



# Proposed Hugo Wind Energy Facility near De Doorns, Western Cape Province

Terrestrial Biodiversity Scoping  
Report

PREPARED FOR  
FE Hugo & Khoe (Pty) Ltd

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# Proposed Hugo Wind Energy Facility near De Doorns, Western Cape Province

Terrestrial Biodiversity Scoping Report  
0695823



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Dr Juan Swanepoel  
Senior Associate Consultant (Ecologist)



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Stephen Burton  
Managing Consultant (Ecologist)



---

Dieter Rodewald  
Managing Partner

ERM Southern Africa (Pty) Ltd  
1<sup>st</sup> Floor  
Great Westerford  
240 Main Road, Rondebosch  
Cape Town, 7700  
T +27 21 681 5400

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## CONTENTS

1.	EXECUTIVE SUMMARY	1
2.	INTRODUCTION	2
2.1	BACKGROUND	2
2.2	PROJECT DESCRIPTION	2
2.3	TERMS OF REFERENCE	3
2.3.1	Applicable Standards	4
3.	METHODOLOGY	5
3.1	DESKTOP STUDY	5
3.2	SITE VERIFICATION	6
3.3	SITE ECOLOGICAL IMPORTANCE	6
3.4	IMPACT ASSESSMENT AND MITIGATION	8
4.	RESULTS	9
4.1	ASSUMPTIONS AND LIMITATIONS	11
4.2	LAND USE AND IMPORTANT BIODIVERSITY AREAS	12
4.3	ANIMAL SPECIES	14
4.4	PLANT SPECIES	16
4.5	SITE SENSITIVITY	18
5.	POTENTIAL IMPACTS AND OPPORTUNITIES	23
5.1	NO-GO ALTERNATIVE	23
5.2	CONSTRUCTION PHASE	24
5.3	OPERATIONAL PHASE	26
5.4	DECOMMISSION PHASE	27
5.5	CUMULATIVE IMPACTS	28
5.6	OPPORTUNITIES	28
6.	PLAN OF STUDY FOR THE ENVIRONMENTAL ASSESSMENT	28
7.	CONCLUSION	29

APPENDIX A COMPREHENSIVE SITE ECOLOGICAL IMPORTANCE METHODOLOGY

APPENDIX B COMPREHENSIVE IMPACT ASSESSMENT AND MITIGATION METHODOLOGY

APPENDIX C COMPREHENSIVE LIST OF ANIMAL SPECIES POTENTIALLY PRESENT ON SITE

APPENDIX D COMPREHENSIVE LIST OF PLANT SPECIES POTENTIALLY PRESENT ON SITE

## LIST OF TABLES

TABLE 1: APPLICABLE POLICIES AND LEGISLATIONS AT DIFFERENT GEOGRAPHIC SCALES.	4
TABLE 2: INTERPRETING SITE ECOLOGICAL IMPORTANCE OUTPUTS.	7
TABLE 3: ANIMAL SPECIES OF CONSERVATION CONCERN POTENTIALLY PRESENT IN THE HUGO WEF PAOI.	14
TABLE 4: PLANT SPECIES OF CONSERVATION CONCERN TRIGGERED BY THE DFFE ONLINE SCREENING TOOL.	16
TABLE 5: SITE ECOLOGICAL IMPORTANCE OF THE MATROOSBERG MOUNTAIN CATCHMENT AREA AND CRITICAL BIODIVERSITY AREAS.	18
TABLE 6: SITE ECOLOGICAL IMPORTANCE OF TERRESTRIAL-AQUATIC ECOTONES.	19
TABLE 7: SITE ECOLOGICAL IMPORTANCE OF MATJIESFONTEIN SHALE RENOSTERVELD.	19
TABLE 8: SITE ECOLOGICAL IMPORTANCE OF NORTH LANGEBERG SANDSTONE FYNBOS.	20
TABLE 9: SITE ECOLOGICAL IMPORTANCE OF SOUTH LANGEBERG SANDSTONE FYNBOS.	21
TABLE 10: SITE ECOLOGICAL IMPORTANCE OF MATJIESFONTEIN QUARTZITE FYNBOS.	21
TABLE 11: IMPACTS AND MITIGATION MEASURES ASSOCIATED WITH THE CONSTRUCTION PHASE OF THE PROPOSED HUGO WEF.	24
TABLE 12: IMPACTS AND MITIGATION MEASURES ASSOCIATED WITH THE OPERATIONAL PHASE OF THE PROPOSED HUGO WEF.	26
TABLE 13: CUMULATIVE IMPACTS ASSOCIATED WITH THE PROPOSED HUGO WEF.	28
TABLE 14: ASSESSMENT CRITERIA FOR CONSERVATION IMPORTANCE.	30
TABLE 15: ASSESSMENT CRITERIA FOR FUNCTIONAL INTEGRITY.	31
TABLE 16: DETERMINING BIODIVERSITY IMPORTANCE AS A FUNCTION OF CONSERVATION IMPORTANCE AND FUNCTIONAL INTEGRITY.	33
TABLE 17: ASSESSMENT CRITERIA FOR RECEPTOR RESILIENCE.	33
TABLE 18: DEFINING THE SIGNIFICANCE IN TERMS OF THE IMPACT CRITERIA.	36
TABLE 19: COLOUR-CODING OF POTENTIAL IMPACTS TO DESCRIBE SIGNIFICANCE.	38
TABLE 20: COMPREHENSIVE LIST OF ANIMAL SPECIES POTENTIALLY PRESENT WITHIN THE PROPOSED HUGO WEF PROJECT PAOI.	42
TABLE 21: COMPREHENSIVE LIST OF PLANT SPECIES POTENTIALLY PRESENT WITHIN THE PROPOSED HUGO WEF PROJECT PAOI.	56

## LIST OF FIGURES

FIGURE 1: LAYOUT AND LOCATION OF THE PROPOSED HUGO WIND ENERGY FACILITY NEAR DE DOORNS, WESTERN CAPE PROVINCE.	3
FIGURE 2: MITIGATION HIERARCHY.	8
FIGURE 3: DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT'S ONLINE SCREENING TOOL ASSESSMENT OF A) TERRESTRIAL BIODIVERSITY, B) ANIMAL SPECIES, AND C) PLANT SPECIES OF THE PROPOSED HUGO WIND ENERGY FACILITY.	10
FIGURE 4: IMPORTANT PLANT SPECIES AREAS WITHIN THE PROPOSED HUGO WIND ENERGY FACILITY STUDY AREA.	12
FIGURE 5: THE LATEST AVAILABLE SOUTH AFRICAN NATIONAL LAND COVER DATASET OF THE PROPOSED HUGO WIND ENERGY FACILITY.	14
FIGURE 6: SITE SENSITIVITY MAP FOR THE PROPOSED HUGO WIND ENERGY FACILITY IN THE PLANT SPECIES THEME.	22

## ACRONYMS AND ABBREVIATIONS

Acronyms	Description
BAP	Biodiversity Action Plan
BESS	Battery Energy Storage System
BI	Biodiversity Importance
BMP	Biodiversity Management Plan
CC	Closed Canopy
CI	Conservation Importance
CSIR	Council for Scientific and Industrial Research
D	Duration
DFFE	Department of Forestry, Fisheries and the Environment
E	Extent
EA	Environmental Authorization
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
ERM	Environmental Resources Management
ESIA	Environmental and Social Impact Assessment
FEPA	Freshwater Ecosystem Priority Areas
FFq 3	Matjiesfontein Quartzite Fynbos
FFS 15	North Langeberg Sandstone Fynbos
FI	Functional Integrity
FRs 6	Matjiesfontein Shale Renosterveld
IPP	Independent Power Producers

kV	Kilovolt
M	Magnitude
MW	Megawatt
NFEPA	National Freshwater Ecosystem Priority Areas
NPAES	National Protected Areas Expansion Strategy
O&M	Operations and Maintenance
OSS	On-Site Substation
P	Probability
PAOI	Project Area of Influence
QGIS	Quantum Geographic Information System
R	Reversibility
RR	Receptor Resilience
SANBI	South African National Biodiversity Institute
SANLC	South African National Land Cover
SCC	Species of Conservation Concern
SD	Secure Digital
SEI	Site Ecological Importance
SWSA	Strategic Water Source Areas
WEF	Wind Energy Facility
WTG	Wind Turbine Generator
WWF	World Wildlife Fund



## EXECUTIVE SUMMARY

Environmental Resources Management Southern Africa (Pty) (“ERM”) was contracted by Functional Entity (FE) Hugo & Khoe (Pty) Ltd (“The Client”) to compile a Terrestrial Biodiversity Specialist Scoping Report of the proposed Hugo Wind Energy Facility (WEF). This report will recommend whether the application should proceed into the Environmental Impact Assessment (EIA) Phase.

The proposed Hugo WEF will be located near De Doorns in the Western Cape Province and include up to 48 turbines and have a maximum output of 360 MW. The development will also include access and internal road, a Battery Energy Storage System (BESS), Operations and Maintenance (O&M) building, On-Site Substation (OSS) and temporary site office.

The site is predominantly classified as Very High Sensitivity by the Department of Forestry, Fisheries and the Environments (DFFE) Online Screening Tool (ST), while remaining areas are classified as Low Sensitivity. This is due to the intersection of the PAOI with various important biodiversity areas including PAs such as the Matroosberg Mountain Catchment Area, CBAs, ESAs, FEPAs and SWSAs.

Up to 586 animal species are potentially present on site, of which 40 are SCC. However some of the occurrence data is likely collected from individuals reintroduced to game reserves. Up to 1777 plant species are potentially present on site, of which 37 are confirmed SCC according to the DFFE Online ST. Given the high number of species potentially present it is likely the number of SCC is greater than that provided by the DFFE Online ST. The proposed development area includes four vegetation types that are listed as Least Concern (LC) by the Red List of Ecosystems (RLE), and intersects in some areas with Protected Areas (PA), Critical Biodiversity Areas (CBA), Ecological Support Areas (ESA) and Other Natural Areas (ONA).

The anticipated impacts include vegetation clearing, loss of individual SCC, alien invasive species, soil erosion, chemical contamination, fire, reduced and restricted movement, altered flow regimes, overgrazing, disturbance and/or displacement, and mortality. Cumulative impacts include those that affect broad-scale ecological processes and conservation objectives. With adherence to the prescribed mitigation measures opportunities exist to promote conservation efforts, community engagement and education, and local environmental monitoring and research.

It is the Specialists opinion that the DFFE Online ST Assessment of Very High Sensitivity in the Terrestrial Biodiversity Theme for some areas is accurate. In compliance with the Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Biodiversity, Government Gazette No. 43110, Government Notice No. 320, 20 March 2020, this requires a Terrestrial Biodiversity Specialist EIA Report to accompany the proposed Hugo WEF EIA Report which must be submitted as part of the application for authorization.

It is the Specialists opinion that the application process should proceed to the respective EIA phases for further assessment.

