

**SOVENTIX SOLAR POWER PLANT:  
PLANT RESCUE & PROTECTION PLAN**



**PRODUCED FOR ECOLOGES**

**BY**



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## ***BACKGROUND & OBJECTIVES***

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The purpose of the plant rescue and protection plan is to implement avoidance and mitigation measures to reduce the impact of the development of the Soventix Solar Power Plant on listed and protected plant species and their habitats. This subplan is a requirement of the EIA process and is also required in order to ensure compliance with national and provincial legislation for vegetation clearing and any required destruction or translocation of provincially and nationally protected species within the footprint of the PV plant.

The Plan first provides some legislative background on the regulations relevant to listed and protected species, followed by a summary of the protected species and genera as listed by the Northern Cape Conservation Act (2009) and then an identification of species present at the Soventix PV Plant site and actions that should be implemented to minimise impact on these species and comply with legislative requirements.

## ***LEGISLATIVE BACKGROUND & REQUIREMENTS***

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Plant species are protected at the national level as well as the provincial level and different permits may be required for different species depending on their protection level. At the national level, protected trees are listed by DAFF under the National List of Protected Trees, which is updated on a regular basis. Any clearing of nationally protected trees requires a permit from DAFF. At the provincial level, all species red-listed under the Red List of South African plants (<http://redlist.sanbi.org/>) as well as species listed under the Northern Cape Nature Conservation Act (No. 9 of 2009) are protected and require provincial permits. The Northern Cape Conservation Act lists a variety of species as protected but also several whole families and genera as protected. Of particular relevance to the current study are the following, which are extracted from the legislation and are not intended to provide a comprehensive list of all protected species, only those which are likely to be encountered in the area. The reader is referred to the schedules of the Act for a full list of species listed under the act.

Under the Northern Cape Nature Conservation Act (No. 9 of 2009), the following are highlighted as potentially being present at the site:

### **Schedule 1: Specially Protected Flora**

- Family GERANIACEAE - *Pelargonium* spp. all species

### **Schedule 2 Protected Flora**

- *Amaryllidaceae* – All species

- *Apiaceae* – All Species
- *Apocynaceae* – All Species
- *Asphodelaceae* – All species except *Aloe ferox*
- *Iridaceae* – All species
- *Mesembryanthemaceae* – All species
- *Capparaceae* - *Boscia* spp. Sheperd's trees, all species
- *Androcymbium* spp. - All species
- *Crassulaceae* - All species except those listed in Schedule 1
- *Euphorbiaceae* - *Euphorbia* spp. All species
- *Oxalidaceae* - *Oxalis* spp All species
- *Portulacaceae* - *Anacampseros* spp. All species

A full list of plant species known from the broad area around the Soventix PV site including those recorded at the site are provided in Annex 1. This includes their protection status according to the Northern Cape Conservation Act and whether they are listed under the national list of protected trees. It is important to note that authorisation of the project by DEA does not free the developer from complying with the provincial legislation and permitting requirements with regards to protected species.

## ***MITIGATION & AVOIDANCE OPTIONS***

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The primary mitigation and avoidance measure that must be implemented at the preconstruction phase is the Preconstruction Walk-Through of the development footprint. This defines which and how many individuals of listed and protected species are found within the development footprint. This information is required for the DAFF and Northern Cape permits which must be obtained before construction can commence.

Where listed plant species fall within the development footprint and avoidance is not possible, then it may be possible to translocate the affected individuals outside of the development footprint. However, not all species are suitable for translocation as only certain types of plants are able to survive the disturbance. Suitable candidates for translocation include most geophytes and succulents. Although there are exceptions, the majority of woody species do not survive translocation well and it is generally not recommended to try and attempt to translocate such species. Recommendations in this regard would be made following the walk-through of the facility footprint before construction, where all listed and protected species within the development footprint will be identified and located.

## **RESCUE AND PROTECTION PLAN**

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### **Preconstruction**

- Identification of all listed species which may occur within the site, based on the SANBI SIBIS database as well as the specialist EIA studies for the site and any other relevant literature.

Before construction commences at the site, the following actions should be taken:

- A walk-through of the final development footprint by a suitably qualified botanist/ecologist to locate and identify all listed and protected species which fall within the development footprint. This would need to happen during the peak flowering season at the site which depending on rainfall is likely to be during late summer to autumn (March-April).
- A walk-through report following the walk-through which identifies areas where minor deviations to roads and other infrastructure can be made to avoid sensitive areas and important populations of listed species. The report should also contain a full list of localities where listed species occur within the development footprint and the number of affected individuals in each instance, so that this information can be used to comply with the permit conditions required by the authorization as well as provincial requirements.
- Search and rescue operation of all listed species suitable for translocation within the development footprint that cannot be avoided. Affected individuals should be translocated to a similar habitat outside of the development footprint and marked for monitoring purposes. Those species suitable for search as rescue should be identified in the walk-through report. It is important to note that a permit is required to translocate or destroy any listed and protected species even if they do not leave the property.

### **Construction Phase**

- ECO to monitor vegetation clearing at the site. Any deviations from the plans that may be required should first be checked for listed species by the ECO and any listed species present which are able to survive translocation should be translocated to a safe site.
- Any listed species observed within the development footprint that were missed during the preconstruction plant sweeps should be translocated to a safe site.
- Many listed species are also sought after for traditional medicine or by collectors and so the ECO should ensure that all staff attend environmental induction training in which the legal and conservation aspects of harvesting plants from the wild are discussed.

- The ECO should monitor construction activities in sensitive habitats such as near rivers and wetlands carefully to ensure that impacts to these areas are minimized.

## **Operational Phase**

- Access to the site should be strictly controlled and all personnel entering or leaving the site should be required to sign and out with the security officers.
- The collecting of plants or their parts should be strictly forbidden and signs stating so should be placed at the entrance gates to the site.

## ***MONITORING & REPORTING REQUIREMENTS***

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The following reporting and monitoring requirements are recommended as part of the plant rescue and protection plan:

- Preconstruction walk-through report detailing the location and distribution of all listed and protected species. This should include a walk-through of all infrastructure including all new access roads, PV array areas, underground cables, power line routes, buildings and substations. The report should include recommendations of route adjustments where necessary, as well as provide a full accounting of how many individuals of each listed species will be impacted by the development.
- Monitoring during construction by the ECO to ensure that listed species and sensitive habitats are avoided. All incidents should be recorded along with the remedial measures implemented.
- Post construction monitoring of plants translocated during search and rescue to evaluate the success of the intervention. Monitoring for a year post-transplant should be sufficient to gauge success.

