Adesmia microphylla

Taxonomic Authority: Hook. & Arn.		
Global Assessment 🔲 Regional Assessment	Region: Global	Endemic to region
Synonyms	Common Names	
Adesmia spinosa Lesson Patagonium microph (Hooker & Arnott) Kuntze		
Upper Level Taxonomy		
Kingdom:PLANTAEClass:MAGNOLIOPSIDAFamily:LEGUMINOSAE	Phylum: TRACHEOPHYTA Order: FABALES	
Lower Level Taxonomy		
Rank: Subpopulation:	Infra- rank name: Authority:	Plant Hybrid
Adesmia microphylla is a perennial shrub.		

General Information

Distribution

A. microphylla is endemic to Chile found in the central provinces of Valparaiso, Coquimbo, Region Metropolitana de Santia, Maule and Atacama.

Range Size	Elevation	Biogeographic Realm
Area of Occupancy: Extent of Occurrence:	Upper limit: 1000 Lower limit: 400	Afrotropical Antarctic
Map Status:	<u>Depth</u> Upper limit: Lower limit:	AustralasianNeotropicalOceanian
	Depth Zones Shallow photic Bathyl Hadal Photic Abyssal	PalearcticIndomalayanNearctic
Dopulation		

Population

There is currently not data available relating to the population size of this taxon, however is considered to be common within its range.

Total Population Size

Minimum Population Size:

Maximum Population Size:

Habitat and Ecology

A. microphylla is found on hills or fields as part of the xerophilous (dry) vegetation. The taxon often forms associations with scrub species such as Proustia pungens and Lithraea caustica.

<u>System</u>		Movement patter	<u>n</u>	Crop Wild Relative
✓ Terrestrial	FreshwaterMarine	NomadicMigratory	Congregatory/DispersiveAltitudinally migrant	☐ Is the species a wild relative of a crop?

<u>Growth From</u>	Definition
Shrub - size unkno	Perennial shrub (any size), also termed a Phanerophyte if $>1m$ or a Chamaephyte if $<1m$

Threats

A. microphylla is not known to be specifically threatened, however there are a number of general threats in the chilean mattorral and the Atacama desert in which the taxon is found. These threats include a rise in the human population, which is associated with habitat loss due to urban development, the contruction of roads and mining (Anderson et al 1990). Livestock grazing, logging, tourism, fuelwood gathering and commercial plant collecting are also leading to habitat degradation in the Valdivian temperate forests (Smith 2001).

	Past	Present	Future
13 None		\checkmark	

Conservation Measures

A. microphylla is known to occur within the Chilean National Chinchilla Reserve (Durán et al 1987) and there are several other protected areas within the species range. Seeds have been collected as a method of ex-situ conservation by the Millennium Seed Bank Project. There are also living collectings at the San Luis Obispo Botanical Gardens.

	In Place	Needed
3 Research actions		\checkmark
3.2 Population numbers and range		\checkmark
3.3 Biology and Ecology		\checkmark
3.4 Habitat status		\checkmark
3.5 Threats		\checkmark
3.6 Uses and harvest levels		\checkmark
3.7 Cultural relevance		\checkmark
3.8 Conservation measures		\checkmark
3.9 Trends/Monitoring		\checkmark
4 Habitat and site-based actions	\checkmark	\checkmark
4.4 Protected areas	\checkmark	\checkmark
5 Species-based actions	\checkmark	
5.7 Ex situ conservation actions	\checkmark	
5.7.2 Genome resource bank	\checkmark	

Countries of Occurrence

			PRESENCE	Ξ					ORIGIN	l	
	Year Round	Breeding Season only	migrant		Extinct	Presence uncertain	Native	Introduced I	Re- ntroduc	Vagrant ced	: Origin uncertain
Chile	\checkmark						\checkmark				
Atacama	\checkmark						\checkmark				
Coquimbo	\checkmark						\checkmark				
Maule	\checkmark						\checkmark				
Valparaíso	\checkmark						\checkmark				

General Habitats	<u>Score</u>	Description	<u>Major</u> Importance
3 Shrubland	1	Suitable	Unset
3.5 Shrubland - Subtropical/Tropical Dry	1	Suitable	Unset

Species Utilisation

Species is not utilised at all

Purpose / Type of Use	Subsistence	<u>National</u>	International
2. Food - animal	$\mathbf{\nabla}$		

A. microphylla is used as animal fodder (Ulibarri, 1986).

Trend in the level of wild offtake/harvest in relation to total wild population numbers over the last five years:

Trend in the amount of offtake/harvest produced through domestication/cultivation over the last five years:

CITES status: Not listed

IUCN Red Listing

Red List Assessment: (using 2001 IUCN system) Least Concern (LC	Red List Assessment:	(using 2001 IUCN system)	Least Concern ((LC)
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Red List Criteria:

Date Last Seen (only for EX, EW or Possibly EX species):

Is the species Possibly Extinct?		Possibly Extinct Candidate?	
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Rationale for the Red List Assessment

The distribution of A. microphylla does not meet the threshold for a threatened category. The taxon is known to occur within the protected areas network and seeds have been collected as a method of ex-situ conservation. The taxon is not considered to be specifically threatened despite general threats to the habitat. A. microphylla does not meet the criteria for a threatened category and is thus rated as Least Concern.

Reason(s) for Change in Red List Category from the Previous Assessment:

Genuine Change	Nongenuine Change	□ No Change			
☐ Genuine (recent)☐ Genuine (since first assessment)	 New information Knowledge of Criteria Incorrect data used previously 	 Taxonomy Criteria Revisio Other Same category and criteria Same category but change in criteria 			
Current Population Trend: StableDate of Assessment: 05/08/2010Name(s) of the Assessor(s):Groom, A.Evaluator(s):Notes:					
% population decline in the past:					
Time period over which the past decline h applying Criterion A or C1 (in years or get					
% population decline in the future:					
Time period over which the future decline applying Criterion A or C1 (in years or gen					

Bibliography

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