# 1. INTRODUCTION

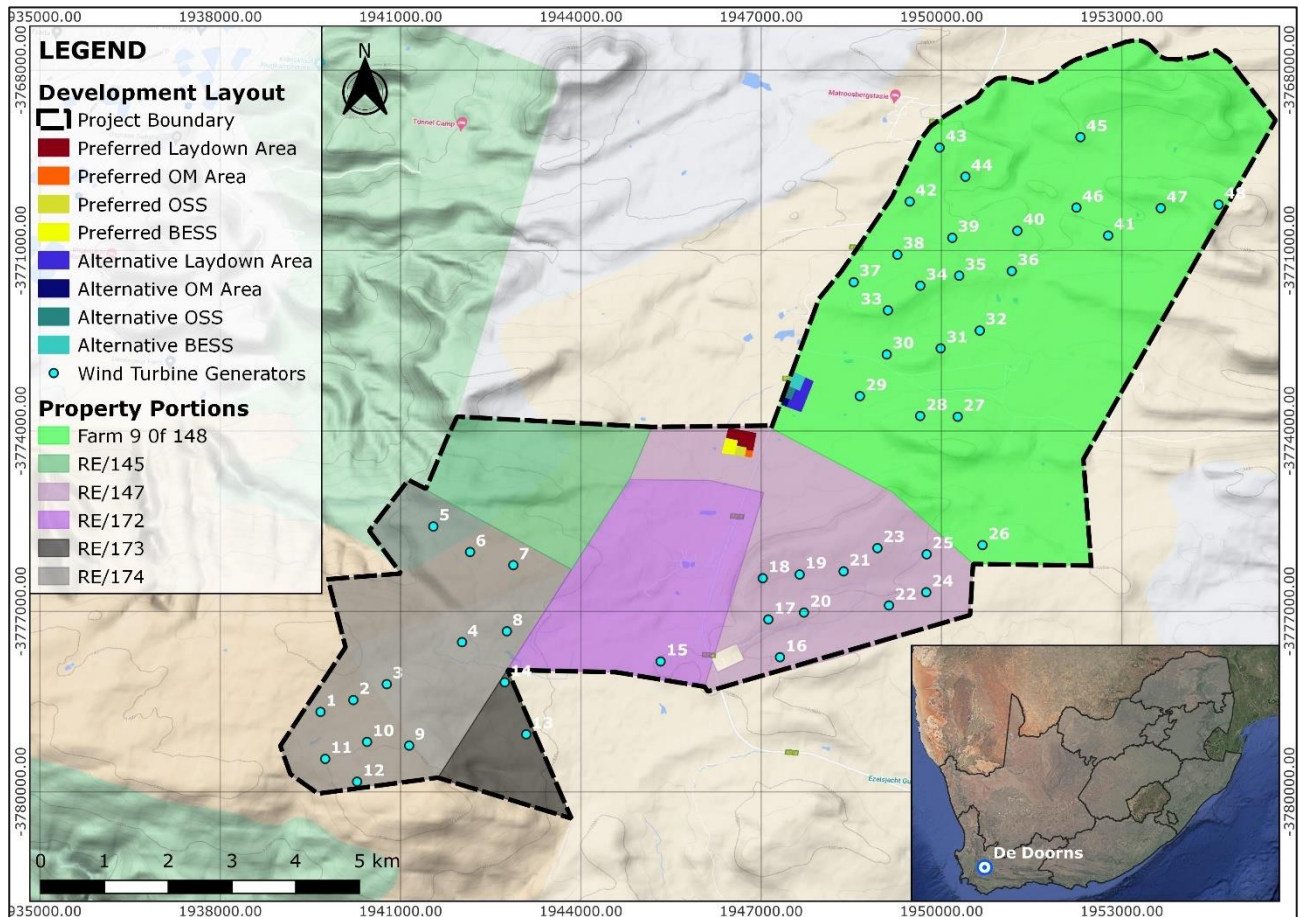
## 1.1 BACKGROUND

Environmental Resources Management Southern Africa (Pty) (“ERM”) was contracted by Functional Entity (FE) Hugo & Khoe (Pty) Ltd (“The Client”) to compile a Terrestrial Biodiversity Specialist Scoping Report of the proposed Hugo Wind Energy Facility (WEF) near De Doorns in the Western Cape Province of South Africa. The primary purpose of this report is to identify and describe the plant species and habitats that are likely present within the proposed Project Area of Influence (PAOI), the anticipated impacts for the proposed development, and the approach to conducting an appropriate Environmental Impact Assessment (EIA) Specialist Report.

## 1.2 PROJECT DESCRIPTION

The proposed Hugo WEF located approximately 10 km southeast of De Doorns on property portions Farm 9 of 148, RE/145, RE/147, RE/172, RE/173 and RE/174, will comprise up to 48 turbines (Figure 1) with a maximum output of up to 360 MW. This operation will also comprise access roads and internal roads, a Battery Energy Storage System (BESS), an Operations and Maintenance (O&M) building, an On-Site Substation (OSS), and a temporary site office. A 33 kV underground/overhead cabling along the proposed roads and 132 kV overhead transmission lines connecting the Independent Power Producers (IPP) substation will be installed to connect the WEF to the national electrical grid network. The grid connection will form part of a separate application process.

**FIGURE 1: LAYOUT AND LOCATION OF THE PROPOSED HUGO WIND ENERGY FACILITY NEAR DE DOORNS, WESTERN CAPE PROVINCE.**



### 1.3 TERMS OF REFERENCE

The specialist Terrestrial Biodiversity Scoping Report describes the proposed PAOI in terms of the terrestrial features that contribute to high levels of biodiversity in the area, as well as the plant and animal species present with specific focus on Species of Conservation Concern (SCC). In addition, this Scoping Report identifies the potential impacts and sensitivities, and how to proceed with the EIA Terrestrial Biodiversity Specialist Study for the eventual Environmental Authorization (EA) process.

This report follows the Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Biodiversity, Government Gazette No. 43110, Government Notice No. 320, 20 March 2020<sup>1</sup>, and the combined Department of Forestry, Fisheries and the Environment (DFFE), South African National Biodiversity Institute (SANBI) and BirdLife South Africa’s Species Environmental Assessment Guidelines for the implementation of the Terrestrial Fauna and Terrestrial Flora Species Protocols for environmental impact assessment in South Africa (2022)<sup>2</sup>. The main objectives of this report include:

- Identify ecological drivers or processes of the PAOI and how the proposed development will impact these.

<sup>1</sup>[https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Terrestrial Biodiversity Assessment Protocols.pdf](https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf)

<sup>2</sup> <http://opus.sanbi.org/jspui/handle/20.500.12143/6922>

- Identify the ecological functioning and ecological processes that operate within the PAOI.
- Identify flora and faunal ecological corridors within the PAOI that might be impeded by the proposed development.
- Identify significant landscape features (including rare or important flora-fauna associations, SWSAs, FEPA subcatchments etc.) in the PAOI.
- Describe the PAOI in terms of main vegetation types, threatened ecosystems ecological connectivity, habitat fragmentation, ecological processes, species distribution and movement.

### 1.3.1 APPLICABLE STANDARDS

This Terrestrial Biodiversity Scoping Report identifies policies and legislations at different geographic scales that must be considered during the EA process. These policies and legislation are described in Table 1 below.

**TABLE 1: APPLICABLE POLICIES AND LEGISLATIONS AT DIFFERENT GEOGRAPHIC SCALES.**

PROVINCIAL STANDARDS	
1. Cape Nature and Environmental Conservation Ordinance 19 of 1974.	Applicable in the former Cape Province, this Act forms the legal basis for nature conservation and environmental management. Key aspects addressed include Protected Areas, Species Protection, Environmental Management, and Public Participation.
2. Western Cape Biosphere Reserves Act 6 of 2011.	Focuses on the establishment, management and protection of biosphere reserves in the Western Cape Province. Key points include Biosphere Reserve Designation, Management and Conservation, Stakeholder Involvement, and Research and Education.
3. Western Cape Land Use Planning Act, 2015.	Provides a framework for land use management and spatial planning within the Western Cape Province. Main elements include Spatial Planning, Land Use Management, Public Participation and Development Principles.
4. Western Cape Biodiversity Act 6 of 2021.	The Act seeks to balance conservation efforts with sustainable use, involving various stakeholders to protect the unique biodiversity of the Western Cape Province. Key provisions include Biodiversity

Stewardship, Regulation and Enforcement, Sustainable Use, and Research and Education.

NATIONAL STANDARDS	
1. National Environmental Management: Protected Areas Act, 2003 (NEMA).	Provides a legal framework to safeguard South Africa’s biodiversity and natural heritage with specific focus on Protected Area Categories, Protected Area Management, Stakeholder Involvement, and Conservation Objectives.
2. National Environmental Management: Biodiversity Act, 2004 (NEMBA).	Provides a legal framework to promote conservation and sustainable use of South Africa’s diverse biological resources while considering social, economic, and environmental factors, fostering a balance between conservation efforts and development needs. Key aspects of the Act include Biodiversity Conservation, Protected Areas and Species, Invasive Species Management, Bioprospecting and Access to Genetic Resources, and Research and Information.
3. Conservation of Agricultural Resources Act, 1983 (CARA).	Provides a framework to ensure the conservation and sustainable utilization of agricultural resources, protecting the environment and promoting the long-term viability of agriculture in South Africa. Key points of the Act include Soil Conservation, Water Conservation, Control of Invasive Species, Land-Use Planning, and Research and Education.

## 2. METHODOLOGY

### 2.1 DESKTOP STUDY

The desktop study was initiated by obtaining the proposed development area’s expected sensitivity in the Terrestrial Biodiversity Theme using the DFFE Online Screening Tool (ST)<sup>3</sup>. The recorded land-use of the proposed PAOI was determined using the latest available South African National Land Cover (SANLC, 2020)<sup>4</sup> spatial datasets and Quantum Geographic Information

<sup>3</sup> <https://screening.environment.gov.za/screeningtool/#/pages/welcome>

<sup>4</sup> <https://egis.environment.gov.za/sa-national-land-cover-datasets>

System (QGIS). These data were compared with previously identified important biodiversity areas in proximity by consulting the following resources:

- The Red List of Ecosystems (RLE, 2022) spatial dataset<sup>5</sup> to determine the Red List Status and Category of ecosystem(s) within the proposed PAOI.
- The Breedevalley Key Biodiversity Areas (KBA) spatial dataset<sup>6</sup> was used to determine the presence of Critical Biodiversity Areas (CBA1/2), Ecological Support Areas (ESA1/2), Protected Areas (PA) and Other Natural Areas (ONA) within the proposed PAOI.
- The SANBI 2018 Beta Vegetation Map of South Africa, Lesotho and Swaziland Spatial Dataset<sup>7</sup> to determine the Vegetation Units present within the proposed PAOI.
- The 2011 National Freshwater Ecosystem Priority Areas (NFEPA) river<sup>8</sup> and wetland<sup>9</sup> datasets.
- The International Union for the Conservation of Nature's (IUCN) Red List<sup>10</sup> to confirm the international Red List Status and Category of plant species that have been recorded in the proposed PAOI.

In addition, the resources below were consulted to compile a list of plant and animal Species of Conservation Concern (SCC) that are potentially present within the proposed development area footprint:

- The SANBI Plants of Southern Africa (POSA) Brahms database<sup>11</sup> to identify plant species that have been recorded in the proposed PAOI.
- The Biodiversity and Development Institute's Virtual Museum database<sup>12</sup> to determine the presence of plant and animal species that have been recorded in the proposed PAOI.
- The Global Biodiversity Information Facility (GBIF) database<sup>13</sup> to determine the presence of plant and animal species that have been recorded in the proposed PAOI.
- The SANBI Red List of South African Species<sup>14</sup> to confirm the national Red List Status and Category of species that have been recorded in the proposed PAOI.
- The International Union for the Conservation of Nature's (IUCN) Red List<sup>15</sup> to confirm the international Red List Status and Category of plant species that have been recorded in the proposed PAOI.