## ANNEX 1.

List of species known from the vicinity of the Soventix PV plant and their presence at the site and protection status according to the Northern Cape Conservation Act (2009)

Family	Species	Threat status	Present	Protection
MESEMBRYANTHEMACEAE	<i>Chasmatophyllum maninum</i> L.Bolus	DDD	1	Schedule 2
MESEMBRYANTHEMACEAE	<i>Chasmatophyllum rouxii</i> L.Bolus	DDD		Schedule 2
POACEAE	<i>Cynodon polevansii</i> Stent	DDT		
MYRSINACEAE	<i>Rapanea melanophloeos</i> (L.) Mez	Declining		
ACANTHACEAE	<i>Barleria rigida</i> Nees	LC	1	
	<i>Blepharis integrifolia</i> (L.f.) E.Mey. ex			
ACANTHACEAE	<i>Schinz</i> var. <i>integrifolia</i>	LC	1	
ACANTHACEAE	<i>Monechma divaricatum</i> (Nees) C.B.Clarke	LC		
ACANTHACEAE	<i>Monechma incanum</i> (Nees) C.B.Clarke	LC	1	
AIZOACEAE	<i>Galenia africana</i> L.	LC	1	
AIZOACEAE	<i>Galenia pubescens</i> (Eckl. & Zeyh.) Druce	LC		
AIZOACEAE	<i>Galenia sarcophylla</i> Fenzl	LC	1	
AIZOACEAE	<i>Galenia secunda</i> (L.f.) Sond.	LC	1	
AIZOACEAE	<i>Tetragonia arbuscula</i> Fenzl	LC	1	
AIZOACEAE	<i>Tetragonia fruticosa</i> L.	LC		
AIZOACEAE	<i>Tetragonia spicata</i> L.f.	LC	1	
AMARANTHACEAE	<i>Amaranthus dinteri</i> Schinz subsp. <i>dinteri</i>	LC		
AMARANTHACEAE	<i>Kyphocarpa angustifolia</i> (Moq.) Lopr.	LC		
AMARANTHACEAE	<i>Pupalia lappacea</i> (L.) A.Juss. var. <i>lappacea</i>	LC		
AMARYLLIDACEAE	<i>Brunsvigia radulosa</i> Herb.	LC	1	Schedule 2
AMARYLLIDACEAE	<i>Haemanthus humilis</i> Jacq. subsp. <i>humilis</i>	LC		Schedule 2
ANACARDIACEAE	<i>Searsia burchellii</i> (Sond. ex Engl.) Moffett	LC	1	
ANACARDIACEAE	<i>Searsia erosa</i> (Thunb.) Moffett	LC	1	
ANACARDIACEAE	<i>Searsia lancea</i> (L.f.) F.A.Barkley	LC		
ANACARDIACEAE	<i>Searsia pendulina</i> (Jacq.) Moffett	LC		
APIACEAE	<i>Berula thunbergii</i> (DC.) H.Wolff	LC		Schedule 2
	<i>Ceropegia multiflora</i> Baker subsp. <i>multiflora</i>	LC		Schedule 2
APOCYNACEAE	<i>Gomphocarpus fruticosus</i> (L.) Aiton f. subsp. <i>fruticosus</i>	LC	1	Schedule 2
	<i>Gomphocarpus tomentosus</i> Burch. subsp. <i>tomentosus</i>	LC		Schedule 2
APOCYNACEAE	<i>Huernia humilis</i> (Masson) Haw.	LC		Schedule 2
APOCYNACEAE	<i>Marsdenia floribunda</i> (E.Mey.) N.E.Br.	LC		Schedule 2
	<i>Microloma armatum</i> (Thunb.) Schltr. var. <i>armatum</i>	LC		Schedule 2
APOCYNACEAE	<i>Pachypodium succulentum</i> (Jacq.) Sweet	LC		Schedule 2
APOCYNACEAE	<i>Stapelia flavopurpurea</i> Marloth	LC		Schedule 2
APOCYNACEAE	<i>Stapelia grandiflora</i> Masson var.	LC		Schedule 2

