

Inclusion of *Senna meridionalis* in Appendix II

Proponent: Madagascar

Summary: *Senna meridionalis* is a deciduous much-branched shrub or shrubby tree, two to five metres tall found only in Madagascar. It is one of 250 or so species of *Senna*, a genus of leguminous plants widespread in the tropics. The species has a relatively extensive but fragmented distribution in southern and western Madagascar, growing mainly on calcareous soils in arid and semi-arid areas in deciduous forest and thorny scrub. Its extent of occurrence is likely to exceed 12000 km². It appears to be at least locally common and is reported from at least two protected areas (Tsimanampetsotsa National Park and Cap Sainte Marie Special Reserve). Regeneration from seed is said generally to be good.

Senna meridionalis has a bonsai-like appearance and is in some demand for the international horticultural trade, chiefly grown by hobbyists. It does not appear to be widely available at present (late 2009). The plant is reported to be collected particularly from the Table de Toliara mountain near Toliara in south-west Madagascar. Malagasy authorities report the export of some 700 in the period 2003–2006, most of these (just under 400) in 2004. It may be assumed that some or all of these were wild-collected plants. The species can reportedly be propagated from both seeds and cuttings.

Analysis: *Senna meridionalis* has a wide but apparently fragmented distribution in southern and western Madagascar. Data on population status are sparse, but the species appears to be at least locally common. It is in international trade as a horticultural plant, with at least some of that trade in wild collected plants. However, reported volumes of trade are low and the plant is reportedly easy to propagate. It seems unlikely that harvest for trade is reducing the species to a level at which it might become eligible for inclusion in Appendix I in the near future, or that such regulation is needed to ensure that harvest from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences.

Supporting Statement (SS)	Additional information
Madagascar	<u>Taxonomy</u>
	Formerly known as <i>Cassia meridionalis</i> ; placed in <i>Senna</i> by Du Puy (1995).
	<u>Range</u>
	<u>IUCN Global Category</u>
	Not assessed

Supporting Statement (SS)	Additional information
Biological and trade criteria for inclusion in Appendix II (<i>Resolution Conf. 9.24 (Rev. CoP14) Annex 2 a</i>)	
<u>A) Trade regulation needed to prevent future inclusion in Appendix I</u>	
<p>The species has a very fragmented distribution in the south (Table de Toliara mountain) and south-west (Tsingy de Bemaraha). In a 2006 survey, around 420 individuals, of which 150 were mature, were counted at Ahaviro on the Table de Toliara mountain.</p> <p>The species regenerates easily by seed, but collectors tend to take all the specimens they find at a given site, without leaving young plants to ensure succession. This may lead to long-term decline in the population. The form from the Table de Toliara is particularly highly sought after and occurs in unprotected areas subject to considerable pressure, including fire.</p> <p>On the basis of fieldwork carried out in 2006, the species is considered to meet the IUCN Criteria for Vulnerable.</p> <p>Recorded exports are: 0 in 2003; 483 in 2004; 166 in 2005; 23 in 2006.</p>	<p><i>Du Puy (2002) reported the species's distribution as south-west Madagascar, where it occurred on the Mahafaly Plateau from Toliara through Tsimanampetsotsa and Itampolo south to Cap Sainte Marie. Its habitat was xerophytic scrubland, usually on limestone but also on sand over limestone, often near the coast, at altitudes of up to 200 m. On the basis of this distribution, its extent of occurrence is likely to exceed 12 000 km².</i></p> <p><i>The species is thought likely not to be threatened at present (McGough, 2009).</i></p> <p><i>Tsingy de Bemaraha is considerably north of the above range; it is possible that the reference is in error for another protected area (Tsimanampetsotsa).</i></p>
<u>B) Regulation of trade required to ensure that harvest from the wild is not reducing population to level where survival might be threatened by continued harvest or other influences</u>	
	<p><i>The branches are used as poles in house construction (Du Puy, 2002).</i></p>
Inclusion in Appendix II to improve control of other listed species	
<u>A) Specimens in trade resemble those of species listed in Appendix II under <i>Resolution Conf. 9.24 (Rev. CoP14) Annex 2 a</i> or listed in Appendix I</u>	
<u>B) Compelling other reasons to ensure that effective control of trade in currently listed species is achieved</u>	
Other information	
<p>Fragmented distribution.</p>	<p style="text-align: center;"><u>Threats</u></p> <p><i>Natural habitats in southern Madagascar are affected by fire, charcoal and fuelwood extraction, over-grazing and conversion to agriculture. It is not known to what extent these affect this species.</i></p>

Supporting Statement (SS)	Additional information
Occurs in the Tsingy de Bemaraha National Park.	<p align="center"><u>Conservation, management and legislation</u></p> <p><i>This may be in error for Tsimanampetsotsa, which is also a national park and where the species is known to occur. Cap Ste Marie, where the species is also recorded, is a special reserve.</i></p>
	<p align="center"><u>Captive breeding/artificial propagation</u></p> <p><i>Can be propagated by seed and cuttings (Bihmann, n.d.).</i></p>
	<p align="center"><u>Other comments</u></p>

Reviewers:

TRAFFIC East/Southern Africa.

References:Du Puy, D.J. (1995). *New Combinations in Senna Miller and Chamaecrista Moench (Leguminosae: Caesalpinioideae) from Madagascar*. Royal Botanic Gardens, Kew.Du Puy, D.J. (Ed.) (2002). *The Leguminosae of Madagascar*. Royal Botanic Gardens, Kew.McGough, N. (2009). *In litt.* to IUCN/TRAFFIC Analyses Team, Cambridge, UK.Bihmann, n.d.. <http://www.bihmann.com/caudiciforms/subs/sen-mer-sub.asp> Viewed 16 December 2009.