

Systematic Botany—a view from the Centre

Proceedings of the Australasian Systematic Botany Society Conference

26–29 September, 2016—Alice Springs, Australia



asbs2016.ourplants.org



Program—Monday

9:00	Welcome and Plenary	
09:00–10:45	Welcome	
	Plenary Talk—A modern view on polyploidy: studies of <i>Nicotiana</i> section <i>Suaveolentes</i> by Mark Chase	0–1
10:40–11:00	Morning Break	
11:00	Session 1: Problems and Systematics	
11:00–11:20	John Clarkson , It's not the snake in the grass you should be wary of!	1–2
11:20–11:40	Matt AM Renner , Nearly everything we thought we knew about Australian Plagiogchilaceae is wrong	1–3
11:40–12:00	Gillian Brown , <i>Archidendron</i> , are the east and west really that different?	1–4
12:00–12:20	Robyn Barker , The enigmatic and industrious Mr Schultz[e]	1–5
12:20–13:20	Lunch	
13:20	Session 2: Our Taxonomic Resources	
13:20–13:40	James Clugston , Conservation genomics of <i>Cycas calcicola</i> (Cycadaceae) in Australia	2–6
13:40–14:00	Ilse Breitwieser , State and future needs of New Zealand's nationally important taxonomic collections	2–7
14:00–14:20	Ian Cowie , Keys to the flora of the MacDonnell Ranges Bioregion of Central Australia: web enabling the MacFlora interactive keys	2–8
14:20–14:40	Joel Collins , Mobile field data collection: redefining possibilities	2–9
14:40–15:00	Ryonen Butcher , ALA: what's waiting in the wings?	2–10
15:00–15:30	Afternoon Break	
15:30	Session 3: Our Taxonomic Resources (continued)	
15:30–15:50	Anthony Whalen , The Australian Biological Resources Study—so where do we go to from here?	3–11
15:50–16:10	Kevin Thiele , The eFlora platform—ready and waiting for a Flora near you	3–12
16:30	ASBS AGM followed by ASBS business meeting	

Program—Tuesday

09:00–10:30	Nancy T. Burbidge Medal Presentation and Address	
	Nancy T. Burbidge Medal Address	13
10:30–11:00	Morning Break and poster session	
11:00	Session 4: Evaluating Biodiversity	
11:00–11:20	Daniel J Murphy , Endemic areas and comparative biogeography of Australian plants	4–14
11:20–11:40	WR (Bill) Barker , How well do today's herbarium specimen data reflect the floristic diversity of a region?	4–15
11:40–12:00	Hugh Burley , Quantifying floristic beta-diversity of the Australian Wet Tropics using phylogenetic turnover	4–16 Student
12:00–12:20	Nicholas Cuff , Patterns of short range endemism in Top End <i>Typhonium</i> Schott illustrate the importance of taxonomic research to development planning and assessment	4–17
12:20–12:40	Maarten J M Christenhusz , Tiptoe through the tulips, a cultural history and phylogeny of <i>Tulipa</i> (Liliaceae)	4–18
12:40–13:40	Lunch	
13:40	Session 5: Systematics, Time and Evolution	
13:40–14:00	Isaac A Kerr , A <i>Ripogonum</i> look-alike from the Oligocene of New Zealand: a lesson in the importance of cuticle	5–19 Student
14:00–14:20	Jessica Bruce , <i>Reedia spathacea</i> F.Muell.: a study of phylogeography, population structure and co-occurrence	5–20 Student
14:20–14:40	Rachael M Fowler , <i>Eremophila</i> and tribe Myoporeae (Scrophulariaceae): phylogeny and biogeography based on high throughput sequencing	5–21 Student
14:40–15:00	Ed Biffin , Hybridisation between native and invasive <i>Carpobrotus</i> N.E.Br. (Aizoaceae) in South Australia—molecular and morphological insights	5–22
15:00–15:30	Afternoon Break	
15:30	Session 6: Insights into Biodiversity	
15:30–15:50	Jürgen Kellermann , Rhamnaceae—where art thou	6–23
15:50–16:10	Kerry Lynne Gibbons , <i>Mitrasacme</i> , morphology and the monsoon tropics	6–24
16:10–16:30	Nick Kalfas , Looking at the Big Pitcher: assessing the coevolution of <i>Cephalotus follicularis</i> and its associated wingless fly	6–25 Student
16:30–16:50	Charles Foster , Evaluating the impact of genomic data and priors on Bayesian estimates of the angiosperm evolutionary timescale	6–26 Student
16:50–17:10	Timothy L. Collins , Would you like a new species and a fertile hybrid with that? <i>Eucalyptus magnificata</i> is not just an endangered species	6–27 Student
17:10	Forum: Decadal Plan progress	
18:00	Conference Dinner	