	<i>grandiflora</i>			
APOCYNACEAE	<i>Tridentea jucunda</i> (N.E.Br.) L.C.Leach	LC		Schedule 2
ASPARAGACEAE	<i>Asparagus striatus</i> (L.f.) Thunb.	LC		
ASPARAGACEAE	<i>Asparagus suaveolens</i> Burch.	LC	1	
	<i>Haworthia bolusii</i> Baker var.			
ASPHODELACEAE	<i>blackbeardiana</i> (Poelln.) M.B.Bayer	LC		Schedule 2
	<i>Haworthia venosa</i> (Lam.) Haw. subsp.			
ASPHODELACEAE	<i>tessellata</i> (Haw.) M.B.Bayer	LC		Schedule 2
ASPHODELACEAE	<i>Kniphofia ensifolia</i> Baker subsp. <i>ensifolia</i>	LC		Schedule 2
	<i>Trachyandra saltii</i> (Baker) Oberm. var.			
ASPHODELACEAE	<i>oatesii</i> (Baker) Oberm.	LC		Schedule 2
ASPLENIACEAE	<i>Asplenium cordatum</i> (Thunb.) Sw.	LC		
ASTERACEAE	<i>Amphiglossa triflora</i> DC.	LC		
ASTERACEAE	<i>Arctotis leiocarpa</i> Harv.	LC		
	<i>Berkheya pinnatifida</i> (Thunb.) Thell.			
ASTERACEAE	subsp. <i>pinnatifida</i>	LC		
ASTERACEAE	<i>Brachylaena glabra</i> (L.f.) Druce	LC		
ASTERACEAE	<i>Chrysocoma ciliata</i> L.	LC	1	
ASTERACEAE	<i>Dicoma capensis</i> Less.	LC	1	
ASTERACEAE	<i>Dimorphotheca cuneata</i> (Thunb.) Less.	LC		
ASTERACEAE	<i>Dimorphotheca zeyheri</i> Sond.	LC	1	
	<i>Eriocephalus ericoides</i> (L.f.) Druce subsp.			
ASTERACEAE	<i>ericoides</i>	LC	1	
ASTERACEAE	<i>Eriocephalus karooicus</i> M.A.N.Müll.	LC	1	
ASTERACEAE	<i>Euryops asparagoides</i> (Licht. ex Less.) DC.	LC		
ASTERACEAE	<i>Euryops empetrifolius</i> DC.	LC		
ASTERACEAE	<i>Euryops lateriflorus</i> (L.f.) DC.	LC	1	
	<i>Felicia filifolia</i> (Vent.) Burt Davy subsp.			
ASTERACEAE	<i>filifolia</i>	LC		
ASTERACEAE	<i>Felicia hirsuta</i> DC.	LC		
	<i>Felicia muricata</i> (Thunb.) Nees subsp.			
ASTERACEAE	<i>cinerascens</i> Grau	LC		
	<i>Felicia muricata</i> (Thunb.) Nees subsp.			
ASTERACEAE	<i>muricata</i>	LC	1	
	<i>Gazania krebsiana</i> Less. subsp. <i>arctotoides</i>			
ASTERACEAE	(Less.) Roessler	LC	1	
ASTERACEAE	<i>Gazania serrata</i> DC.	LC		
ASTERACEAE	<i>Geigeria filifolia</i> Mattf.	LC	1	
	<i>Geigeria ornativa</i> O.Hoffm. subsp.			
ASTERACEAE	<i>ornativa</i>	LC		
ASTERACEAE	<i>Gnaphalium filagopsis</i> Hilliard & B.L.Burt	LC		
ASTERACEAE	<i>Helichrysum argyrosphaerum</i> DC.	LC	1	
	<i>Helichrysum asperum</i> (Thunb.) Hilliard &			
ASTERACEAE	B.L.Burt var. <i>asperum</i>	LC		
ASTERACEAE	<i>Helichrysum lineare</i> DC.	LC		
ASTERACEAE	<i>Helichrysum lucilioides</i> Less.	LC	1	

ASTERACEAE	<i>Helichrysum micropoides</i> DC.	LC	
ASTERACEAE	<i>Helichrysum pentzioides</i> Less.	LC	
ASTERACEAE	<i>Helichrysum zeyheri</i> Less.	LC	1
ASTERACEAE	<i>Hertia kraussii</i> (Sch.Bip.) Fourc.	LC	
ASTERACEAE	<i>Hertia pallens</i> (DC.) Kuntze	LC	1
ASTERACEAE	<i>Ifloga glomerata</i> (Harv.) Schltr.	LC	
ASTERACEAE	<i>Kleinia longiflora</i> DC.	LC	
ASTERACEAE	<i>Lactuca inermis</i> Forssk.	LC	
ASTERACEAE	<i>Lepidostephium denticulatum</i> Oliv.	LC	
ASTERACEAE	<i>Leysera tenella</i> DC.	LC	
ASTERACEAE	<i>Nidorella resedifolia</i> DC. subsp. <i>resedifolia</i>	LC	1
ASTERACEAE	<i>Nolletia arenosa</i> O.Hoffm.	LC	
ASTERACEAE	<i>Oncosiphon piluliferum</i> (L.f.) Källersjö	LC	
ASTERACEAE	<i>Osteospermum leptolobum</i> (Harv.) Norl.	LC	1
ASTERACEAE	<i>Osteospermum spinescens</i> Thunb.	LC	1
ASTERACEAE	<i>Pegolettia retrofracta</i> (Thunb.) Kies	LC	1
ASTERACEAE	<i>Pentzia globosa</i> Less.	LC	1
ASTERACEAE	<i>Pentzia incana</i> (Thunb.) Kuntze	LC	1
ASTERACEAE	<i>Pentzia lanata</i> Hutch.	LC	1
ASTERACEAE	<i>Pentzia quinquefida</i> (Thunb.) Less.	LC	1
ASTERACEAE	<i>Phymaspermum aciculare</i> (E.Mey. ex Harv.) Benth. & Hook. ex B.D.Jacks	LC	1
ASTERACEAE	<i>Printzia huttoni</i> Harv.	LC	
ASTERACEAE	<i>Pteronia erythrochaeta</i> DC.	LC	
ASTERACEAE	<i>Pulicaria scabra</i> (Thunb.) Druce	LC	
ASTERACEAE	<i>Rosenia humilis</i> (Less.) K.Bremer	LC	1
ASTERACEAE	<i>Rosenia oppositifolia</i> (DC.) K.Bremer	LC	1
ASTERACEAE	<i>Schistostephium flabelliforme</i> Less.	LC	
ASTERACEAE	<i>Senecio burchellii</i> DC.	LC	
ASTERACEAE	<i>Senecio consanguineus</i> DC.	LC	1
ASTERACEAE	<i>Senecio isatideus</i> DC.	LC	
ASTERACEAE	<i>Senecio niveus</i> (Thunb.) Willd.	LC	1
ASTERACEAE	<i>Senecio reptans</i> Turcz.	LC	
ASTERACEAE	<i>Tarchonanthus camphoratus</i> L.	LC	1
ASTERACEAE	<i>Tarchonanthus minor</i> Less.	LC	
ASTERACEAE	<i>Tripteris aghillana</i> DC. var. <i>aghillana</i>	LC	1
ASTERACEAE	<i>Ursinia nana</i> DC. subsp. <i>nana</i>	LC	1
BIGNONIACEAE	<i>Rhigozum obovatum</i> Burch.	LC	1
BORAGINACEAE	<i>Ehretia alba</i> Retief & A.E.van Wyk	LC	1
BORAGINACEAE	<i>Heliotropium ciliatum</i> Kaplan	LC	1
BORAGINACEAE	<i>Lithospermum papillosum</i> Thunb.	LC	
BRASSICACEAE	<i>Erucastrum strigosum</i> (Thunb.) O.E.Schulz	LC	
BRASSICACEAE	<i>Heliophila minima</i> (Stephens) Marais	LC	
BRASSICACEAE	<i>Lepidium schlechteri</i> Thell.	LC	
BRASSICACEAE	<i>Matthiola torulosa</i> (Thunb.) DC.	LC	



