Wong 2020).

Marco Cedeño-Fonseca recently obtained his Master's degree from the University of Costa Rica with a thesis on the taxonomy of Monstera (Araceae) in Costa Rica, and is now extending his work to a revision of the genus in Central America with Orlando O. Ortiz and Tom Croat. He has carried out field work not only in Costa Rica but also in Mexico, Panamá and Colombia, and has done work in the herbaria of the Missouri Botanical Garden and New York Botanical garden and other centres in Mexico and the USA where he has also lectured on Monstera taxonomy. Aside from his work on *Monstera* he has published papers on *Anthurium* (Cedeño-Fonseca et al 2019; Hay and Cedeño-Fonseca 2019) and *Dracontium* (Hay and Cedeño-Fonseca 2018).

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