Program—Wednesday

9:00	Session 7: Systematics and Issues of Scale	
09:00–09:20	Sarah Mathews , Phylogenomics of seed plants	7–28
09:20–09:40	Tanja M Schuster , Using big data to answer large-scale questions in eucalypt systematics: analysis of chloroplast genomes does not support the monophyly of <i>Corymbia</i>	7–29
09:40–10:00	Michael F. Fay , Evolution of genome size in angiosperms	7–30
10:00–10:20	Caroline Pannell , Taxonomy, plant-disperser interactions, diversification and biogeography of the genus <i>Aglaia</i> (Meliaceae)	7–31
10:20–10:40	Kristina Lemson , Population variation in the seagrass <i>Halophila ovalis</i> (Hydrocharitaceae)	7–32
10:40–11:00	Morning Break	
11:00	Session 8: New Taxonomic Resources and Systematic Studies	
11:00–11:20	Kevin Thiele , Building a key to all Australian flowering plants—70% and counting	8–33
11:20–11:40	Donna Lewis , Flora NT—Northern Territory flora online	8–34
11:40–12:00	Richard L. Boyne , My time as a ‘Kewite’	8–35
12:00–12:20	Yu Ito , Molecular phylogeny of <i>Eriocaulon</i> (Eriocaulaceae)	8–36
12:20–12:40	Kor-jent van Dijk , Implications for conservation in the Mount Compass Swamp Gum <i>Eucalyptus paludicola</i> based on genome wide markers	8–37
12:40–13:40	Lunch	
13:40	Session 9: Systematics and Evolution of Species	
13:40–14:00	Jennifer A Tate , Diverse origins and evolution of sexual expression in Australasian Malveae (Malvoideae, Malvaceae)	9–38
14:00–14:20	Melodina Fabillo , The key problem in <i>Eremochloa</i> (Rottboelliinae: Poaceae)	9–39
14:20–14:40	Trevor Wilson , Are we splitting hairs? Resolving infrageneric relationships in the Australian <i>Plectranthus</i> (Lamiaceae)	9–40
14:40–15:00	Heidi Meudt , Species delimitation in Southern Hemisphere bracteate-prostrate forget-me-nots (<i>Myosotis</i> , Boraginaceae) based on analyses of pollen and morphological data	9–41
15:00–15:30	Afternoon Break	
15:30–17:00	Conference handover and student awards	
17:30	Transport to Simpsons Gap BBQ	

Associated events

Sunday

Welcome–Registration function, 17:00–19:00, open to all attendees and accompanying persons—the is an opportunity to register early and catch up with other delegates and friends. This event is at Yubu Napa, a studio and gallery specialising in local indigenous artworks. Located at 65 Hartley Street the gallery is close to a number dining opportunities, around the corner from Todd Mall and about 2 km from the conference venue.

Monday

Apart from starting bright and early with our first presentation beginning at 9:00 there are no other events planned for today.

Tuesday

Conference Dinner at the Olive Pink Botanic Garden, 18:00 departure, a short walk from the Double Tree by Hilton and easily accessible from most of the nearby accommodation (but bring a torch to see your way). We are excited to offer you a taste of the outback with unique choices from local indigenous caterers Kungkas Can Cook. Dinner will be around 18:30.

Wednesday

End of Conference BBQ, 17:30 departure—what better way to end this year’s conference than to have an informal BBQ at Simpsons Gap (20 km west of Alice Springs). Price includes food and transport to and from the conference venue. You are guaranteed seeing the local rock wallaby population (as the sun sets) and we have organised to be shown some of the wildlife in the area.

Thursday

Post-conference field trip to the MacDonnell Ranges, 8:00 departure—the MacDonnell Ranges contain a staggering 750+ species with most of the endemics for the MacDonnell bioregion. You’ll get a taste of some of the more easily accessible species. We will visit Standley Chasm and some of us will climb up onto the ridge. This climb is strenuous and you will need to wear proper footwear and we recommend you carry water with you. We also visit the chasm itself which is typical of a mesic gorge. If time permits, we will go to Ellery Big Hole to see a xeric gorge. This has a wonderful swimming hole, so bring swimmers and a towel. Return around 17:30.

Field trip to Standley Chasm & Ellery Waterhole

Thursday, 29 September 2016

Personal items to bring

Hat, sunscreen, water, fly net, sunglasses, comfortable walking shoes, camera (optional: swim wear & towel for Ellery Waterhole)

Itinerary

- 8:00 Meet at entrance to Double Tree by Hilton.
9:00 Arrive Jay Creek tributary (near Standley Chasm)—walk up dry gorge then over saddle to Standley Chasm kiosk. Optional side walk (steep) to lookout.
11:30 Refreshment—tea/coffee, scone at kiosk
12:00 Walk into Standley Chasm—mesic gorge
13:00 Lunch
13:45 Depart Standley Chasm
14:45 Arrive Ellery Rock hole—xeric gorge & limestone flora, potential swim
16:00 Depart Ellery Rockhole
17:30 Return Double Tree by Hilton

Species of interest

Jay Creek

<i>Acacia basedowii</i>	<i>Eucalyptus sessilis</i>
<i>Acacia cowleana</i>	<i>Exocarpos sparteus</i>
<i>Acacia kempeana</i>	<i>Gastrolobium brevipes</i>
<i>Acacia mellodora</i>	<i>Grevillea striata</i>
<i>Acacia strongylophylla</i>	<i>Hibbertia glabberima</i>
<i>Acacia tenuisissima</i>	<i>Hydrocotyle trachycarpa</i>
<i>Amyema gibberulum</i>	<i>Indigofera basedowii</i>
<i>Callitris glaucophylla</i>	<i>Indigofera helmsii</i>
<i>Cheilanthes lasiophylla</i>	<i>Macrozamia macdonnellii</i>
<i>Corymbia aparrerinja</i>	<i>Olearia ferresii</i>
<i>Corymbia opaca</i>	<i>Olearia stuartii</i>
<i>Cyperus cunninghamii</i>	<i>Pandorea doratoxylon</i>
<i>Cyperus vaginalis</i>	<i>Sida phaeotricha</i>
<i>Dodonaea viscosa</i> subsp. <i>mucronata</i>	<i>Triodia hubbardii</i>

Standley Chasm

<i>Actinotus schwartzii</i>	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>
<i>Apowollstonia stirlingii</i> subsp. <i>aliciafontinalis</i>	<i>Macrozamia macdonnellii</i>
<i>Cremnothamnus thomsonii</i>	

Ellery Waterhole

<i>Eucalyptus socialis</i> subsp. <i>encontrica</i>	<i>Triodia longiceps</i>
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