

CONFERENCE PROGRAM

SUNDAY 2 DECEMBER 2018

9:00-late ASBS Council meeting

MONDAY 3 DECEMBER 2018

DAY 1

8:45 for

9:00-17:00 Workshop: How to write and referee scientific papers: State Library of Queensland

17:00-20:00 Welcome Reception and Launch of *Systems* art exhibition at Queensland Herbarium, Mt Coot-tha Botanic Gardens, Toowong

TUESDAY 4 DECEMBER 2018

DAY 2

8:30-8:45 Introduction and Housekeeping

8:45-9:15 Welcoming Address & Opening of Conference

SESSION 1: SHARING BOTANICAL WEALTH: ENGAGEMENT, BENEFIT SHARING AND THE NAGOYA PROTOCOL

9:15-10:00 Queensland Biodiscovery Act
Julia Playford

10:00-10:15 Indigenous Engagement with Science
Gerry Turpin

10:15-10:30 Ka rere nga purapura a Matariki; the seeds of the Pleiades are falling
Nick Roskrige

10:30-11:00

MORNING TEA

SESSION 1 (CONTINUED)

11:00-11:15 Nagoya Protocol on Access Benefit Sharing: implications for herbaria and systematics research
Shelley James; Gillian Brown, Antony Kusabs, Karina Knight, Josephine Milne, Dhahara Ranatunga

11:15-11:30 Increasing fungal literacy in Australasia: lessons from Universities to communities
Teresa Lebel; Sapphire McMullan-Fisher, Sandra Abell

11:30-12:00 Sharing botanical wealth panel discussion

12:00-13:00

LUNCH

SESSION 2: INSIGHTS FROM LONG AGO: PALAEOBOTANY INFORMING SYSTEMATICS

13:00-13:45 *Plenary Address*: Imposing geochronological constraints on the stratigraphic record of life
Paulo Vasconcelos

- 13:45-14:00 Newly discovered syncarpous fruits from the Oligocene Capella locality suggest links to Moraceae
Andrew Rozefelds
- 14:00-14:15 A comprehensive fossil calibration database for estimating angiosperm divergence times
Hervé Sauquet; Santiago Ramírez-Barahona, Susana Magallón

SESSION 3: MACPHERSON–MACLEAY, OTHER GAPS AND OVERLAPS: BIOGEOGRAPHY OF AUSTRALASIA

- 14:15-14:30 Mind the Gap – Extinction pulse at Eocene–Oligocene boundary drives diversification dynamics of the Australian temperate flora
Francis Nge; Ed Biffin, Kevin Thiele, Michelle Waycott
- 14:30-14:45 Evolution of *Geosiris* (Iridaceae): historical biogeography and plastid-genome evolution in a genus of non-photosynthetic tropical rainforest herbs disjunct across the Indian Ocean
Elizabeth Joyce; Darren Crayn, Vivienne Lam, Wesley Gerelle, Sean Graham, Lars Nauheimer

14:45-15:15

AFTERNOON TEA

- 15:15-15:30 Phylogeography of the native shrub *Spyridium parvifolium* (tribe Pomaderreae; family Rhamnaceae) across south-eastern Australia using complete chloroplast genome sequences
Catherine Clowes; Michael Bayly, Gillian Brown
- 15:30-15:45 Phylogeography of Box Eucalypts with Disjunct Distributions in South-East Australia
Patrick Fahey
- 15:45-16:00 The SAD model - an uplifting tale of how migration stimulated the diversification of the Malesian flora
Darren Crayn; Elizabeth Joyce

SESSION 4: POSTER PRESENTATIONS

- 16:05-16:10 Using large-scale ecological data to support taxonomic decisions in difficult species complexes in *Ptilotus* (Amaranthaceae)
Timothy Hammer; Paul Macintyre, Ladislav Mucina, Kevin Thiele
- 16:10-16:15 Phylogeographic congruence in *Lindernia* (Linderniaceae) with biotic regions across northern Australia
Bill Barker; Ed Biffin
- 16:15-16:20 Clarification of species limits of *Prostanthera cineolifera* R.T.Baker & H.G.Sm. (Lamiaceae) essential for conservation
Ruth Palsson; Jeremy Bruhl, Rose Andrew, Ian Telford, Trevor Wilson
- 16:20-16:25 Integrative taxonomic revision of *Melichrus* R.Br. (Ericaceae subfam. *Epacridoidae*)
Helen Kennedy; Jeremy Bruhl, Darren Crayn, Rose Andrew, Ian Telford
- 16:25-16:30 ddRAD-seq identifies a recurrent *Dicksonia* tree fern hybrid
Lara Shepherd; Patrick Brownsey, Chris Stowe, Leon Perrie
- 16:30-16:35 Informed decision making — conservation genetics of threatened flora
Robert Lamont; Steven Ogbourne, Gabriel Conroy, Joel Nichols