## 2.2 SITE VERIFICATION

The specialist spent two days on site (28 - 29 June 2022) in conjunction with the terrestrial animal specialist retrieving camera trap data and replacing Secure Digital (SD) memory cards to verify the sensitivity of the proposed study area as described by the DFFE Online ST, and land use as described by the SANLC (2020).

<sup>5</sup> <http://bgis.sanbi.org/SpatialDataset/Detail/6715>

<sup>6</sup> <http://bgis.sanbi.org/SpatialDataset/Detail/641>

<sup>7</sup> <http://bgis.sanbi.org/SpatialDataset/Detail/670>

<sup>8</sup> <http://bgis.sanbi.org/SpatialDataset/Detail/397>

<sup>9</sup> <http://bgis.sanbi.org/SpatialDataset/Detail/395>

<sup>10</sup> <https://www.iucnredlist.org/>

<sup>11</sup> <https://posa.sanbi.org/sanbi/Explore>

<sup>12</sup> <https://vmus.adu.org.za/>

<sup>13</sup> <https://www.gbif.org/>

<sup>14</sup> <http://speciesstatus.sanbi.org/>

<sup>15</sup> <https://www.iucnredlist.org/>



## 2.3 SITE ECOLOGICAL IMPORTANCE

Habitat sensitivity is determined as a function of several factors including the presence and distribution of SCC, intactness of habitat, extent of impacts, and the capacity of the habitat to withstand and/or recover from disturbance. These factors are assessed on a scale from 'Low' to 'Very High' according to pre-determined conditions and incorporated into a formula to determine the Site Ecological Importance (SEI) for each habitat. Full methodology can be found in Appendix A. How the different SEI outcomes relate to any proposed development is described in Table 2 below.

**TABLE 2: INTERPRETING SITE ECOLOGICAL IMPORTANCE OUTPUTS.**

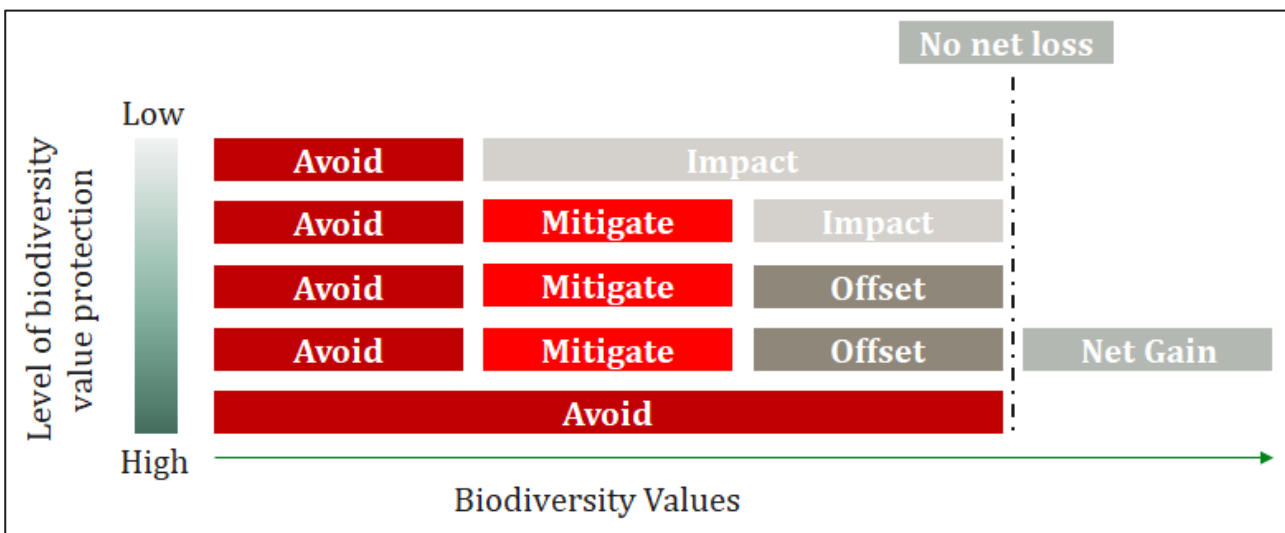
<b>Site Ecological Importance</b>	<b>Interpretation in relation to proposed development activities</b>
<b>Very High</b>	Avoidance mitigation - no destructive development activities should be considered. Offset mitigation not acceptable/not possible (i.e., last remaining populations of species, last remaining good condition patches of ecosystems/unique species assemblages). Destructive impacts for species/ecosystems where persistence targets remain.
<b>High</b>	Avoidance mitigation wherever possible. Minimization mitigation – changes to project infrastructure design to limit the amount of habitat impacted, limited development activities of low impact acceptable. Offset mitigation may be required for high impact activities.
<b>Medium</b>	Minimization and restoration mitigation – development activities of medium impact acceptable followed by appropriate restoration activities.
<b>Low</b>	Minimization and restoration mitigation – development activities of medium to high impact acceptable followed by appropriate restoration activities.
<b>Very Low</b>	Minimization mitigation – development activities of medium to high impact acceptable and restoration activities may not be required.

## 2.4 IMPACT ASSESSMENT AND MITIGATION

A 7 - step approach was employed for the determination of significance and potential impacts that is both objective and scientific based to allow appointed specialists to retain independence throughout the assessment process. The 7 - step approach for determining the significance of impacts pre and post mitigation includes:

- **Step 1:** Predict potential impacts.
- **Step 2:** Determine whether potential impacts will be direct, indirect, residual and/or cumulative.
- **Step 3:** Description and determination of the significance of the predicted impacts to ensure a consistent and systematic basis for the decision-making process.
- **Step 4:** Determination of practical and reasonable mitigation measures based on specialists' inputs and field observations following the mitigation hierarchy.
- **Step 5:** Evaluation of predicted residual impacts after implementation of mitigation measures.
- **Step 6:** Determination of the significance of the impact taking into consideration the predicted residual impacts after implementation of mitigation measures.
- **Step 7:** Based on an acceptable significance of the impact, determination of the need and desirability of the proposed development and an opinion as to whether the development should proceed or not.
- Full methodology is presented in Appendix B.
- The mitigation hierarchy (Figure 2) aims to achieve the best possible outcome to minimize effects on biodiversity and needs to be applied sequentially in the order below:

FIGURE 2: MITIGATION HIERARCHY.



- **Avoidance or minimization:** Emphasizing the avoidance of adverse impacts on environmental receptors. It involves strategic planning and actions to circumvent or steer



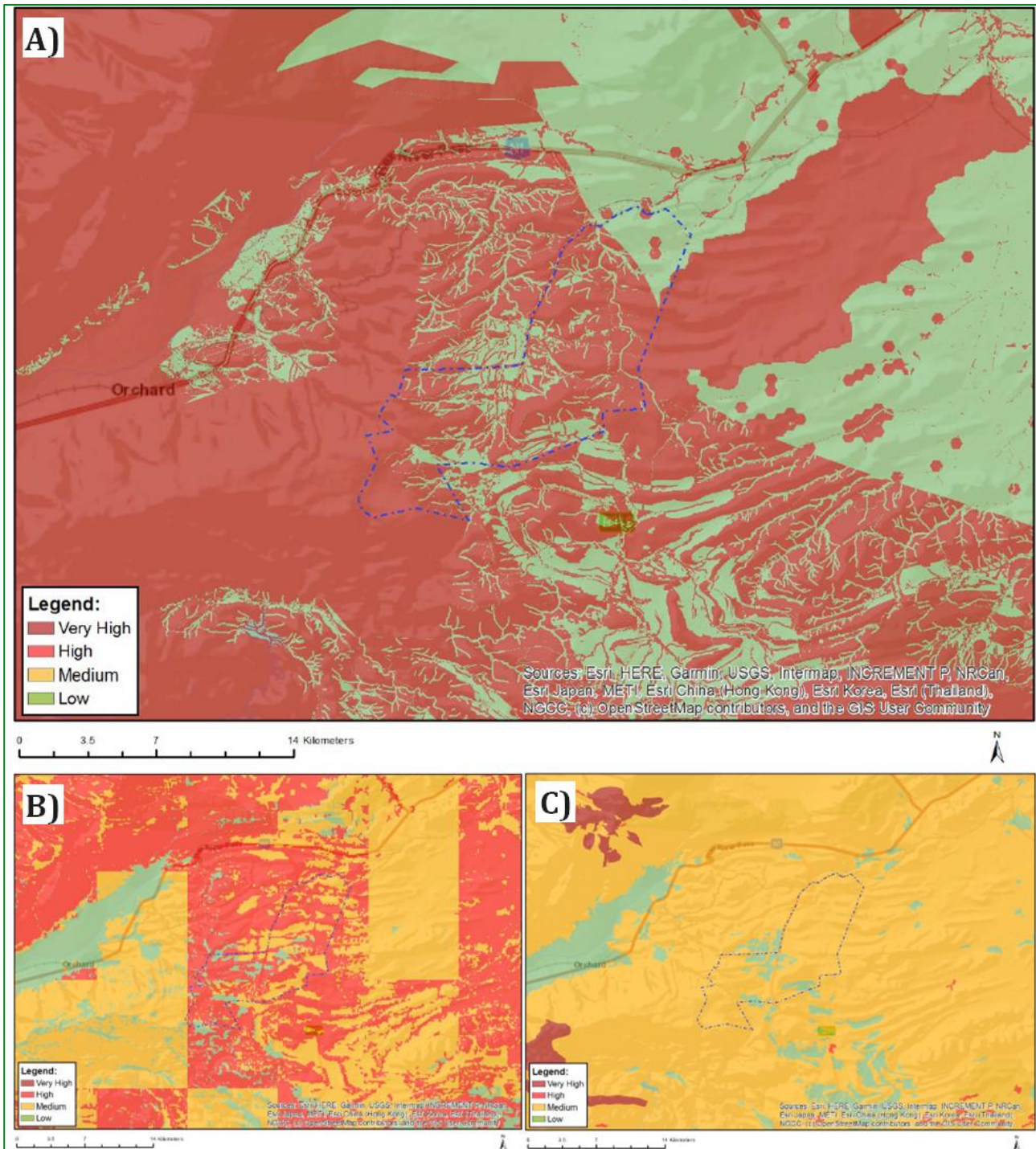
clear of activities that could potentially harm ecosystems or natural resources, thereby reducing or eliminating negative environmental consequences before they occur.

- **Mitigation:** Measures taken to reduce, alleviate, or compensate for the negative impacts on an environmental receptor that cannot be entirely avoided. It involves implementing strategies and actions to minimize or offset the adverse effects of human activities on ecosystems or natural resources, aiming to restore or enhance environmental conditions.
- **Rehabilitation/restoration:** Restoring ecosystems or habitats to their original or a more natural state after they have been affected by human activities. It involves implementing measures to revive or regenerate degraded areas, returning them to a condition that supports biodiversity, ecosystem functions, and overall environmental health.
- **Compensation/offsets:** Actions taken to counterbalance or compensate for unavoidable adverse impacts on an environmental receptor. This component involves measures such as restoring or enhancing other areas to make up for the ecological damage caused in a different location or through various activities. The aim is to achieve a balance by providing environmental benefits equivalent to those lost due to human actions, thereby mitigating overall environmental harm.
- A comprehensive description and discussion of the different components of the Mitigation Hierarchy are provided in Appendix B.

### 3. RESULTS

The DFFE Online ST identified the study area as having a predominantly Very High Sensitivity in the Terrestrial Biodiversity theme, with some areas of Low Sensitivity (Figure 3.A).

