50. PLANT DISTRIBUTION PATTERNS IN WESTERN AUSTRALIA

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Species distribution maps based on 1:250,000 map sheets have been compiled for the families Centrolepidaceae, Restionaceae, Casuarinaceae, Amarantaceae, Papilionaceae, Rutaceae, Goodeniaceae and several genera in the Proteaceae. More detailed maps have been compiled for species of Liliaceae and Apiaceae as well as the genus Eucalyptus.

Analysis of distribution maps has been used to reveal the following:

- (1) Priority areas for collecting. Neglected areas have been identified as well as overcollected areas requiring protection.
- (2) Areas of species richness in the families and genera studied. Evolutionary speculations have been derived.
- Conservation priorities for each species mapped. Detailed maps have variants and disjunctions noted as well as enabling an estimate of the degree of restriction.
- (4) Changes in phytogeographic knowledge.