

The first Red Data List for southern African plants was published in 1980 (Hall *et al.* 1980), and was followed 16 years later by an update (Hilton-Taylor 1996). These publications classified plants as Rare, Vulnerable, Endangered, Indeterminate or Insufficiently Known. Since then the Species Survival Commission (SSC) of IUCN—World Conservation Union has introduced a new system with improved methods of assessing extinction rates of taxa. This system makes use of prescribed quantitative criteria to place taxa into different categories according to their extinction risks (IUCN 1994, 2001). Many taxa that were previously classified as Rare are now in the category Least Concern (LC) since they are not facing increased extinction risk. However, they may still require conservation attention. For this reason, Victor & Keith (2004) introduced the Orange List concept and proposed a quantitative system of assessing, recording and documenting taxa that should be considered for legal protection and conservation. The Orange List includes taxa that are rare but not declining, as well as taxa that are declining but not fast enough to trigger a threatened listing according to the IUCN Red List Criteria. Two other categories that are considered under the Orange List are Data Deficient (DD) and Near Threatened (NT).

According to IUCN (2001), a taxon qualifies for the category Data Deficient when 'there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status'. Although this usually applies to taxa that are poorly known, this category might also contain well-known taxa that lack sufficient data required for using the IUCN Red List Criteria. Whereas DD is not considered to be one of the categories of threat, listing of taxa in this category acknowledges the possibility that future research may show that threatened classification is appropriate.

During the seven years of compilation of South Africa's Red List of threatened plants according to the revised Red List assessment process, it has become apparent that there is a need to distinguish between different scenarios for listings within the DD category. A set of flags is proposed to distinguish between the different reasons for listing, with the aim of facilitating conservation planning and highlighting research needs for the taxa.

Three main reasons for listing taxa in the DD category are apparent. In the first scenario, taxa have been listed as Data Deficient but are suspected to have taxonomic problems (such as being indistinguishable from closely related taxa) that make it difficult for them to be accurately assessed. Only once these taxonomic problems are sorted out, can a proper assessment be made of the taxon. It is proposed that the taxa that are unable to be assessed due to unclear taxonomic delimitation, or suspected to be synonymous with other taxa, are listed as DD with a flag of 'Taxonomically uncertain' (abbreviated as DDT). Because these taxa are often thought to be synonymous with more widespread taxa, they are usually unlikely to warrant conservation attention. An example is *Erica obconica*, which is probably conspecific with the widespread *Erica mucronata*. However, this has not yet been formalized so the species is classified as DDT for now.

The second flag deals with taxa that could very well qualify for a category of threat but have insufficient information required for the assessment process (such as distribution or rate of decline). It is proposed that such taxa are classified as DD with the flag 'Distribution and/or other information lacking' (abbreviated as DDD). Taxa classified as DDD are likely to be of high conservation importance and high research priority. An example is *Phyllica apiculata*, a shrub found on mountain slopes of the Caledon District. Since much of the natural land in the Caledon area is transformed, it is likely that this species is threatened with extinction. It is therefore classified as DDD until more information becomes available.

A third flag is proposed for taxa that are so poorly known that it is impossible to determine whether or not they could be classified as threatened. Whereas most DD taxa are suspected to be threatened, some taxa have so little information that it is not known whether they are undercollected, rare, taxonomically problematic or poorly known; but there is no cause to suspect that they are threatened with extinction. These taxa are represented by very few collection records in herbaria and have insufficient information about them in the literature. These taxa are flagged to indicate that they are of high research priority, but low conservation priority until such time more information becomes available. These taxa are flagged DDX. An example is *Anderbergia fallax*, which

is known from a single collection made from Goedgeloof Peak in the Langeberg near Swellendam. It is likely to be undercollected as it is a fairly inconspicuous plant; furthermore it is unlikely to be threatened on the high mountain peaks where it grows.

The advantage of flagging subsections of the Data Deficient category is that conservationists will no longer have to divest efforts into the taxa in the DDT and DDX categories. The DDT flag will serve to highlight those taxa that need taxonomic attention; whereas DDD and DDX flags would serve to highlight those taxa in need of more field work and research attention.

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