

# Applying IUCN criteria to plant threat assessment

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*The International Union for Conservation of Nature (IUCN) Red List criteria have some limitations, as broad standards often overlook the unique ecologies of different taxonomic plant groups. Conducting assessments requires empirical data on population sizes/declines, ranges, and quantifiable threats, which are difficult to obtain. Further, neither population counts nor decline rates are relevant/applicable/practical/comparable for some species when estimating threat status, and applying IUCN criteria to such species can create a misleading picture. Methodological inconsistencies and varying subjective interpretations can lead to unequal threat rankings for species with similar threat statuses. It is argued that the primary criteria are inadequate to account for the wide variations in life histories across different taxonomic groups. It is suggested that additional considerations on habit, size, habitat, taxonomic group, or other features related to pollination, reproduction, and dispersal are necessary for assessment accuracy. Developing criteria tailored to each taxonomic group, emphasising regional and local assessments, and utilising perceived qualitative data would enhance the accuracy of threat evaluations and support conservation efforts. Comparing threat statuses within taxonomic families or groups with similar traits, rather than among divergent groups, is sensible and helps identify vulnerabilities of specific species, thereby strengthening conservation strategies. Further, evaluating the threat status of all species in quantifiable terms is neither necessary nor practical. Instead, focusing on key or endemic species/commercially exploited plants/vulnerable habitat specialists makes sense for overall effective conservation.*

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