BRASSICACEAE	<i>Rorippa fluviatilis</i> (E.Mey. ex Sond.) Thell. var. <i>fluviatilis</i>	LC		
BUDDLEJACEAE	<i>Buddleja saligna</i> Willd.	LC		
BUDDLEJACEAE	<i>Gomphostigma virgatum</i> (L.f.) Baill.	LC		
CAMPANULACEAE	<i>Wahlenbergia androsacea</i> A.DC.	LC		
CAMPANULACEAE	<i>Wahlenbergia nodosa</i> (H.Buek) Lammers	LC		
CAPPARACEAE	<i>Boscia albitrunca</i> (Burch.) Gilg & Gilg-Ben. <i>Cleome angustifolia</i> Forssk. subsp. <i>diandra</i>	LC		DAFF
CAPPARACEAE	(Burch.) Kers	LC		
CAPPARACEAE	<i>Cleome gynandra</i> L.	LC		
CAPPARACEAE	<i>Cleome monophylla</i> L.	LC		
CARYOPHYLLACEAE	<i>Dianthus micropetalus</i> Ser.	LC		Schedule 2
CARYOPHYLLACEAE	<i>Herniaria erckertii</i> Herm. subsp. <i>erckertii</i>	LC		
CARYOPHYLLACEAE	<i>Silene undulata</i> Aiton	LC		
CARYOPHYLLACEAE	<i>Spergularia bocconeii</i> (Scheele) Graebn. <i>Atriplex vestita</i> (Thunb.) Aellen var.	LC		
CHENOPODIACEAE	<i>appendiculata</i> Aellen	LC	1	
CHENOPODIACEAE	<i>Bassia salsoloides</i> (Fenzl) A.J.Scott	LC	1	
CHENOPODIACEAE	<i>Salsola aphylla</i> L.f.	LC	1	
CHENOPODIACEAE	<i>Salsola calluna</i> Fenzl ex C.H.Wright	LC	1	
CHENOPODIACEAE	<i>Salsola dealata</i> Botsch.	LC		
CHENOPODIACEAE	<i>Salsola glabrescens</i> Burttt Davy	LC	1	
CHENOPODIACEAE	<i>Salsola humifusa</i> A.Brückn.	LC		
COMMELINACEAE	<i>Commelina africana</i> L. var. <i>africana</i> <i>Commelina africana</i> L. var. <i>barberae</i>	LC		
COMMELINACEAE	(C.B.Clarke) C.B.Clarke	LC		
CONVOLVULACEAE	<i>Convolvulus sagittatus</i> Thunb. <i>Adromischus caryophyllaceus</i> (Burm.f.)	LC	1	
CRASSULACEAE	<i>Lem.</i>	LC		Schedule 2
CRASSULACEAE	<i>Adromischus trigynus</i> (Burch.) Poelln. <i>Crassula capitella</i> Thunb. subsp.	LC		Schedule 2
CRASSULACEAE	<i>thyrsiflora</i> (Thunb.) Toelken	LC	1	Schedule 2
CRASSULACEAE	<i>Crassula dependens</i> Bolus	LC		Schedule 2
CRASSULACEAE	<i>Kalanchoe paniculata</i> Harv.	LC		Schedule 2
CRASSULACEAE	<i>Kalanchoe rotundifolia</i> (Haw.) Haw.	LC		Schedule 2
CRASSULACEAE	<i>Tylecodon ventricosus</i> (Burm.f.) Toelken <i>Cucumis myriocarpus</i> Naudin subsp.	LC		Schedule 2
CUCURBITACEAE	<i>leptodermis</i> (Schweick.) C.Jeffrey & <i>P.Halliday</i>	LC		
CUCURBITACEAE	<i>Cucumis myriocarpus</i> Naudin subsp. <i>myriocarpus</i>	LC	1	
CUCURBITACEAE	<i>Cucumis zeyheri</i> Sond.	LC		
CYPERACEAE	<i>Bulbostylis humilis</i> (Kunth) C.B.Clarke	LC		
CYPERACEAE	<i>Cyperus bellus</i> Kunth	LC		
CYPERACEAE	<i>Cyperus capensis</i> (Steud.) Endl.	LC		
CYPERACEAE	<i>Cyperus congestus</i> Vahl	LC		

CYPERACEAE	<i>Cyperus decurvatus</i> (C.B.Clarke) C.Archer & Goetgh.	LC	
CYPERACEAE	<i>Cyperus marginatus</i> Thunb.	LC	1
CYPERACEAE	<i>Cyperus marlothii</i> Boeckeler	LC	
CYPERACEAE	<i>Cyperus usitatus</i> Burch.	LC	1
CYPERACEAE	<i>Isolepis diabolica</i> (Steud.) Schrad.	LC	
CYPERACEAE	<i>Isolepis setacea</i> (L.) R.Br.	LC	
CYPERACEAE	<i>Schoenoplectus decipiens</i> (Nees) J.Raynal	LC	
DRACAENACEAE	<i>Sansevieria aethiopica</i> Thunb.	LC	
	<i>Arachniodes webbiana</i> (A.Braun) Schelpe subsp. <i>foliosa</i> (C.Chr.) Gibby, Rasbach, Reichst., Widén & Viane	LC	
DRYOPTERIDACEAE	<i>Diospyros austro-africana</i> De Winter var. <i>microphylla</i> (Burch.) De Winter	LC	1
EBENACEAE	<i>Euclea crispa</i> (Thunb.) Gürke subsp. <i>ovata</i> (Burch.) F.White	LC	1
EBENACEAE	<i>Bergia anagaloides</i> E.Mey. ex Fenzl	LC	
ELATINACEAE	<i>Bergia anagaloides</i> E.Mey. ex Fenzl	LC	
EUPHORBIACEAE	<i>Clutia impedita</i> Prain	LC	
EUPHORBIACEAE	<i>Clutia thunbergii</i> Sond.	LC	
EUPHORBIACEAE	<i>Euphorbia arida</i> N.E.Br.	LC	Schedule 2
	<i>Euphorbia clavarioides</i> Boiss. var. <i>truncata</i> (N.E.Br.) A.C.White, R.A.Dyer & B.Sloane	LC	Schedule 2
EUPHORBIACEAE	<i>Euphorbia mauritanica</i> L. var. <i>mauritanica</i>	LC	Schedule 2
EUPHORBIACEAE	<i>Euphorbia stellispina</i> Haw. var. <i>stellispina</i>	LC	1 Schedule 2
FABACEAE	<i>Acacia karroo</i> Hayne	LC	1
	<i>Acacia mellifera</i> (Vahl) Benth. subsp. <i>detinens</i> (Burch.) Brenan	LC	
FABACEAE	<i>Amphithalea muraltioides</i> (Benth.) A.L.Schutte	LC	
FABACEAE	<i>Argyrolobium argenteum</i> Eckl. & Zeyh.	LC	
FABACEAE	<i>Cullen tomentosum</i> (Thunb.) J.W.Grimes	LC	
FABACEAE	<i>Dichilus gracilis</i> Eckl. & Zeyh.	LC	
	<i>Indigastrum argyraeum</i> (Eckl. & Zeyh.) Schrire	LC	1
FABACEAE	<i>Indigofera alternans</i> DC. var. <i>alternans</i>	LC	1
FABACEAE	<i>Indigofera hedyantha</i> Eckl. & Zeyh.	LC	
FABACEAE	<i>Lessertia annularis</i> Burch.	LC	1
FABACEAE	<i>Lotononis laxa</i> Eckl. & Zeyh.	LC	1
FABACEAE	<i>Lotononis pungens</i> Eckl. & Zeyh.	LC	
FABACEAE	<i>Melolobium calycinum</i> Benth.	LC	
	<i>Melolobium candicans</i> (E.Mey.) Eckl. & Zeyh.	LC	1
FABACEAE	<i>Melolobium canescens</i> Benth.	LC	
FABACEAE	<i>Rhynchosia adenodes</i> Eckl. & Zeyh.	LC	
FABACEAE	<i>Sutherlandia humilis</i> E.Phillips & R.A.Dyer	LC	Schedule 1
GENTIANACEAE	<i>Sebaea pentandra</i> E.Mey. var. <i>pentandra</i>	LC	