FIGURE 3: DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT'S ONLINE SCREENING TOOL ASSESSMENT OF A) TERRESTRIAL BIODIVERSITY, B) ANIMAL SPECIES, AND C) PLANT SPECIES OF THE PROPOSED HUGO WIND ENERGY FACILITY.



The classification of High Sensitivity in the Terrestrial Biodiversity Theme is due to the intersection of the study area with the Matrosberg Mountain Catchment Area, Critical Biodiversity Areas (CBA), Ecological Support Areas (ESA), Freshwater Ecosystem Priority Area (FEPA) Subcatchment, and the Groot Winterhoek Strategic Water Source Area (SWSA).

The FEPA project provides strategic spatial priorities for conserving South Africa’s freshwater ecosystems and supports sustainable use of water resources. Freshwater Ecosystem Priority Areas (FEPA) were identified based on:

- Representation of ecosystem types and flagship free-flowing rivers.
- Maintenance of water supply areas in areas with high water yield.
- Identification of connected ecosystems.
- Representation of threatened and near-threatened fish species and associated migration corridors.
- Preferential identification of FEPAs that overlapped with:
  - Any free-flowing river.
  - Priority estuaries identified in the National Biodiversity Assessment 2011.
  - Existing protected areas and focus areas for protected area expansion identified in the NPAES.

Strategic Water Source Areas (SWSA) are defined as areas of land that either supply disproportionate quantity of mean annual surface water runoff in relation to their size and are thus nationally important, or have high groundwater recharge and where the groundwater forms a nationally important resource. The NFEPA, World Wildlife Fund (WWF) and Council for Scientific and Industrial Research (CSIR) have identified 21 SWSAs for surface water which cover 8% of South Africa and supply 50% of the mean annual runoff.

In addition, the DFFE Online ST outputs in the Animal (Figure 3.B) and Plant Species (Figure 3.C) Themes are predominantly High and Medium Sensitivity, respectively. These classifications are based on the potential presence of SCC within the proposed study area and are explored in more detail in the following sections.

### 3.1 ASSUMPTIONS AND LIMITATIONS

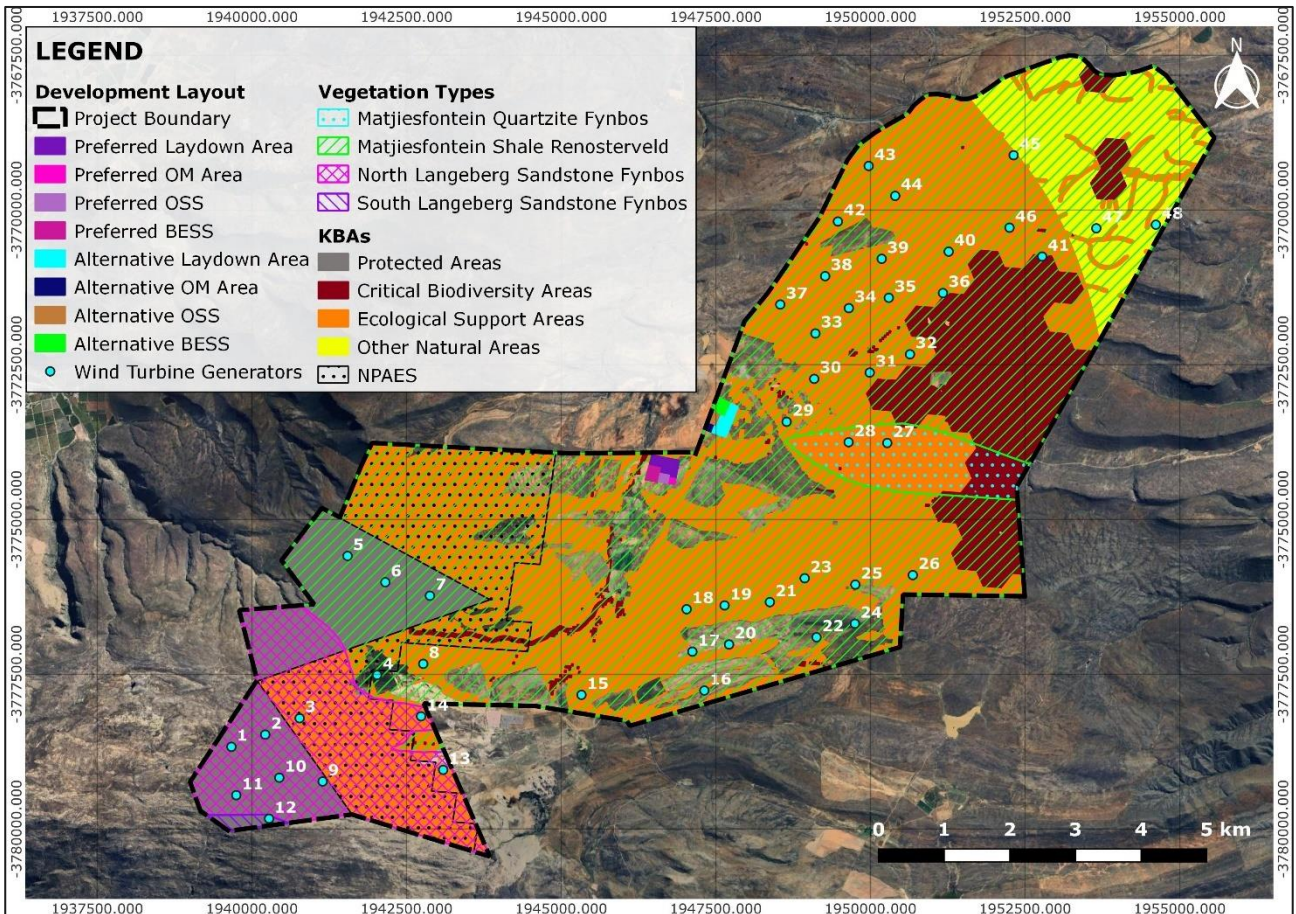
- The contents of this report relate to the proposed Hugo WEF and associated infrastructure as presented in Figure 1.
- SCC are classified as Critically Endangered (CR), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Data Deficient (DD) and Rare.
- The identity of several plant SCC are withheld from this and subsequent reports due to the sensitivity of these species to illegal harvesting. These species are known by numerical identifiers (Sensitive Species 142, 207, 521, 654, 692, 871 and 1209) assigned by the SANBI. The identity of these species has been made available to the Specialist for consideration during the compilation of reports relevant to the study area.
- Previous studies used to compile online species distribution datasets used to supplement the species list for the proposed Hugo WEF and associated infrastructure PAOI are extremely limited and cannot be seen as fully representative of the diversity of plant species potentially on site.
- Where online databases provided records of species that have several sub-species but provided no reference to which sub-species was recorded, it was assumed the sub-species was that with the greatest conservation importance.



### 3.2 LAND USE AND IMPORTANT BIODIVERSITY AREAS

The proposed Hugo WEF PAOI is dominated by Matjiesfontein Shale Renosterveld (FRs 6), followed by a section of North Langeberg Sandstone Fynbos (FFs 15) and a small section of South Langeberg Sandstone Fynbos (FFs 16) in the western sections, and Matjiesfontein Quartzite Fynbos (FFq 3) in the south-eastern section of the proposed PAOI (Figure 4). All three of the vegetation types identified are listed as Least Concern by the RLE (2022).

**FIGURE 4: IMPORTANT PLANT SPECIES AREAS WITHIN THE PROPOSED HUGO WIND ENERGY FACILITY STUDY AREA.**



The landscape of the Matjiesfontein Shale Renosterveld (FRs 6) is described as being elevated areas (low mountains, parallel hills and mid-altitude plateaus) of low, moderate density leptophyllous shrubland dominated by renosterbos (*Dicerothermanus rhinocerotis*). Heuweltjies, which are soil mounds associated with increased local biodiversity, have been recorded in low densities in some places<sup>16</sup>. The North (FFs 15) and South Langeberg Sandstone Fynbos (FFs 16) are similar in their constituent vegetation types of proteoid, restioid and ericaceous fynbos fynbos, differing only by occurrence altitude and (FFs 15) also including asteraceous fynbos on lower slopes. The Matjiesfontein Quartzite Fynbos (FFq 3) consists of narrow, linear bands of moderate density, medium tall shrublands of asteraceous and proteoid shrubland.

<sup>16</sup>Mucina, L. & Rutherford, M.C. (2006). The vegetation of South Africa, Lesotho and Swaziland. South African National Biodiversity Institute.

Western sections of the proposed PAOI fall within the Matroosberg Mountain Catchment Area, which is a PA and currently includes Wind Turbine Generators (WTG) 1, 2, 5, 6, 7, 9, 10, 11 and 12 (Figure 4). This area expands into the NPAES which are areas which through contractual agreement, land acquisition and declaration of state owned land, aim to increase the area of PA to improve ecosystem representation, ecological sustainability and resilience to climate change.

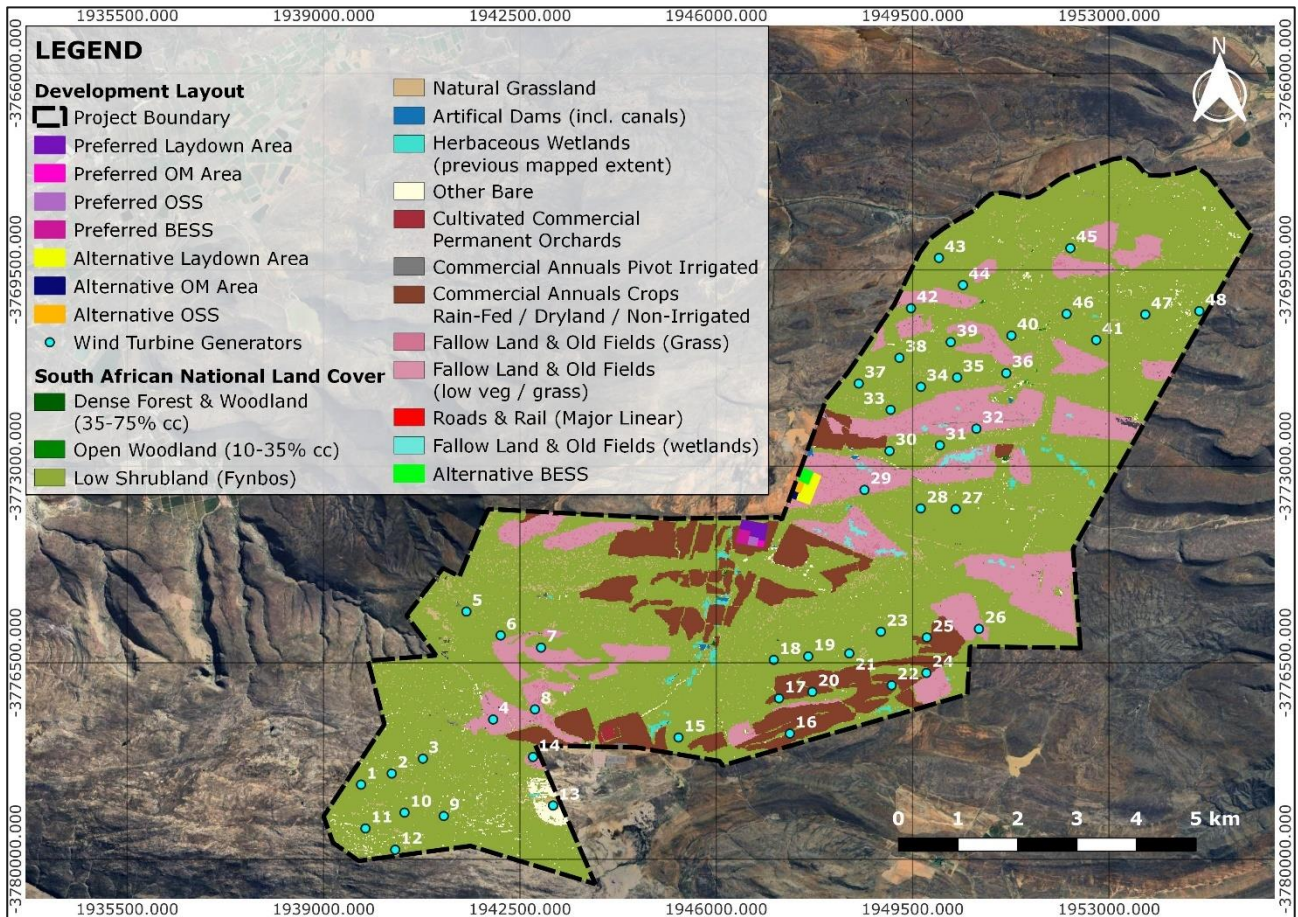
The majority of the site falls within an ESA which is classified as such due to the presence of predicted climate corridors, aquatic features that maintain broader ecological balance and processes that are essential in supporting biodiversity conservation. This area currently includes the majority of WTGs. The ESAs must be maintained in a functional, near-natural state. Some habitat loss is acceptable, provided the underlying biodiversity objectives and ecological functions are not compromised.

