Symposium V: Systematics

Chair: Nigel Fechner

New Russulaceae species in South-east Queensland

Boddington M¹, Dearnaley JD¹, Lebel T² & Leonard P³

¹Faculty of Health, Engineering and Sciences, University of Southern Queensland, Toowoomba QLD AU; morwenna.boddington@usq.edu.au; john.dearnaley@usq.edu.au ²Landcare Research, Auckland NZ; lebelt@landcareresearch.co.nz ³Buderim OLD AU; patbrenda.leonard@bigpond.com

Abstract. Russula species are ectomycorrhizal basidiomycetes common throughout Australian woodlands. Molecular and morphological examination of Russula specimens from various sites in Southeast Queensland has uncovered a number of phylogenetically diverse and potentially undescribed specimens. At this stage, most of these remain as individual specimens. However, several specimens have been grouped into project species. In this presentation, two potentially new species of Russula will be described. Both species are widespread on red to black clay soils in the Toowoomba region and appear to be phylogenetically related to each other. Project species 1 has a white stipe which developed a pink flush after collection and red to pink centrally depressed cap with white gills. The spores of this species were subglobose, white and ornamented with amyloid warts connected in short chains. The second species, project species 3, is macroscopically similar, differing with its larger size, purple-pink cap colour, and rougher cap texture. Its spores are globose to subglobose, white and ornamented with small amyloid warts connected in short chains. Continued molecular and morphological studies of the Russula species of Southeast Queensland may uncover more novel Australian species.

Keywords. Russula, phylogenetics, taxonomy