

Invited keynote lecture

REVISION OF SECTIONS IN THE GENUS LILIUM

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The author, working as Director at Auchgourish Botanic Garden (ABG) in northern Scotland, has undertaken responsibility, in association with Botanic Gardens Conservation International (BGCI) for the international *ex situ* conservation and propagation of botanical taxa within the genera *Cardiocrinum*, *Lilium*, *Nomocharis* and *Notholirion*. Currently this collection contains in excess of 125 taxa of *Lilium*, variously at species and subspecies levels, directly involving the propagation from mainly wild provenance seed and handling living material from seedlings to flowering bulbs of 2-3,000 plants annually. It became quickly obvious during the past 8 years that allocations of many species based on their floral morphology into the sections, largely devised by Comber but subsequently occasionally modified by others (Baranova, 1990), were frequently inconsistent with regards e.g. to their respective specific bulb morphology. Further investigation revealed several of the sections into which several taxa are currently allocated included those with improbable geographic species distributions as well as being at odds with the relevant lectotype for certain sections, along with incorrectly named sections under International Rules for Botanical Taxonomy. During the period 1990–2010 numerous researchers such as Resetnik et al, have demonstrated in their laboratories that through methodologies such as cladistic investigations not only have more accurate interspecies relationships been revealed but so too has the existence of taxa at full species level and confirmation of taxonomical proposals not formerly accepted. Also revealed is the future un-supportability of the genus *Nomocharis* which the author proposes to subsume within *Lilium* as *Nomocharis* sect. nova. Opportunities for hybridisers have therefore become apparent involving taxa which, having hitherto been allocated to sections containing species noted for intersectional incompatibility, these may now be open up to possibilities for attempting hybridisation where before they might have been discouraged to do owing to perceived possibilities for having poor outcomes.