Eastern sections of the proposed PAOI fall within a CBA, classified as such due to the presence of various aquatic features that contribute to high levels of biodiversity in this specific area, and currently includes no WTGs. Critical Biodiversity Areas (CBAs) must be maintained in a natural, or near-natural state with no further loss of natural habitat. Degraded areas in the CBA should be rehabilitated, and only low-impact land uses are considered appropriate.

The north-eastern section of the proposed PAOI falls within ONAs which are not currently identified as priority but retain most of their natural character and perform a range of biodiversity and ecological infrastructure functions. This area currently includes WTGs 45, 47 and 48. According to the SANLC (2020) spatial dataset the proposed Hugo WEF PAOI (Figure 5) is dominated by low fynbos shrublands, followed by bare fallow lands, bare old fields, and commercial annual crops (rain-fed, dryland or non-irrigated).



FIGURE 5: THE LATEST AVAILABLE SOUTH AFRICAN NATIONAL LAND COVER DATASET OF THE PROPOSED HUGO WIND ENERGY FACILITY.



Additional land use types present include small areas of dense forest and woodland (35 - 75% closed canopy/CC – likely alien species), open woodland (10 - 35% CC), natural grassland, bare, artificial dams including canals, herbaceous wetlands (previous mapped extent), cultivated commercial permanent orchards, commercial annuals (pivot irrigated), major linear roads and rail and fallow lands and old fields (grasslands, low vegetation and wetlands).

### 3.3 ANIMAL SPECIES

A total of 586 animal species have been identified as potentially present on site and are presented in Appendix C. These include 259 invertebrate, 222 bird, 49 reptile, 46 mammals, and 10 amphibian species. Of these species 30 are regional SCC, and 29 are international SCC (Table 3).

TABLE 3: ANIMAL SPECIES OF CONSERVATION CONCERN POTENTIALLY PRESENT IN THE HUGO WEF PAOI.

Family	Scientific Name	Red List Status (Regional:International)	Group	Source
Accipitridae	<i>Aquila verreauxii</i>	VU:LC	Aves	GBIF, ST
Accipitridae	<i>Buteo trizonatus</i>	LC:NT	Aves	GBIF

Family	Scientific Name	Red List Status (Regional:International)	Group	Source
Accipitridae	<i>Circus maurus</i>	EN:EN	Aves	GBIF, ST, VM
Accipitridae	<i>Circus ranivorus</i>	EN:LC	Aves	GBIF
Accipitridae	<i>Polemaetus bellicosus</i>	EN:EN	Aves	GBIF
Anatidae	<i>Oxyura maccoa</i>	NT:EN	Aves	GBIF
Chaetopidae	<i>Chaetops frenatus</i>	NT:NT	Aves	GBIF, VM
Ciconiidae	<i>Ciconia nigra</i>	VU:LC	Aves	GBIF, VM
Diomedeidae	<i>Thalassarche melanophris</i>	EN:LC	Aves	GBIF
Fringillidae	<i>Crithagra leucoptera</i>	NT:NT	Aves	GBIF
Gruidae	<i>Anthropoides paradiseus</i>	NT:VU	Aves	GBIF
Helionithidae	<i>Podica senegalensis</i>	VU:LC	Aves	GBIF
Muscicapidae	<i>Monticola explorator</i>	LC:NT	Aves	GBIF
Otididae	<i>Eupodotis afra</i>	VU:LC	Aves	GBIF, ST, VM
Otididae	<i>Neotis ludwigii</i>	EN:EN	Aves	VM
Phoenicopteridae	<i>Phoenicopus minor</i>	NT:NT	Aves	VM
Picidae	<i>Geocolaptes olivaceus</i>	LC:NT	Aves	GBIF
Procellariidae	<i>Procellaria aequinoctialis</i>	VU:VU	Aves	GBIF
Sagittariidae	<i>Sagittarius serpentarius</i>	VU:EN	Aves	GBIF
Scolopacidae	<i>Calidris ferruginea</i>	LC:NT	Aves	GBIF
Scolopacidae	<i>Calidris minuta</i>	LC:NT	Aves	GBIF
Turnicidae	<i>Turnix hottentottus</i>	EN:LC	Aves	GBIF
Lycaenidae	<i>Aloeides caledoni</i>	Rare:LC	Invertebrates	ST
Lycaenidae	<i>Chrysoritis irene</i>	Rare:LC	Invertebrates	VM
Lycaenidae	<i>Chrysoritis rileyi</i>	EN:EN	Invertebrates	GBIF
Lycaenidae	<i>Lepidochrysops bacchus</i>	Rare:LC	Invertebrates	VM
Synlestidae	<i>Ecchlorolestes peringueyi</i>	NT:NT	Invertebrates	VM
Bovidae	<i>Damaliscus pygargus</i> subsp. <i>pygargus</i>	VU:NE	Mammalia	VM

Family	Scientific Name	Red List Status (Regional:International)	Group	Source
Bovidae	<i>Pelea capreolus</i>	NT:NT	Mammalia	GBIF, VM
Bovidae	<i>Redunca fulvorufula</i>	EN:EN	Mammalia	VM
Bovidae	<i>Syncerus caffer</i>	LC:NT	Mammalia	VM
Elephantidae	<i>Loxodonta africana</i>	LC:EN	Mammalia	VM
Equidae	<i>Equus quagga</i>	LC:NT	Mammalia	GBIF
Felidae	<i>Panthera leo</i>	LC:VU	Mammalia	VM
Felidae	<i>Panthera pardus</i>	VU:VU	Mammalia	GBIF, VM
Hippopotamidae	<i>Hippopotamus amphibius</i>	LC:VU	Mammalia	VM
Leporidae	<i>Bunolagus monticularis</i>	CR:CR	Mammalia	ST
Mustelidae	<i>Aonyx capensis</i>	NT:NT	Mammalia	VM
Testudinidae	<i>Psammobates tentorius</i> subsp.	NT:NT	Reptilia	VM
Testudinidae	<i>Psammobates tentorius</i> subsp. <i>tentorius</i>	NT:NT	Reptilia	VM

Some of the predicted animal SCC occurrence are likely associated with records of individuals of the species that were reintroduced to managed game reserves, and are thus not considered part of the fully functional local ecosystem.

### 3.4 PLANT SPECIES

A total of 1777 plant species potentially occur in and/or within close proximity of the proposed Hugo WEF and are presented in Appendix C. The DFFE Online ST identified seven EN, 15 VU, and 15 Rare plant species according to Regional Red Lists potentially present within the proposed study area (Table 4). The sources include the SANBI POSA Brahms (B) database, the Global Biodiversity Information Facility (GBIF) database, The DFFE Online ST and the Biodiversity and Development Institute’s Virtual Museum (VM) database.

**TABLE 4: PLANT SPECIES OF CONSERVATION CONCERN TRIGGERED BY THE DFFE ONLINE SCREENING TOOL.**

Family	Species	Red List Status (Regional:Global)	Source
Aizoaceae	<i>Drosanthemum giffenii</i>	VU:NE	GBIF, ST
Aizoaceae	<i>Drosanthemum tuberculiferum</i>	EN:NE	GBIF, ST
Aizoaceae	<i>Drosanthemum worcesterense</i>	EN:NE	ST



Family	Species	Red List Status (Regional:Global)	Source
Aizoaceae	<i>Esterhuysenia inclaudentis</i>	Rare:NE	ST
Aizoaceae	<i>Octopoma nanum</i>	VU:NE	ST
Aizoaceae	<i>Phiambolia littlewoodii</i>	VU:NE	ST
Asparagaceae	<i>Asparagus mollis</i>	VU:NE	ST
Asteraceae	<i>Anderbergia elsiae</i>	Rare:NE	ST
Asteraceae	<i>Athanasia hirsuta</i>	Rare:NE	B, GBIF, ST
Asteraceae	<i>Eriocephalus microphyllus</i> var. <i>carneus</i>	EN:NE	ST
Asteraceae	<i>Metalasia helmei</i>	Rare:NE	B, GBIF, ST
Brassicaceae	<i>Heliophila elata</i>	VU:NE	ST
Ericaceae	<i>Erica constantia</i>	Rare:NE	ST
Fabaceae	<i>Amphithalea dahlgrenii</i>	VU:NE	ST
Fabaceae	<i>Amphithalea pageae</i>	VU:VU	GBIF, ST
Fabaceae	<i>Amphithalea spinosa</i>	VU:NE	B, GBIF, ST
Fabaceae	<i>Aspalathus intricata</i> subsp. <i>oxyclada</i>	Rare:NE	ST
Fabaceae	<i>Aspalathus rostrata</i>	Rare:NE	B, GBIF, ST
Fabaceae	<i>Aspalathus shawii</i> subsp. <i>longispica</i>	Rare:NE	GBIF, ST
Fabaceae	<i>Lotononis argentea</i>	VU:NE	GBIF, ST
Fabaceae	<i>Lotononis gracilifolia</i>	EN:NE	GBIF, ST
Fabaceae	<i>Otholobium</i> sp. nov (Storton & Zanotvska 11281 NBG)	VU:NE	ST
Iridaceae	<i>Ixia fucata</i>	Rare:NE	GBIF, ST
Iridaceae	<i>Ixia oxalidiflora</i>	VU:NE	B, GBIF, ST
Orchidaceae	<i>Pachites bodkinii</i>	Rare:NE	ST
Proteaceae	<i>Leucadendron cordatum</i>	Rare:LC	B, GBIF, ST
Proteaceae	<i>Protea holosericea</i>	EN:CR	ST
Proteaceae	<i>Protea rupicola</i>	EN:EN	ST
Rhamnaceae	<i>Phylica comptonii</i>	Rare:NE	ST
Rutaceae	<i>Acmadenia matroosbergensis</i>	Rare:NE	B, GBIF, ST
Withheld	Sensitive Species 1209	Rare:NE	ST

Family	Species	Red List Status (Regional:Global)	Source
Withheld	Sensitive Species 142	VU:NE	ST
Withheld	Sensitive Species 207	Rare:NE	B, ST
Withheld	Sensitive Species 654	VU:NE	ST
Withheld	Sensitive Species 692	VU:NE	ST
Withheld	Sensitive Species 871	VU :NE	B, ST
Withheld	Sensitive Species 521	EN:NE	GBIF, ST

These include a single CR, one EN and one VU plant species according to International Red Lists potentially present within the proposed study area. Given the number of additional plant species associated with the PAOI the number of Regional and Global SCC will likely be much higher following detailed survey and review.

