

Rainbows end—orchid systematics and conservation in SW Western Australia

W-2-17

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The proliferation of orchid species in south-western Western Australia (SWWA) from about 100 to over 400 in the past twenty years shows little sign of slowing. Currently taxonomic complexity within species complexes appears infinite and splitting into very narrowly defined species is unlikely to resolve identification or conservation problems, as many populations do not fit well into any remaining species.

Unfortunately both genetic and morphological evidence strongly suggest that there is little to justify such extreme splitting. Many of the newly described taxa are unable to be separated morphologically or have workable keys provided by their proponents. Currently differences in flowering times, pollinators, geographical ranges and habitats are being used to justify these species, but these are all prone to breakdown when subject to close study. Also these differences correspond more closely to ecotypes and are not conserving the crown taxa as required by systematics.

Currently of the 346 recognised SWWA Orchid taxa 192 have significant taxonomic issues, and of those 95 listed as conservation taxa 64 have similar issues. We suggest that narrow taxonomic delimitation of these species are not serving conservation or systematics. These poorly defined species consume resources but are not conserving many significant taxa, populations or genetic variation. Further they will consume limited taxonomic resources in the resolution of these issues.

Afternoon Break

Wednesday, 15:15–15:45

Wrap up and prizes—Horace Lamb

15:45–16:15

Systematics 2017—Integrating Systematics for Conservation and Ecology

Proceedings of the Australasian Systematic Botany Society & Society of
Australian Systematic Biologists Conference and the Invertebrate
Biodiversity and Conservation Biennial Meeting

27–29 November, 2017—Adelaide, Australia

Swainsona Supplement 5

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