- 16:35-16:40 In defense of phrase names
Ian Telford; Jeremy Bruhl
- 16:40-16:45 Blindspots in the rainforest – a case study of *Elaeocarpus* (Elaeocarpaceae) in Fiji
Yumiko Baba; Marika Tuiwawa
- 16:45-17:00 Housekeeping
- 17:00-18:00 ASBS general meeting & Presentation of N.T. Burbidge medal

WEDNESDAY 5 DECEMBER 2018

DAY 3

- 8:30-8:40 Housekeeping
- 8:40-8:45 *Introduction by ASBS President*
- 8:45-9:45 N.T. Burbidge medal recipient address
- 9:45-10:15 Taxonomy Australia
Kevin Thiele
- 10:15-10:30 Poster chat (poster presenters to be available to discuss their work)

10:30-11:00

MORNING TEA

SESSION 5: PHYLOGENETIC AND TAXONOMIC PROGRESS 1

- 11:00-11:15 Resolving of the backbone of *Ptilotus* and establishing a new taxonomic framework for the aervoid clade (Amaranthaceae)
Timothy Hammer, Xiao Zhong, Catherine Colas des Francs-Small, Paul Nevill, Ian Small, Kevin Thiele
- 11:15-11:30 If it's yellow, let it mellow: Investigating toxicity variation in southern Australian yellow-staining *Agaricus* in a phylogenetic context
Amelia-Grace Boxshall; Teresa Lebel, Damien L. Callahan, Todd McLay, Joanne Birch
- 11:30-11:45 Taking an integrative approach to resolve the *Xerochrysum bracteatum* species complex
Tim Collins; Alexander N. Schmidt-Lebuhn, Rose L. Andrew, Ian R.H. Telford, Jeremy J. Bruhl
- 11:45-12:00 The 'Taxonomic Gap' and progress towards a 'Global Flora'
Russell Barrett
- 12:00-12:15 How to look again at *Spermacoce* and *Borreria* (Rubiaceae): is morphological evolution in Australian *Spermacoce* key to our understanding of generic limits?
Kerry Gibbons; Marco Duretto
- 12:15-12:30 Speciation theory and species delimitation using *Eucalyptus* as a model
Susan Rutherford

12:30-13:30

LUNCH

SESSION 6: PHYLOGENETIC AND TAXONOMIC PROGRESS 2

- 13:30-13:45 Australian grass diversity: phylogenetic overview, global comparisons and future direction
Tanya Scharaschkin
- 13:45-14:00 Vale *Velleia* (and others) – the final chapter of our *Goodenia s.l.* saga
Kelly Shepherd; Rachel Jabaily
- 14:00-14:15 How many species of toropapa (*Alseuosmia*) are disguised in the bush?
Lara Shepherd; Andrew Townsend, Peter de Lange, Leon Perrie
- 14:15-14:30 Quo vadis *Halophila ovalis*?
Kristina Lemson; Annette Koenders, Kathryn McMahon, Kor-Jent van Dijk, Ainsley Calladine & Michelle Waycott
- 14:30-14:45 OMG *Boronia* (Rutaceae) is polyphyletic: coping with large well supported clades that contain few morphologically useful characters
Marco Duretto; Margaret Heslewood, Mike Bayly
- 14:45-15:00 Taxonomic revision of the *Myosotis australis* group (Boraginaceae) in Australia, New Zealand and New Guinea
Heidi Meudt; Jessie Prebble, Michael Thorsen
- 15:00-15:15 Treating *Tephrosia* (Fabaceae) for the eFlora of Australia: project progress and plans
Ryonen Butcher
- 15:15-15:30 Plant traits for everyone – A proposal for a new multi-purpose minimum trait set
Russell Barrett; Hervé Sauquet