### 3.5 SITE SENSITIVITY

Preliminary SEI values for habitats 1) Matroosberg Mountain Catchment Area and Critical Biodiversity Areas (CBAs), 2) Terrestrial-Aquatic Ecotones, 3) Matjiesfontein Shale Renosterveld, 4) North Langeberg Sandstone Fynbos, 5) South Langeberg Sandstone Fynbos, and 6) Matjiesfontein Quartzite Fynbos are provided in Tables 5 - 10 below.

**TABLE 5: SITE ECOLOGICAL IMPORTANCE OF THE MATROOSBERG MOUNTAIN CATCHMENT AREA AND CRITICAL BIODIVERSITY AREAS.**

**Conservation Importance (CI): High**

Highly likely occurrence of CR, EN and/or VU species that have a global EOO >10 km<sup>2</sup> (Tables 3 and 4).

**Functional Integrity (FI): Very High**

Very large (>100 ha) of a designated PA.

**Biodiversity Importance (BI): Very High**

**Receptor Resilience (RR): Medium**

Slow anticipated recovery (± >10 years) to restore >75 % of the original species composition.

**Site Ecological Importance (SEI): Very High**

Implications for Wind Energy mitigation:

- 
1. Avoidance mitigation.
- 
2. No destructive development activities.
- 
3. Offset mitigation not acceptable.
- 

**TABLE 6: SITE ECOLOGICAL IMPORTANCE OF TERRESTRIAL-AQUATIC ECOTONES.**

**Conservation Importance (CI): High**

Highly likely occurrence of CR, EN and/or VU species that have a global EOO >10 km<sup>2</sup> (Tables 3 and 4).

**Functional Integrity (FI): High**

Ecosystem type of LC with relatively good habitat connectivity and minor negative ecological impacts.

**Biodiversity Importance (BI): High**

**Receptor Resilience (RR): Medium**

Slow anticipated recovery ( $\pm$  >10 years) to restore >75 % of the original species composition.

**Site Ecological Importance (SEI): High**

Implications for Wind Energy mitigation:

- 
1. Avoidance where possible.
- 
2. Minimisation mitigation where avoidance is not possible.
- 
3. Adapt layout design to minimize impacts.
- 
4. Offset mitigation may be required.
- 

**TABLE 7: SITE ECOLOGICAL IMPORTANCE OF MATJIESFONTEIN SHALE RENOSTERVELD.**

**Conservation Importance (CI): High**

Highly likely occurrence of CR, EN and/or VU species that have a global EOO >10 km<sup>2</sup> (Tables 3 and 4).

**Functional Integrity (FI): High**

Large (20 – 100 ha) intact natural area with good habitat connectivity with good rehabilitation potential.

---

**Biodiversity Importance (BI): High**

**Receptor Resilience (RR): High**

Habitat can recover relatively quickly (5 - 10 years) to restore >75 % of the original species due to good habitat connectivity.

**Site Ecological Importance (SEI): Medium**

Implications for Solar Energy mitigation:

1. Minimisation and restoration mitigation.
2. Development activities of medium impact acceptable followed by appropriate restoration activities.
3. Monitor regularly for erosion and mitigate immediately when identified.
4. Monitor regularly for alien invasive species and remove immediately when detected.

**TABLE 8: SITE ECOLOGICAL IMPORTANCE OF NORTH LANGEBERG SANDSTONE FYNBOS.**

**Conservation Importance (CI): High**

Highly likely occurrence of CR, EN and/or VU species that have a global EOO >10 km<sup>2</sup> (Tables 3 and 4).

**Functional Integrity (FI): High**

Large (20 – 100 ha) intact natural area with good habitat connectivity with good rehabilitation potential.

**Biodiversity Importance (BI): High**

**Receptor Resilience (RR): High**

Habitat can recover relatively quickly (5 - 10 years) to restore >75 % of the original species due to good habitat connectivity.

**Site Ecological Importance (SEI): Medium**

Implications for Solar Energy mitigation:

1. Minimisation and restoration mitigation.
2. Development activities of medium impact acceptable followed by appropriate restoration activities.
3. Monitor regularly for erosion and mitigate immediately when identified.

---

4. Monitor regularly for alien invasive species and remove immediately when detected.

---

**TABLE 9: SITE ECOLOGICAL IMPORTANCE OF SOUTH LANGEBERG SANDSTONE FYNBOS.**

**Conservation Importance (CI): High**

Highly likely occurrence of CR, EN and/or VU species that have a global EOO >10 km<sup>2</sup> (Tables 3 and 4).

**Functional Integrity (FI): Medium**

Medium (5 - 20 ha) area of good natural connectivity.

**Biodiversity Importance (BI): Medium**

**Receptor Resilience (RR): High**

Habitat can recover relatively quickly (5 - 10 years) to restore >75 % of the original species due to good habitat connectivity.

**Site Ecological Importance (SEI): Low**

Implications for Solar Energy mitigation:

- 
1. Minimisation and restoration mitigation.

---

  2. Development activities of medium to high impact acceptable followed by appropriate restoration activities.

---

  3. Monitor regularly for erosion and mitigate immediately when identified.

---

  4. Monitor regularly for alien invasive species and remove immediately when detected.

---

**TABLE 10: SITE ECOLOGICAL IMPORTANCE OF MATJIESFONTEIN QUARTZITE FYNBOS.**

**Conservation Importance (CI): High**

Highly likely occurrence of CR, EN and/or VU species that have a global EOO >10 km<sup>2</sup> (Tables 3 and 4).

**Functional Integrity (FI): High**

Large (20 – 100 ha) intact natural area with good habitat connectivity with good rehabilitation potential.

**Biodiversity Importance (BI): High**

**Receptor Resilience (RR): High**

Habitat can recover relatively quickly (5 - 10 years) to restore >75 % of the original species due to good habitat connectivity.

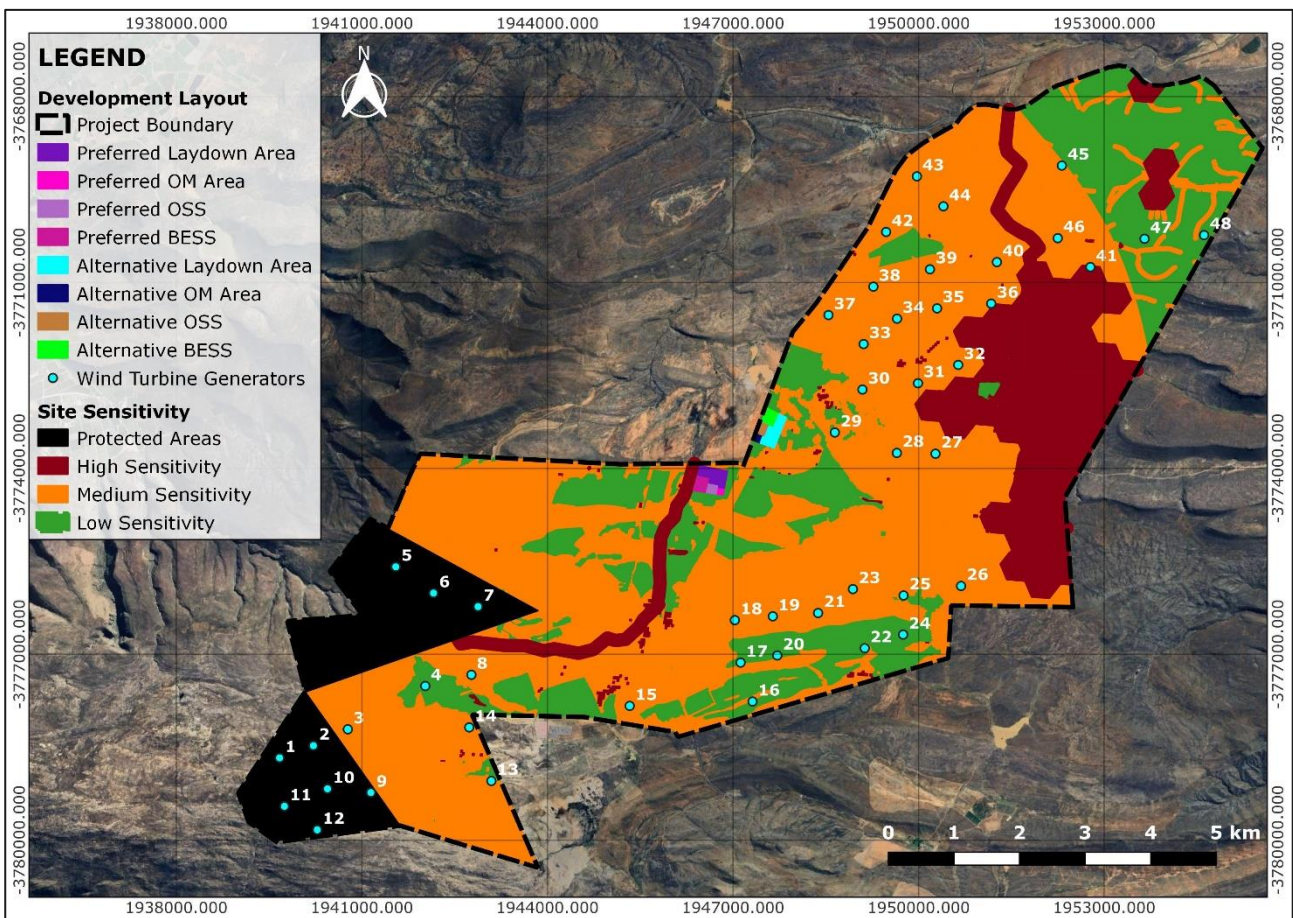
**Site Ecological Importance (SEI): Medium**

Implications for Solar Energy mitigation:

1. Minimisation and restoration mitigation.
2. Development activities of medium impact acceptable followed by appropriate restoration activities.
3. Monitor regularly for erosion and mitigate immediately when identified.
4. Monitor regularly for alien invasive species and remove immediately when detected.

