

Inclusion of Natal Ginger *Siphonochilus aethiopicus* (populations of Mozambique, South Africa, Swaziland and Zimbabwe) in Appendix II

Proponent: South Africa

Summary: *Siphonochilus aethiopicus*, the Natal Ginger or Wild Ginger, is a long-lived plant that grows in seasonally dry woodlands with a perennial rhizome and annual above-ground parts that die off during the dry season. It is widespread in tropical and sub-tropical Africa, occurring in 24 range States. The proposal only concerns populations of Mozambique, South Africa, Swaziland and Zimbabwe.

Although believed to be affected by habitat loss, large-scale commercial harvesting to supply the herbal medicine trade in southern Africa is considered to be the most important factor affecting the species, which is one of the most popular ingredients in traditional medicines, particularly in South Africa. Harvest for local medicinal use has been implicated in declines in South Africa, where it is now extinct over much of its former range, its extent of occurrence having reportedly declined by more than 90% over the last 100 years, now standing at just over 8000km²¹. Thirty-nine known historical subpopulations were identified in South Africa in 2000, of which only 17 were still extant. More than half had fewer than 100 individuals, although some had up to 4000 plants. The species is now extinct in KwaZulu-Natal and has declined drastically in Limpopo and Mpumalanga Provinces. The majority of the remaining populations are reportedly not secure. Two-thirds occur outside formal conservation areas and three of the six populations that are theoretically protected are reportedly still being heavily exploited.

Historically South Africa exported the plant (e.g. to Lesotho in the early 20th century). The direction of trade appears to have reversed. Demand in South Africa is apparently too high to be met by current production from cultivated sources or locally sourced wild plants². Wild plants are reportedly being imported in increasing quantities from neighbouring countries. One reported market observation in 2011 revealed thousands of plants said to have been harvested in Zimbabwe and there are accounts of people travelling to Zimbabwe from South Africa to harvest. Plants are also reportedly imported into South Africa and possibly Swaziland from Mozambique. Because any trade that occurs is part of the informal economic sector it is difficult to assess its volume.

Reports from Mozambique from 1987 and 2010 indicated it to be locally abundant in clumps in miombo woodland. Healthy populations apparently still exist in northern Mozambique, although it is suspected that some of those in the south may be depleted. In Swaziland, remnant wild populations are not effectively protected in protected areas and there is information on ongoing harvest of the species in at least one nature reserve. There is no information available on population status or trends in Zimbabwe.

Outside the four range States that are the subject of the proposal, there are reports of numerous *S. aethiopicus* populations in West Africa.

There is also some evidence of international trade through international online trade platforms, including from South Africa and from Australia (of *S. aethiopicus* of South African origin).

In South Africa, *S. aethiopicus* is listed as an endangered species in the Threatened or Protected Species (TOPS) Regulation list. Permits are required for harvesting, possession and trade. In 2015, South Africa has published (in draft)³ its intention to revise the TOPS listing of *S. aethiopicus* to a critically endangered species of medicinal plants, which will restrict, through permitting, the import into South Africa of wild-sourced material of the species, as well as domestic trade within the country. Under the listing, all artificially propagated plants and their export would be exempt from controls³.

In Swaziland, the Flora Protection Act lists *S. aethiopicus* as a specially protected flora species requiring permits for harvest or export⁴.

Siphonochilus aethiopicus has not been assessed against the IUCN Red List criteria, but was assessed as critically endangered in South Africa, as endangered in Swaziland, and was reported to be endangered in Benin.

Analysis: This proposal is limited to *Siphonochilus aethiopicus* populations in Mozambique, South Africa, Swaziland and Zimbabwe. The populations in South Africa have evidently been seriously depleted by harvesting for domestic demand, and there are indications that harvesting for import into South Africa has spread to the other three range States in the proposal. Import is believed to take place through informal

channels. Populations have been described as 'remnant' in Swaziland. Healthy populations reportedly exist in northern Mozambique; there are suspicions of depletion in the south of the country. There is no information available on its status in Zimbabwe. On this basis there is insufficient evidence to determine whether the species meets the criteria in Annex 2 a of *Res. Conf. 9.24 (Rev. CoP16)*.

Reviewers: D. Newton, V. Williams, N. Crouch and G. Nichols.

References:

Information not referenced in the Summary section is from the Supporting Statement.

¹ Williams and Crouch unpublished, obtained from Williams. V, (2016) *In litt.* to IUCN/TRAFFIC Analyses Team, Cambridge, UK.

² Crouch, N (2016) *In litt.* to IUCN/TRAFFIC Analyses Team, Cambridge, UK.

³ South Africa Department of Environmental Affairs (2015) National Environmental Management: Biodiversity Act (10/2004): Threatened or protected species regulations. do.: Publication of lists of species that are threatened or protected, activities that are prohibited and exemption from restriction. Government Gazette, Notice 255 of 2015, No. 38600.

⁴ Minister for Agriculture and Cooperatives (2000) The Flora Protection Act, Schedule A, Especially protected flora (Endangered). Mbabane.