GERANIACEAE	<i>Monsonia angustifolia</i> E.Mey. ex A.Rich.	LC		
GERANIACEAE	<i>Pelargonium aestivale</i> E.M.Marais	LC		Schedule 1
GERANIACEAE	<i>Pelargonium pseudofumarioides</i> R.Knuth	LC		Schedule 1
GERANIACEAE	<i>Pelargonium tragacanthoides</i> Burch.	LC		Schedule 1
GISEKIACEAE	<i>Gisekia pharnacioides</i> L. var.	LC	1	
	<i>pharnacioides</i>			
	<i>Daubinya comata</i> (Burch. ex Baker)			
HYACINTHACEAE	<i>J.C.Manning &amp; A.van der Merwe</i>	LC		Schedule 2
HYACINTHACEAE	<i>Dipcadi brevifolium</i> (Thunb.) Fourc.	LC		
HYACINTHACEAE	<i>Dipcadi gracillimum</i> Baker	LC		
HYACINTHACEAE	<i>Dipcadi longifolium</i> (Ker Gawl.) Baker	LC		
HYACINTHACEAE	<i>Dipcadi viride</i> (L.) Moench	LC		
HYACINTHACEAE	<i>Lachenalia bowkeri</i> Baker	LC		Schedule 2
	<i>Lachenalia ensifolia</i> (Thunb.) J.C.Manning			
HYACINTHACEAE	<i>&amp; Goldblatt</i>	LC		Schedule 2
HYACINTHACEAE	<i>Ledebouria apertiflora</i> (Baker) Jessop	LC	1	Schedule 2
HYPERICACEAE	<i>Hypericum lalandii</i> Choisy	LC		
HYPOXIDACEAE	<i>Empodium elongatum</i> (Nel) B.L.Burt	LC		
HYPOXIDACEAE	<i>Hypoxis rigidula</i> Baker var. <i>rigidula</i>	LC		
IRIDACEAE	<i>Gladiolus dalenii</i> Van Geel subsp. <i>dalenii</i>	LC		Schedule 2
IRIDACEAE	<i>Gladiolus ecklonii</i> Lehm.	LC		Schedule 2
	<i>Gladiolus permeabilis</i> D.Delaroche subsp.			
IRIDACEAE	<i>edulis</i> (Burch. ex Ker Gawl.) Oberm.	LC		Schedule 2
IRIDACEAE	<i>Hesperantha longituba</i> (Klatt) Baker	LC		Schedule 2
	<i>Lapeirousia plicata</i> (Jacq.) Diels subsp.			
IRIDACEAE	<i>plicata</i>	LC	1	Schedule 2
IRIDACEAE	<i>Moraea falcifolia</i> Klatt	LC		Schedule 2
IRIDACEAE	<i>Moraea pallida</i> (Baker) Goldblatt	LC	1	Schedule 2
IRIDACEAE	<i>Syringodea concolor</i> (Baker) M.P.de Vos	LC	1	Schedule 2
JUNCACEAE	<i>Juncus exsertus</i> Buchenau	LC		
JUNCACEAE	<i>Juncus oxycarpus</i> E.Mey. ex Kunth	LC		
LAMIACEAE	<i>Leonotis ocymifolia</i> (Burm.f.) Iwarsson	LC		
LAMIACEAE	<i>Ocimum americanum</i> L. var. <i>americanum</i>	LC		
LAMIACEAE	<i>Salvia disermas</i> L.	LC	1	
LAMIACEAE	<i>Salvia namaensis</i> Schinz	LC		
LAMIACEAE	<i>Salvia runcinata</i> L.f.	LC		
LAMIACEAE	<i>Salvia verbenaca</i> L.	LC	1	
LAMIACEAE	<i>Stachys linearis</i> Burch. ex Benth.	LC		
LOBELIACEAE	<i>Lobelia erinus</i> L.	LC		
	<i>Lobelia flaccida</i> (C.Presl) A.DC. subsp.			
LOBELIACEAE	<i>flaccida</i>	LC		
LOBELIACEAE	<i>Lobelia thermalis</i> Thunb.	LC		
LOBELIACEAE	<i>Monopsis scabra</i> (Thunb.) Urb.	LC		
LOPHIOCARPACEAE	<i>Corbichonia decumbens</i> (Forssk.) Exell	LC		
LOPHIOCARPACEAE	<i>Lophiocarpus polystachyus</i> Turcz.	LC		