Preliminary sensitivity is mapped using the SEIs above in conjunction with satellite imagery and specialist opinion. The preliminary sensitivity map (Figure 6) in the Terrestrial Biodiversity Theme will be significantly refined following a detailed survey on site and facilitate a more accurate calculation and delineation of the respective SEIs. The classification of the PA as 'No Go'

**FIGURE 6: SITE SENSITIVITY MAP FOR THE PROPOSED HUGO WIND ENERGY FACILITY IN THE PLANT SPECIES THEME.**





## 4. POTENTIAL IMPACTS AND OPPORTUNITIES

- **Impact 1:** Vegetation Clearing – Predominantly during the Construction Phase and possibly during the Decommission Phase certain areas will need to be cleared of vegetation to facilitate construction and/or deconstruction, and transport of personnel on site.
- **Impact 2:** Loss of individual SCC – Associated with the impact of vegetation clearing, but also due to potential greater ease of access during the Operational Phase might put SCC at greater risk of targeted illegal poaching and harvesting.
- **Impact 3:** Alien invasive species – Movement of personnel during all phases, and increased disturbance put the proposed study area at greater risk of alien invasive species moving into and spreading within the proposed study area.
- **Impact 4:** Soil erosion – Facilitated by clearing vegetation and increased road use during all phases which promote soil displacement and loss.
- **Impact 5:** Chemical contamination – Spillage of construction materials or chemicals can adversely impact plants and waterbodies on which they depend.
- **Impact 6:** Fire risk – Due to smoking and/or uses electrical equipment on site.
- **Impact 7:** Broad-scale ecological processes – Ecological corridors for the dispersal and movement of plant across the landscape could be compromised.
- **Impact 8:** Conservation objectives – Local, national and international conservation efforts and areas in the area could be impacted.
- **Impact 9:** Reduced connectivity and restricted movement – Construction activities and novel infrastructure (e.g., perimeter fencing) may exclude species from portions of suitable habitat by restricting animals' movement across the landscape.
- **Impact 10:** Altered flow regimes – Construction of infrastructure may alter water flow characteristics such as runoff, sedimentation and infiltration. These could change vegetation community composition, soil depth, and habitat suitability.
- **Impact 11:** Overgrazing – Construction areas becoming unavailable for grazing may alter grazing patterns, potentially concentrating livestock in areas of high suitability for various SCCs.
- **Impact 12:** Disturbance and/or displacement – Increased construction activity, movement of machinery and operation of equipment may disturb and/or displace certain animal SCCs from the vicinity of construction.
- **Impact 13:** Mortality – Direct mortality due to increased traffic and illegal collection/poaching/entrapment, and indirect mortality due to potential increased predator presence and decreased detection.

The impact tables for all the above impacts are provided in the sections below where they are most relevant. It should be noted however that these impacts are likely to occur in varying degrees during all phases.

### 4.1 NO-GO ALTERNATIVE

The No-Go Alternative assumes that the proposed development described in Section 1.2 of this Scoping Report does not proceed. In this case the proposed Hugo WEF PAOI will remain unchanged from its baseline condition and be subject to all extant impacts and those that may arise from changes in potential future land-use. Under the No-Go Alternative the potential

contribution of the proposed Hugo WEF to meet growing renewable power demands will be directed into an alternative energy development (renewable/non-renewable) with its own distinct impacts on the local environment. Development of a non-renewable alternative will potentially have far-reaching implications on climate change.

## 4.2 CONSTRUCTION PHASE

The impacts that will be most prevalent during the Construction Phase of the proposed Hugo WEF are Impact 1 (vegetation clearing), Impact 5 (chemical contamination), Impact 9 (reduced connectivity and restricted movement), Impact 10 (altered flow regimes), Impact 11 (overgrazing), Impact 12 (disturbance and/or displacement), and Impact 13 (mortality). Their significance with and without the recommended mitigation measures are assessed in Table 11 below.

**TABLE 11: IMPACTS AND MITIGATION MEASURES ASSOCIATED WITH THE CONSTRUCTION PHASE OF THE PROPOSED HUGO WEF.**

Impact	Mitigation
Vegetation clearing	<ul style="list-style-type: none"> <li>• The development footprint must avoid No-Go areas entirely, and High Sensitivity areas as much as possible.</li> <li>• Limit area of impact as much as possible.</li> <li>• A pre-construction walkthrough during the optimal flowering period (spring) of the finalized development layout must be conducted to ensure that No-Go and High Sensitivity areas are avoided where possible.</li> <li>• Ensure that lay-down and other temporary infrastructure are within Low Sensitivity areas;</li> <li>• Rehabilitate disturbed areas that are not required by the operational phase of the development;</li> <li>• All construction staff on site must attend an environmental induction to ensure that basic environmental principles are adhered to. This includes topics such as avoiding fire hazards, no littering, appropriate handling of pollution and chemical spills, minimizing wildlife interactions, remaining within demarcated construction areas, avoidance of No-Go areas and sensitive habitats etc.</li> <li>• Demarcate sensitive areas in close proximity to the development footprint as no-go areas with construction tape or similar and clearly marked as No-Go areas.</li> <li>• An environmental management programme (EMPr) must be implemented, and must provide a detailed description of how construction activities must be conducted to reduce unnecessary clearing and/or destruction of habitat.</li> </ul>
Chemical contamination	<ul style="list-style-type: none"> <li>• The development footprint must avoid No-Go entirely, and High Sensitivity areas as much as possible.</li> <li>• Limit area of impact as much as possible.</li> <li>• A pre-construction walkthrough of the finalized development layout must be conducted to ensure that No-Go and High Sensitivity areas are avoided where possible.</li> <li>• Ensure that lay-down and other temporary infrastructure are within Low Sensitivity areas;</li> <li>• Rehabilitate disturbed areas that are not required by the operational phase of the development;</li> <li>• All construction staff on site must attend an environmental induction to ensure that basic environmental principles are adhered to. This includes topics such as avoiding fire hazards,</li> </ul>



Impact	Mitigation
	<p>no littering, appropriate handling of pollution and chemical spills, minimizing wildlife interactions, remaining within demarcated construction areas, avoidance of No-Go areas and sensitive habitats etc.</p> <ul style="list-style-type: none"> <li>• Demarcate sensitive areas in close proximity to the development footprint as no-go areas with construction tape or similar and clearly marked as No-Go areas.</li> <li>• An environmental management programme (EMPr) must be implemented, and must provide a detailed description of how construction activities must be conducted to reduce unnecessary clearing and/or destruction of habitat.</li> </ul>
Reduced connectivity and restricted movement	<ul style="list-style-type: none"> <li>• Minimization of length and width of road network.</li> <li>• Fencing ad road designs to allow for passage of animals (e.g., short, wide culverts in roads and wildlife friendly fencing.</li> </ul>
Altered flow regimes	<ul style="list-style-type: none"> <li>• Adequate flow and erosion control measures</li> </ul>
Overgrazing	<ul style="list-style-type: none"> <li>• Temporary laydown areas, construction yards and site office buildings to be placed in low sensitivity or modified areas.</li> </ul>
Disturbance and/or displacement	<ul style="list-style-type: none"> <li>• Temporary laydown areas, construction yards and site office buildings to be placed in low sensitivity or modified areas.</li> <li>• Pre-construction baseline animal monitoring programme, with focus on areas identified for the construction footprint during the design phase (e.g., road network).</li> <li>• Avoidance of highly sensitive habitats for construction areas.</li> <li>• Clearly demarcated construction areas and no unauthorized personnel to be permitted beyond demarcated areas.</li> <li>• Adequate noise reduction measures (where possible) on heavy machinery.</li> <li>• Minimize construction activity that occurs between dusk and dawn.</li> <li>• Minimization of lighting used to illuminate construction areas and sight buildings.</li> </ul>
Mortality	<ul style="list-style-type: none"> <li>• No movement of construction vehicles between dusk and dawn.</li> <li>• Implementation and enforcement of speed limits.</li> <li>• Roadkill monitoring and recording programme.</li> <li>• Induction toolbox talk to construction personnel to increase awareness about animal SCCs present and roadkill risks.</li> <li>• No unauthorized movement of personnel.</li> <li>• No unauthorized access to the construction site.</li> <li>• No trenches to be left uncovered overnight.</li> <li>• Trenches, excavations and cattle grids to have slopes to allow for animals to escape should they fall in.</li> <li>• No hunting permitted.</li> <li>• No dogs or cats permitted (other than those of the landowner).</li> <li>• Waste management programme to prevent trash buildup attracting species such as crows.</li> <li>• Roadkill to be immediately reported, removed and suitably disposed of to prevent scavenging (e.g., buried).</li> <li>• Construction activity to be minimized during the night to reduce noise pollution during periods when Riverine Rabbit are most active.</li> </ul>

### 4.3 OPERATIONAL PHASE

The impacts that will be most prevalent during the Operational Phase of the proposed Hugo WEF are Impact 1 (vegetation clearing), Impact 2 (Loss of individual SCC), Impact 3 (alien invasive species), Impact 4 (soil erosion), Impact 6 (fire), Impact 9 (reduced connectivity and restricted movement), Impact 10 (altered flow regimes), Impact 11 (overgrazing), Impact 12 (disturbance and/or displacement), and Impact 13 (mortality). Their significance with and without the recommended mitigation measures are assessed in Table 12 below.

**TABLE 12: IMPACTS AND MITIGATION MEASURES ASSOCIATED WITH THE OPERATIONAL PHASE OF THE PROPOSED HUGO WEF.**

Impact	Mitigation
Loss of individual SCC	<ul style="list-style-type: none"> <li>• An environmental induction for all construction staff on site to identify SCC.</li> <li>• Demarcate sensitive areas, where SCC have been confirmed present in close proximity to the development footprint as No-Go areas with construction tape or similar and clearly marked as No-Go areas.</li> <li>• Identify sensitive areas, where SCC are likely present in close proximity to the development footprint as High Sensitivity areas and ensure the identification of expected SCC are included in the induction.</li> <li>• No open fires should be permitted outside of designated areas.</li> <li>• An environmental management programme (EMPr) must be implemented and must provide a detailed description of how construction activities must be conducted to avoid loss of species.</li> <li>• Compile a comprehensive species list of plants that may be cut, chopped, uprooted, broken, damaged or destroyed and obtain relevant permits for these restricted activities.</li> <li>• Site access should be controlled, and no unauthorised persons should be allowed onto the site to limit illegal harvesting.</li> <li>• The collection or harvesting of any plants at the site should be strictly forbidden.</li> </ul>
Alien invasive species	<ul style="list-style-type: none"> <li>• Disturbed areas such as road verges, lay-down areas and areas utilised by temporary construction facilities must be regularly monitored to detect the establishment of alien species and those species should be eradicated before they spread.</li> <li>• Regular alien clearing should be conducted, as needed, using the best-practice methods for the species concerned, the use of herbicides should be avoided as far as possible.</li> <li>• The use of herbicides (if absolutely required) for the control and eradication of alien grasses should be done in accordance with</li> </ul>

Impact	Mitigation
	<p>the alien eradication programme in the EMPr to reduce unintended ecological impacts.</p>
<p>Soil erosion</p>	<ul style="list-style-type: none"> <li>• Utilize existing servitudes and access roads wherever possible, any new roads or the upgrading of roads should be minimized as far as possible and not be larger than required.</li> <li>• All construction vehicles should adhere to clearly defined and demarcated roads, no off-road driving should be allowed.</li> <li>• Ensure that sufficient erosion control measures are constructed on all servitudes and access roads in the project area, including where such crosses waterbodies.</li> <li>• Rehabilitate existing servitude and access roads in the project area with sufficient erosion control measures to prevent the loss of soil and the degradation of vegetation.</li> <li>• Construction activities in or near drainage lines, washes or temporary inundated depressions must only take place during the dry season.</li> <li>• An environmental management programme (EMPr) must be implemented, and must provide a detailed description of how construction activities must be conducted to avoid increased erosion.</li> <li>• Erosion management at the site should take place according to the Erosion Management Plan and Rehabilitation Plan included in the EMPr.</li> <li>• All roads and other hardened surfaces should have runoff control features which redirect water flow and dissipate energy in the water stream which may pose an erosion risk.</li> <li>• Regular monitoring for erosion after construction to ensure that no erosion problems have developed as result of the disturbance.</li> </ul>
<p>Fire risk</p>	<ul style="list-style-type: none"> <li>• No open fires should be permitted outside of designated areas.</li> <li>• No smoking should be permitted outside of designated area.</li> </ul>

#### 4.4 DECOMMISSION PHASE

The impacts that will be most prevalent during the Decommission Phase of the proposed Hugo WEF are Impact 1 (vegetation clearing), Impact 2 (Loss of individual SCC), Impact 9 (reduced connectivity and restricted movement), Impact 10 (altered flow regimes), Impact 11 (overgrazing), Impact 12 (disturbance and/or displacement), and Impact 13 (mortality). Their significance with and without the recommended mitigation measures are assessed in Tables 11 and 12 in previous sections.

