

# Red List of South African

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**Endemism Provincial** distribution Range

Distribution

South African endemic

KwaZulu-Natal

Ngome Forest to KwaZulu-Natal

## **Forest Clivia**

## **Taxonomy**

**Scientific** Clivia gardenii Name Hook.

Higher Monocotyledons

Classification

**AMARYLLIDACEAE Family** Common Boslelie (a), Forest Clivia (e), Umayime (z), Names

Umgulufu (a)

#### **National Status**

Status and Criteria **Assessment** 2008/01/15

Vulnerable A2abcd; B1ab(ii,iv,v)

Date

Assessor(s) V.L. Williams, D.

Raimondo, N.R. Crouch, A.B. Cunningham, C.R. Scott-Shaw, M. Lötter & A.M. Ngwenya

Justification EOO 6900 km<sup>2</sup>,

occurring at less than 10 locations. It has declined at least 30% in the last 90 years (generation length 30 years) due to harvesting for the medicinal plant and horticultural trades as well as some habitat loss to commercial

forest plantations, crop cultivation and urban development. The number of mature individuals continue to

decline due to harvesting.



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Midlands.

## **Habitat and Ecology**

Major system Terrestrial

Major Northern Coastal Forest, Scarp Forest,

Southern Mistbelt

Forest

**Description** Forest undergrowth.

#### **Threats**

The traders of traditional medicine do not distinguish between species of Clivia and all species are therefore at risk of over-exploitation. The primary factor determining which species is sold on a particular day in the market relates to where a harvester has managed to find subpopulations to exploit. Five Clivia species found in South Africa are harvested for traditional medicine and have been recorded in all the major medicinal plant markets in South Africa. Clivia miniata and Clivia nobilis were the most frequently referenced species in the literature, but Clivia miniata, Clivia caulescens and Clivia gardenii are the most prevalent in the markets (note: some species identified as Clivia gardenii in the market place may be the recently described Clivia robusta). The whole plant (except for the flowers) is used and the tops of the leaves are typically cut off, thereby making it difficult to distinguish between the species. Cunningham (1988) estimated that 397 bags (50kgsize) were sold annually by 54 traders, which probably represented a quarter of the total quantity sold in the region at the time. In 2001, 26% of the Faraday market traders in Johannesburg sold Clivia spp. (ranked 13th in order of prevalence), and the volume present in the market at the time of the two week survey was equivalent to 11 bags (50 kg-size) (Williams 2003). The volume purchased annually by traders in Faraday was conservatively estimated to be >200 bags. However, inconsistent availability of the species has been noted by the traders. One quarter of the Faraday traders selling Clivias also noted that it was scarce and increasingly difficult to obtain. In early November 2004, for example, none of the traders were able to acquire stock. By late November, a consignment of mature plants harvested in Swaziland (probably C. caulescens) was finally delivered. The prevalence and popularity of the genus in other markets is reportedly high. Assessments for Mpumalanga (Mander 1997) and KZN (Mander

1998) ranked Clivia spp. as being in the top 10 of the most frequently demanded plants. On the Witwatersrand in 1994, the genus was sold by 66% of the muthi shops and was also ranked 13th out of more than 450 species in terms of its occurrence in the shops (Williams et al. 2000, Williams 2007). There seems to be a preference by traders for younger and smaller individuals. Older and larger plants were perceived as having more water in them and were thus 'weaker' because of the diluted power however, most traders will buy whatever they can get due to its popularity (V.L. Williams, pers. obs.).. In summary, the bulk harvesting of Clivias for the medicinal plant trade is a nationally acknowledged threat to the genus. Clivias are traded extensively and over-harvesting is a threat to the persistence of populations in the wild. Furthermore, high volumes in trade, plant scarcities and shortages have been reported by traders in several regional medicinal plant markets. The whole plant of Clivia gardenii is dug up, hence harvesting is very destructive. The species is less popular with horticultural collectors, but some extraction continues to occur. The species is common in protected areas. but is markedly less visible outside of protected areas. The species was estimated to have declined at least 30% in the last 90 years and this decline is expected to continue.

### **Population**

Population Decreasing trend

#### Conservation

Protected in Umtamvuna Nature Reserve and Ngome Forest Reserve.

#### **Notes**

Taxonomy and distribution: Clivia robusta, the new species of Clivia described by Murray et al. (2004), was previously known as the 'robust' form of C. gardenii until further investigations revealed it to be a distinct taxon at the rank of genus. The distribution of C. robusta is distinct from that of C. gardenii s.s., with C. gardenii only occurring from Durban northwards. Hence any previous records of C. gardenii occurring south of Durban are likely to be locality records for C. robusta.

### **Assessment History**

**Taxon** Status and Citation/Red assessedCriteria List version VU A2abcd: Raimondo et Clivia B1ab(ii,iv,v) gardenii al. (2009) Hook. Clivia Lower Risk - Victor (2002) gardenii Least Hook. Concern Clivia Not Hilton-Taylor gardenii **Threatened** (1996)Hook. Clivia Indeterminate Hall et al. gardenii (1980)Hook.

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#### Citation

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**⊠** Comment on this assessment

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