MALVACEAE	<i>Abutilon pycnodon</i> Hochr.	LC		
MALVACEAE	<i>Grewia flava</i> DC.	LC		
MALVACEAE	<i>Hermannia bryoniifolia</i> Burch.	LC		
MALVACEAE	<i>Hermannia burkei</i> Burt & Davy	LC		
MALVACEAE	<i>Hermannia comosa</i> Burch. ex DC.	LC	1	
MALVACEAE	<i>Hermannia cuneifolia</i> Jacq. var. <i>cuneifolia</i>	LC	1	
	<i>Hermannia cuneifolia</i> Jacq. var.			
MALVACEAE	<i>glabrescens</i> (Harv.) I. Verd.	LC		
	<i>Hermannia erodioides</i> (Burch. ex DC.)			
MALVACEAE	Kuntze	LC	1	
MALVACEAE	<i>Hermannia jacobifolia</i> (Turcz.) R.A. Dyer	LC		
MALVACEAE	<i>Hermannia linearifolia</i> Harv.	LC		
MALVACEAE	<i>Hermannia modesta</i> (Ehrenb.) Mast.	LC		
MALVACEAE	<i>Hermannia pulchella</i> L.f.	LC	1	
MALVACEAE	<i>Hibiscus marlothianus</i> K. Schum.	LC		
MALVACEAE	<i>Hibiscus pusillus</i> Thunb.	LC		
MALVACEAE	<i>Melhania prostrata</i> DC.	LC		
MALVACEAE	<i>Melhania virescens</i> (K. Schum.) K. Schum.	LC		
MELIANTHACEAE	<i>Melianthus comosus</i> Vahl	LC		
	<i>Melianthus dregeanus</i> Sond. subsp.			
MELIANTHACEAE	<i>dregeanus</i>	LC		
	<i>Malephora smithii</i> (L. Bolus)			
MESEMBRYANTHEMACEAE	<i>H.E.K. Hartmann</i>	LC	1	Schedule 2
	<i>Mestoklema tuberosum</i> (L.) N.E. Br. ex			
MESEMBRYANTHEMACEAE	<i>Glen</i>	LC	1	Schedule 2
MESEMBRYANTHEMACEAE	<i>Neohenricia sibbettii</i> (L. Bolus) L. Bolus	LC		Schedule 2
MESEMBRYANTHEMACEAE	<i>Oscularia deltoides</i> (L.) Schwantes	LC		Schedule 2
	<i>Psilocaulon coriarium</i> (Burch. ex N.E. Br.)			
MESEMBRYANTHEMACEAE	<i>N.E. Br.</i>	LC	1	Schedule 2
	<i>Psilocaulon granulicaule</i> (Haw.)			
MESEMBRYANTHEMACEAE	<i>Schwantes</i>	LC	1	Schedule 2
	<i>Hypertelis salsoloides</i> (Burch.) Adamson			
MOLLUGINACEAE	var. <i>salsoloides</i>	LC		
	<i>Limeum sulcatum</i> (Klotzsch) Hutch. var.			
MOLLUGINACEAE	<i>sulcatum</i>	LC		
	<i>Mollugo cerviana</i> (L.) Ser. ex DC. var.			
MOLLUGINACEAE	<i>cerviana</i>	LC		
	<i>Ophioglossum polyphyllum</i> A. Braun var.			
OPHIOGLOSSACEAE	<i>polyphyllum</i>	LC		
ORCHIDACEAE	<i>Disa pulchra</i> Sond.	LC		Schedule 2
ORCHIDACEAE	<i>Eulophia foliosa</i> (Lindl.) Bolus	LC		Schedule 2
ORCHIDACEAE	<i>Satyrium longicauda</i> Lindl. var. <i>longicauda</i>	LC		Schedule 2
OXALIDACEAE	<i>Oxalis depressa</i> Eckl. & Zeyh.	LC	1	Schedule 2
PAPAVERACEAE	<i>Papaver aculeatum</i> Thunb.	LC		
PEDALIACEAE	<i>Pterodiscus luridus</i> Hook. f.	LC		
PEDALIACEAE	<i>Sesamum capense</i> Burm. f.	LC	1	

PHYLLANTHACEAE	<i>Phyllanthus maderaspatensis</i> L.	LC	
PHYLLANTHACEAE	<i>Phyllanthus parvulus</i> Sond. var. <i>garipensis</i> (E.Mey. ex Drège) Radcl.-Sm.	LC	
PHYLLANTHACEAE	<i>Phyllanthus parvulus</i> Sond. var. <i>parvulus</i>	LC	
PITOSPORACEAE	<i>Pittosporum viridiflorum</i> Sims	LC	
POACEAE	<i>Agrostis lachnantha</i> Nees var. <i>lachnantha</i> <i>Alloteropsis semialata</i> (R.Br.) Hitchc.	LC	
POACEAE	subsp. <i>eckloniana</i> (Nees) Gibbs Russ.	LC	
POACEAE	<i>Aristida adscensionis</i> L.	LC	1
POACEAE	<i>Aristida congesta</i> Roem. & Schult. subsp. <i>barbicollis</i> (Trin. & Rupr.) De Winter	LC	
POACEAE	<i>Aristida congesta</i> Roem. & Schult. subsp. <i>congesta</i>	LC	1
POACEAE	<i>Aristida diffusa</i> Trin. subsp. <i>burkei</i> (Stapf) <i>Melderis</i>	LC	1
POACEAE	<i>Aristida vestita</i> Thunb.	LC	
POACEAE	<i>Brachiaria eruciformis</i> (Sm.) Griseb.	LC	
POACEAE	<i>Brachiaria marlothii</i> (Hack.) Stent	LC	
POACEAE	<i>Cenchrus ciliaris</i> L.	LC	1
POACEAE	<i>Chloris virgata</i> Sw.	LC	1
POACEAE	<i>Cynodon dactylon</i> (L.) Pers.	LC	1
POACEAE	<i>Cynodon incompletus</i> Nees	LC	
POACEAE	<i>Digitaria eriantha</i> Steud.	LC	1
POACEAE	<i>Elionurus muticus</i> (Spreng.) Kunth <i>Enneapogon cenchroides</i> (Licht. ex Roem. & Schult.) C.E.Hubb.	LC	1
POACEAE	<i>Enneapogon desvauxii</i> P.Beauv.	LC	1
POACEAE	<i>Enneapogon scaber</i> Lehm.	LC	1
POACEAE	<i>Enneapogon scoparius</i> Stapf	LC	
POACEAE	<i>Eragrostis bicolor</i> Nees	LC	1
POACEAE	<i>Eragrostis chloromelas</i> Steud. <i>Eragrostis cilianensis</i> (All.) Vignolo ex <i>Janch.</i>	LC	
POACEAE	<i>Eragrostis curvula</i> (Schrad.) Nees	LC	
POACEAE	<i>Eragrostis homomalla</i> Nees <i>Eragrostis lehmanniana</i> Nees var. <i>lehmanniana</i>	LC	1
POACEAE	<i>Eragrostis nindensis</i> Ficalho & Hiern <i>Eragrostis obtusa</i> Munro ex Ficalho & <i>Hiern</i>	LC	1
POACEAE	<i>Eragrostis procumbens</i> Nees	LC	
POACEAE	<i>Eragrostis rotifer</i> Rendle	LC	
POACEAE	<i>Eragrostis superba</i> Peyr.	LC	
POACEAE	<i>Eragrostis truncata</i> Hack. <i>Eustachys paspaloides</i> (Vahl) Lanza & <i>Mattei</i>	LC	1

