Prioritisation of *Lambertia* taxa for conservation according to the threat posed by *Phytophthora cinnamomi*

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Lambertia are keystone species within the communities in which they occur. Five of the Western Australian *Lambertia* taxa are threatened flora (Declared Rare Flora) and two taxa have a Priority conservation code. Ranking of taxa according to *Phytophthora cinnamomi* susceptibility is fundamental to conservation options within integrated strategies conserving threatened flora of the South-West Botanical Province of Western Australia. Variation in *P. cinnamomi* susceptibility to infection within the genus *Lambertia* was evaluated by soil and stem inoculation. Mortality score following soil inoculation was significantly positively correlated with lesion score determined by stem inoculation. The resulting scores positioned the *Lambertia* taxa in relation to *P.cinnamomi* susceptibility on the resistance-susceptibility continuum and prioritised taxa in relation to the threat posed by the pathogen. The highest mortality and lesion scores for the rare and endangered taxa

L. orbifolia subsp. *orbifolia*, *L.fairallii,* and *L. rariflora* subsp. *lutea* suggest high risk of extinction to *P. cinnamomi* infestation. Furthermore rare and endangered taxa *L.orbifolia* subsp. Scott River Plains, *L.echinata* subsp. *occidentalis* and *L.echinata* subsp. *echinata* with high mortality and moderate lesions scores are also likely at high risk of extinction to *P.cinnamomi* infestation. For common taxa with restricted geographic distribution, the high mortality and lesion scores for *L.ericifolia* suggest high risk of localised extinction in *P.cinnamomi* disease centres. Positioning taxa on the *P.cinnamomi* resistance-susceptibility continuum needs to be incorporated into extinction-risk methodology in order to prioritise flora for conservation actions according to hazard from the pathogen.

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