15:30-16:00

AFTERNOON TEA

SESSION 7: BOTANICAL DIVERSITY AND UTILISATION

- 16:00-16:15 Preliminary floristic patterns observed in the Kakadu sandstone flora
Peter Jobson; Jason Cantley, Angela MacDonnell, Chris Martine
- 16:15-16:30 How many species of *Rottboelliinae* (Poaceae) are there in Australia?
Melodina Fabillo; Tanya Scharaschkin
- 16:30-16:45 Archaeobotanical sense-making: an Australian archaeologist's journey with plants
Brit Asmussen
- 16:45-17:00 Chasing duplicates beyond the century, across the world and throughout the vault: but mind the gaps
Austin Brown
- 17:00-17:15 Checking it twice: an update on the National Species List (NSL)
Anna Monro; Brendan Lepschi, Anne Fuchs
- 17:15-17:20 Housekeeping
- 17:20-17:50 Queensland Herbarium Tour

19:00

CONFERENCE DINNER

THURSDAY 6 DECEMBER 2018

DAY 4

8:30-8:45 Housekeeping

SESSION 8: INFORMED DECISION MAKING – CONSERVATION GENETICS OF THREATENED FLORA

8:45-9:30 *Plenary Address: Conservation Genetics of the Australian/Queensland flora*
Alison Shapcott

9:30-9:45 *Reedia spathacea* F.Muell.: Phylogeography and population structure
Jessica Bruce; Annette Koenders, Kristina Lemson, Quinton Burnham, Margaret Byrne, Pierre Horwitz

9:45-10:00 Conservation genetics of threatened native olives (genus *Notelaea*) in southern Queensland
Chapa Manawaduge; Matthew Phillips, Susan Fuller

10:00-10:15 How did it go? A genetic analysis of the *Gossia gonoclada* recovery program
Laura Simmons; Tamara K. Taylor

10:15-10:30 Congruent geographic structuring in *Macrozamia* and their pollinating thrips
Alicia Toon; Lyn Cook

10:30-11:00

MORNING TEA

SESSION 9: PHYLOGENETIC AND TAXONOMIC PROGRESS 3

11:00-11:15 The evolution and biogeography of Australian Asparagales
Joanne Birch; Daniel Murphy, Neville Walsh, John Conran, Terry Macfarlane, J. Chris Pires

11:15-11:30 Using phylogenetics to investigate continental, biome and habitat shifts and radiations in *Phlegmariurus* (Lycopodiaceae)
Ashley R. Field

11:30-11:45 Australasian orchid diversification in space and time: phylogenetic insights from *Dendrobiinae* (Orchidaceae)
Katharina Nargar; Claire Micheneau, Kamolphet Atsawawaranunt, Lars Nauheimer, Mark A. Clements

SESSION 10: INFORMATION GAPS IN THE AGE OF GENOMICS 1

11:45-12:30 Genomics for Australian plants: developing genomic resources for the Australian plant community
 Linda Broadhurst, Margaret Byrne, David Cantrill, Darren Crayn, Anna Fitzgerald, Graham King, Jen Taylor, Mabel Lum (The Steering Committee and project management on behalf of the Genomics for Australian Plants Consortium)

12:30-13:30

LUNCH BREAK

SESSION 11: INFORMATION GAPS IN THE AGE OF GENOMICS 2

- 13:30-14:00 Evolution of *Oryza* as Revealed by Genomics
Robert Henry
- 14:00-14:15 A hybrid-enrichment bait capture kit for *Hibisceae*, trialled on Australian *Hibiscus* section *Panduriformes*
Todd McLay; Mike Bayly
- 14:15-14:30 Phylogenomics of Australian *Gnaphalieae* (Asteraceae) using target enrichment
Alexander Schmidt-Lebuhn; Jess Bovill, Ian Lester
- 14:30-14:45 Using sequence capture to infer gymnosperm phylogeny
Nathalie Nagalingum; Lorena Endara, Steffi Ickert-Bond, Gordon Burleigh
- 14:45-15:00 Resolving complex evolutionary relationships in the sun orchids (*Thelymitra*, Orchidaceae) – insights through molecular phylogenetics and phylogenomics
Lars Nauheimer
- 15:00-15:30 Conservation genomics for taxon delimitation and management of rare and threatened plants
Margaret Byrne; Rachel Binks, Carol Wilkins, Donna Bradbury

15:30-16:00

AFTERNOON TEA

- 16:00-16:30 Conference Summation and Presentation of Student Prizes
- 16:30-16:40 Next ASBS conference presentation
- 16:40-17:00 Conference Close

FRIDAY 7 DECEMBER 2018

DAY 5

- 7:30-21:30 Field trip to Springbrook
Queensland Herbarium (depart/return), dinner stop at the Canungra Hotel on the way back to Brisbane