POACEAE	<i>Festuca costata</i> Nees	LC	
POACEAE	<i>Fingerhuthia africana</i> Lehm.	LC	1
	<i>Heteropogon contortus</i> (L.) Roem. & Schult.	LC	1
POACEAE	<i>Hordeum capense</i> Thunb.	LC	
POACEAE	<i>Hyparrhenia hirta</i> (L.) Stapf	LC	
POACEAE	<i>Leptochloa fusca</i> (L.) Kunth	LC	
POACEAE	<i>Melica decumbens</i> Thunb.	LC	
	<i>Melinis repens</i> (Willd.) Zizka subsp. <i>grandiflora</i> (Hochst.) Zizka	LC	
POACEAE	<i>Melinis repens</i> (Willd.) Zizka subsp. <i>repens</i>	LC	
POACEAE	<i>Oropetium capense</i> Stapf	LC	1
POACEAE	<i>Panicum coloratum</i> L. var. <i>coloratum</i>	LC	1
POACEAE	<i>Panicum impeditum</i> Launert	LC	
POACEAE	<i>Panicum stapfianum</i> Fourc.	LC	
	<i>Puccinellia acroxantha</i> C.A.Sm. & C.E.Hubb.	LC	
POACEAE	<i>Schismus barbatus</i> (Loefl. ex L.) Thell.	LC	
POACEAE	<i>Setaria lindenbergiana</i> (Nees) Stapf	LC	
POACEAE	<i>Setaria verticillata</i> (L.) P.Beauv.	LC	1
POACEAE	<i>Sporobolus albicans</i> (Nees ex Trin.) Nees	LC	
POACEAE	<i>Sporobolus coromandelianus</i> (Retz.) Kunth	LC	
POACEAE	<i>Sporobolus discosporus</i> Nees	LC	1
POACEAE	<i>Sporobolus fimbriatus</i> (Trin.) Nees	LC	1
POACEAE	<i>Sporobolus ioclados</i> (Trin.) Nees	LC	1
POACEAE	<i>Sporobolus oxyphyllus</i> L.Fish	LC	
POACEAE	<i>Sporobolus tenellus</i> (Spreng.) Kunth	LC	
	<i>Stipagrostis ciliata</i> (Desf.) De Winter var. <i>capensis</i> (Trin. & Rupr.) De Winter	LC	1
	<i>Stipagrostis namaquensis</i> (Nees) De Winter	LC	1
POACEAE	<i>Stipagrostis obtusa</i> (Delile) Nees	LC	1
	<i>Stipagrostis uniplumis</i> (Licht.) De Winter var. <i>uniplumis</i>	LC	
POACEAE	<i>Themeda triandra</i> Forssk.	LC	1
POACEAE	<i>Tragus berteronianus</i> Schult.	LC	1
POACEAE	<i>Tragus koelerioides</i> Asch.	LC	1
POACEAE	<i>Tragus racemosus</i> (L.) All.	LC	1
POLYGALACEAE	<i>Polygala ephedroides</i> Burch.	LC	1
POLYGALACEAE	<i>Polygala hispida</i> Burch. ex DC.	LC	
	<i>Polygala leptophylla</i> Burch. var. <i>leptophylla</i>	LC	1
POLYGONACEAE	<i>Rumex lanceolatus</i> Thunb.	LC	
PORTULACACEAE	<i>Talinum caffrum</i> (Thunb.) Eckl. & Zeyh.	LC	1
RANUNCULACEAE	<i>Anemone tenuifolia</i> (L.f.) DC.	LC	

RANUNCULACEAE	<i>Clematis brachiata</i> Thunb.	LC	1
RESEDACEAE	<i>Oligomeris dipetala</i> (Aiton) Turcz. var. <i>dipetala</i>	LC	
RHAMNACEAE	<i>Rhamnus prinoides</i> L'Hér.	LC	
RHAMNACEAE	<i>Ziziphus mucronata</i> Willd. subsp. <i>mucronata</i>	LC	
RUBIACEAE	<i>Kohautia caespitosa</i> Schnizl. subsp. <i>brachyloba</i> (Sond.) D.Mantell	LC	
RUBIACEAE	<i>Kohautia cynanchica</i> DC.	LC	1
RUTACEAE	<i>Diosma hirsuta</i> L.	LC	
SANTALACEAE	<i>Osyris lanceolata</i> Hochst. & Steud.	LC	1
SANTALACEAE	<i>Thesium congestum</i> R.A.Dyer	LC	
SANTALACEAE	<i>Thesium hystrix</i> A.W.Hill	LC	1
SAPINDACEAE	<i>Allophylus decipiens</i> (Sond.) Radlk.	LC	
SCROPHULARIACEAE	<i>Aptosimum marlothii</i> (Engl.) Hiern	LC	1
SCROPHULARIACEAE	<i>Aptosimum procumbens</i> (Lehm.) Steud.	LC	1
SCROPHULARIACEAE	<i>Aptosimum spinescens</i> (Thunb.) Emil Weber	LC	1
SCROPHULARIACEAE	<i>Chaenostoma halimifolium</i> Benth.	LC	1
SCROPHULARIACEAE	<i>Diclis petiolaris</i> Benth.	LC	
SCROPHULARIACEAE	<i>Jamesbrittenia albiflora</i> (I.Verd.) Hilliard	LC	Schedule 2
SCROPHULARIACEAE	<i>Jamesbrittenia atropurpurea</i> (Benth.) Hilliard subsp. <i>atropurpurea</i>	LC	Schedule 2
SCROPHULARIACEAE	<i>Jamesbrittenia aurantiaca</i> (Burch.) Hilliard	LC	Schedule 2
SCROPHULARIACEAE	<i>Jamesbrittenia filicaulis</i> (Benth.) Hilliard	LC	Schedule 2
SCROPHULARIACEAE	<i>Limosella africana</i> Glück var. <i>africana</i>	LC	1
SCROPHULARIACEAE	<i>Nemesia floribunda</i> Lehm.	LC	Schedule 2
SCROPHULARIACEAE	<i>Nemesia fruticans</i> (Thunb.) Benth.	LC	Schedule 2
SCROPHULARIACEAE	<i>Nemesia hanoverica</i> Hiern	LC	Schedule 2
SCROPHULARIACEAE	<i>Nemesia petiolina</i> Hiern	LC	Schedule 2
SCROPHULARIACEAE	<i>Peliostomum leucorrhizum</i> E.Mey. ex Benth.	LC	1
SCROPHULARIACEAE	<i>Selago acocksii</i> Hilliard	LC	
SCROPHULARIACEAE	<i>Selago albida</i> Choisy	LC	1
SCROPHULARIACEAE	<i>Selago geniculata</i> L.f.	LC	1
SCROPHULARIACEAE	<i>Selago saxatilis</i> E.Mey.	LC	
SCROPHULARIACEAE	<i>Veronica anagallis-aquatica</i> L.	LC	
SCROPHULARIACEAE	<i>Zaluzianskya karrooica</i> Hilliard	LC	
SINOPTERIDACEAE	<i>Cheilanthes eckloniana</i> (Kunze) Mett.	LC	
SINOPTERIDACEAE	<i>Pellaea calomelanos</i> (Sw.) Link var. <i>calomelanos</i>	LC	1
SOLANACEAE	<i>Lycium cinereum</i> Thunb.	LC	1
SOLANACEAE	<i>Lycium horridum</i> Thunb.	LC	1
SOLANACEAE	<i>Lycium pilifolium</i> C.H.Wright	LC	1
SOLANACEAE	<i>Solanum burchellii</i> Dunal	LC	1

SOLANACEAE	<i>Solanum capense</i> L.	LC	
SOLANACEAE	<i>Solanum lichtensteinii</i> Willd.	LC	
SOLANACEAE	<i>Solanum retroflexum</i> Dunal	LC	
SOLANACEAE	<i>Withania somnifera</i> (L.) Dunal	LC	
THYMELAEACEAE	<i>Gnidia microcephala</i> Meisn.	LC	1
THYMELAEACEAE	<i>Gnidia microphylla</i> Meisn.	LC	
THYMELAEACEAE	<i>Gnidia polycephala</i> (C.A.Mey.) Gilg	LC	1
URTICACEAE	<i>Forsskaolea candida</i> L.f.	LC	
VERBENACEAE	<i>Chascanum cuneifolium</i> (L.f.) E.Mey.	LC	
VERBENACEAE	<i>Chascanum pinnatifidum</i> (L.f.) E.Mey. var. <i>pinnatifidum</i>	LC	1
VERBENACEAE	<i>Lantana rugosa</i> Thunb.	LC	
ZYGOPHYLLACEAE	<i>Tribulus terrestris</i> L.	LC	1
ZYGOPHYLLACEAE	<i>Zygophyllum simplex</i> L.	LC	1
ASPARAGACEAE	<i>Asparagus exuvialis</i> Burch. forma <i>exuvialis</i>	Not Evaluated	1
BORAGINACEAE	<i>Heliotropium curassavicum</i> L.	Not Evaluated	
POACEAE	<i>Eragrostis x pseud-obtusa</i> De Winter	Not Evaluated	
SOLANACEAE	<i>Solanum rigescens</i> Jacq.	Not Evaluated	
BRYACEAE	<i>Bryum argenteum</i> Hedw.	Not Evaluated	
BRYACEAE	<i>Bryum canariense</i> Brid.	Not Evaluated	
BRYACEAE	<i>Bryum pycnophyllum</i> (Dixon) Mohamed	Not Evaluated	
DICRANACEAE	<i>Campylopus robillardae</i> Besch.	Not Evaluated	
FUNARIACEAE	<i>Funaria spathulata</i> Schimp. ex Müll.Hal. <i>Goniomitrium africanum</i> (Müll.Hal.)	Not Evaluated	
FUNARIACEAE	<i>Broth.</i>	Not Evaluated	
GRIMMIACEAE	<i>Grimmia pulvinata</i> (Hedw.) Sm.	Not Evaluated	
POACEAE	<i>Urochloa panicoides</i> P.Beauv.	Not Evaluated	
POTTIACEAE	<i>Didymodon tophaceopsis</i> R.H.Zander	Not Evaluated	
POTTIACEAE	<i>Didymodon tophaceus</i> (Brid.) Lisa <i>Didymodon umbrosus</i> (Müll.Hal.)	Not Evaluated	
POTTIACEAE	R.H.Zander	Not Evaluated	
POTTIACEAE	<i>Gymnostomum aeruginosum</i> Sm. <i>Hymenostylium recurvirostre</i> (Hedw.)	Not Evaluated	
POTTIACEAE	Dixon <i>Pseudocrossidium crinitum</i> (Schultz)	Not Evaluated	
POTTIACEAE	R.H.Zander	Not Evaluated	
POTTIACEAE	<i>Tortula atrovirens</i> (Sm.) Lindb.	Not Evaluated	
POTTIACEAE	<i>Trichostomum brachydontium</i> Bruch <i>Ptychomitrium cucullatifolium</i> (Müll.Hal.)	Not Evaluated	
PTYCHOMITRIACEAE	A.Jaeger	Not Evaluated	
RICCIACEAE	<i>Riccia albornata</i> O.H.Volk & Perold	Not Evaluated	
RICCIACEAE	<i>Riccia nigrella</i> DC.	Not Evaluated	