## 4.5 CUMULATIVE IMPACTS

The impacts that will be most prevalent during the Operational Phase of the proposed Hugo WEF are Impact 7 (broad-scale ecological processes) and Impact 8 (conservation objectives). Their significance with and without the recommended mitigation measures are assessed in Table 13 below.

**TABLE 13: CUMULATIVE IMPACTS ASSOCIATED WITH THE PROPOSED HUGO WEF.**

Impact	Mitigation
Broad-scale ecological processes	Adherence to mitigation measures presented in Table 11 and 12.
Conservation objectives	Adherence to mitigation measures presented in Table 11 and 12.

## 4.6 OPPORTUNITIES

Development of the proposed Hugo WEF in adherence with the prescribed mitigation measures presents several ecological opportunities. Avoiding No-Go and High Sensitivity areas the development will indirectly contribute to conservation efforts. Additionally, rehabilitating impacted Low Sensitivity areas following disturbance, and implementing pro-active alien invasive species management will potentially enhance biodiversity by improving local conditions and reducing undue competition for resources. Requiring on-site staff to attend an environmental induction the development indirectly contributes to local community engagement and education on environmental issues. By publishing environmental management progress reports (as should be prescribed in the anticipated EMPr) the development will contribute to local environmental monitoring and could potentially initiate research interests to better understand the impacts and mitigations for renewable energy developments in similar habitats.

## 5. PLAN OF STUDY FOR THE ENVIRONMENTAL ASSESSMENT

Following the reconnaissance site visit and desktop study it is the specialist’s opinion that the DFFE ST assessment of the proposed Hugo WEF PAOI as including areas of Very High Sensitivity with occasional areas of Low Sensitivity in the Terrestrial Biodiversity Theme is accurate.

To fulfil the requirements of the Protocols described in the Terms and References section of this report (Section 1.3), a terrestrial biodiversity survey must be conducted to account for the large number of potential plant and animal SCC, and a pre-construction walkthrough during optimal flower period (spring) to ensure avoidance of plant SCC.

During this survey the site will be characterized in terms of the ecological process and systems present, while recording all observed plant and animal species. For this, a belt transect method will be used to record all new plant species encountered across the site in each respective habitat, until no new species are recorded within a 30 to 60 minute period after recording the last depending on the progress made. Camera traps will be placed strategically to monitor animal SCC movements and areas of high activity. All incidental occurrences of animal species will be

recorded. This survey will facilitate a detailed delineation, characterization and condition assessment of the different habitats present on site and their respective species composition, and detection of SCC. This will allow for detailed mapping of No-Go and highly sensitive areas in addition to expanding on the significance of the anticipated impacts and mitigation measures presented in this Scoping Report.

In compliance with the Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Biodiversity, Government Gazette No. 43110, Government Notice No. 320, 20 March 2020, and the combined Department of Forestry, Fisheries and the Environment (DFFE), South African National Biodiversity Institute (SANBI) and BirdLife South Africa's Species Environmental Assessment Guidelines for the implementation of the Terrestrial Fauna and Terrestrial Flora Species Protocols for environmental impact assessment in South Africa (2022), a full Terrestrial Biodiversity Specialist EIA Report must be submitted in accordance with the requirements for a Very High or High Sensitivity in the Terrestrial Biodiversity Theme. The results from the terrestrial biodiversity specialist survey will be used to refine sensitivity maps and inform the level of mitigation of impacts in relation to the mitigation hierarchy to be included in the associated EMPr.

## 6. CONCLUSION

The sensitivities presented in this Scoping Report are not final and will be refined following the prescribed detailed site survey. The Sensitivities provided by the DFFE Online ST are a useful guideline, but the resolution requires detailed site sensitivity verification before informing project layout and impact assessment.

The pre-dominantly desktop data collected in this Scoping Report suggests that the negative impacts to the terrestrial biodiversity posed by the development of the proposed Hugo WEF could be low and/or avoided with adherence to the recommended mitigation measures.

It is the Specialist's opinion that the DFFE Online ST assessment of Very High Sensitivity in the Terrestrial Biodiversity Theme is correct, and a Specialist EIA Report must be submitted.

Initial mitigation recommendations are standard for wind energy developments, and provided these and considerations presented in the subsequent Terrestrial Biodiversity Specialist EIA Report are met, the development of the Hugo WEF will be compatible with conservation efforts in the area.

It should be noted that the conclusions presented here are preliminary, and a final recommendation will be made following the prescribed site survey.

It is the Specialist's opinion that the application process should proceed to the respective EIA phases for further assessment.

## APPENDIX A COMPREHENSIVE SITE ECOLOGICAL IMPORTANCE METHODOLOGY

Site Ecological Importance (SEI) is considered to be a function of the Biodiversity Importance (BI) of the receiving environment (e.g., species of conservation concern and the habitat type present on the site) and its resilience to impacts, or Receptor Resilience (RR). The BI of the receiving environment is in turn a function of the Conservation Importance (CI) and the Functional Integrity (FI) of the receiving environment. Conservation Importance is defined by the South African National Biodiversity Institute’s Species Environmental Assessment Guidelines as:

“The importance of a site for supporting biodiversity features of conservation concern present, e.g., populations of IUCN threatened and Near Threatened species (CR, EN, VU and NT), rare species, range restricted species, globally significant populations of congregatory species, and areas of threatened ecosystem types, through predominantly natural processes.”

The CI assessment criteria are explained in Table 14 below.

**TABLE 14: ASSESSMENT CRITERIA FOR CONSERVATION IMPORTANCE.**

Conservation Importance	Criteria
<b>Very High</b>	<ul style="list-style-type: none"> <li>■ Confirmed or highly likely occurrence of CR, EN, VU or Extremely Rare or Critically Rare species that have a global extent of occurrence (EOO) &lt; 10 km<sup>2</sup>;</li> <li>■ Any area of natural habitat of a CR ecosystem type or large (&gt;0.1% of the total ecosystem type extent) of natural habitat of EN ecosystem type; and</li> <li>■ Globally significant populations of congregatory species (&gt;10% of the global population).</li> </ul>
<b>High</b>	<ul style="list-style-type: none"> <li>■ Confirmed or highly likely occurrence of CR, EN, VU species that have a global EOO of &gt;10 km<sup>2</sup>. IUCN threatened species (CR, EN, VU) must be listed under any Criterion other than A. If listed as threatened only under Criterion A, include if there are less than 10 locations or &lt; 10 000 mature individuals remaining;</li> <li>■ Small area (&gt;0.01% but &lt;0.1%) of the total ecosystem type extent of natural habitat of EN ecosystem type, or large area (&gt;0.1%) of natural habitat of VU ecosystem type;</li> </ul>



<b>High</b>	<ul style="list-style-type: none"> <li>■ Presence of Rare species; and</li> <li>■ Globally significant populations of congregatory species (&gt;1% but &lt;10% of global population).</li> </ul>
<b>Medium</b>	<ul style="list-style-type: none"> <li>■ Confirmed or highly likely occurrence of populations of NT species, threatened species (CR, EN, VU) listed under Criterion A only and which have more than 10 locations or more than 10 000 mature individuals;</li> <li>■ Any area of natural habitat of threatened ecosystems type with status VU;</li> <li>■ Presence of range restricted species; and</li> <li>■ &gt;50% of receiving environment contains natural habitat with potential to support SCC.</li> </ul>
<b>Low</b>	<ul style="list-style-type: none"> <li>■ No confirmed or highly likely occurrence of SCC;</li> <li>■ No confirmed or highly likely occurrence of range-restricted species; and</li> <li>■ &lt;50% of the receiving environment contains natural habitat with potential to support SCC.</li> </ul>
<b>Very Low</b>	<ul style="list-style-type: none"> <li>■ No confirmed and highly unlikely occurrence of SCC;</li> <li>■ No confirmed and highly unlikely populations of range-restricted species; and</li> <li>■ No natural habitat remaining.</li> </ul>

Functional Integrity (FI) of the receiving environment/habitats is defined as its current ability to maintain the structure and functions that define it, compared to its known or predicted state under ideal conditions i.e. a measure of the ecological condition of the receiving environment as determined by its remaining intact and functional area, its connectivity to other natural areas and the degree of current persistent ecological impacts. The degree of connectivity between habitat patches varies greatly with the dispersal ability of the taxon or taxon group in question, similarly existing impacts will have differential effects on each species. The FI assessment criteria are described in Table 15 below.

**TABLE 15: ASSESSMENT CRITERIA FOR FUNCTIONAL INTEGRITY.**

Functional Integrity	Criteria
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<b>Very High</b>	<ul style="list-style-type: none"><li>■ Very large (&gt;100 ha) intact area for any conservation status of ecosystem, or &gt;5 ha CR ecosystem types;</li><li>■ High habitat connectivity serving as functional ecological corridors, limited road network between intact habitat patches; and</li><li>■ No or minimal current negative ecological impacts with no signs of major past disturbance (e.g., ploughing).</li></ul>
<b>High</b>	<ul style="list-style-type: none"><li>■ Large (&gt;20 ha but &lt;100 ha) intact area for any conservation status of ecosystem type, or &gt;10 ha for EN ecosystem type;</li><li>■ Good habitat connectivity with potentially functional ecological corridors and a regularly used road network between intact habitat patches; and</li><li>■ Only minor current negative ecological impacts (e.g., few livestock utilising area) with no signs of major past disturbance (e.g., ploughing) and good rehabilitation potential.</li></ul>
<b>Medium</b>	<ul style="list-style-type: none"><li>■ Medium (&gt;5 ha but &lt;20 ha) semi-intact area for any conservation status of ecosystem type or &gt;20 ha for VU ecosystem types;</li><li>■ Only narrow corridors of good habitat connectivity or larger areas of poor habitat connectivity and a busy road network between intact patches; and</li><li>■ Mostly minor current negative ecological impacts with some major impacts (e.g., established population of alien and invasive flora) and a few signs of minor past disturbance. Moderate rehabilitation potential.</li></ul>
<b>Low</b>	<ul style="list-style-type: none"><li>■ Small (&gt;1 ha but &lt;5 ha) area;</li><li>■ Almost no habitat connectivity but migrations still possible across some modified or degraded natural habitat and a very busy road network surrounds the area. Low rehabilitation potential; and</li><li>■ Several minor and major negative ecological impacts.</li></ul>
<b>Very Low</b>	<ul style="list-style-type: none"><li>■ Very small (&lt;1 ha) area;</li><li>■ No habitat connectivity except for flying species or flora with wind-dispersed seeds; and</li><li>■ Several major current negative ecological impacts.</li></ul>



As BI is a function of CI and FI, it can be determined as in Table 16 below.

**TABLE 16: DETERMINING BIODIVERSITY IMPORTANCE AS A FUNCTION OF CONSERVATION IMPORTANCE AND FUNCTIONAL INTEGRITY.**

Biodiversity Importance (BI)		Conservation Importance (CI)				
		Very High	High	Medium	Low	Very Low
Functional Integrity (FI)	Very High	Very High	Very High	High	Medium	Low
	High	Very High	High	Medium	Medium	Low
	Medium	High	Medium	Medium	Low	Very Low
	Low	Medium	Medium	Low	Low	Very Low
	Very Low	Medium	Low	Very Low	Very Low	Very Low

Receptor Resilience (RR) is the intrinsic capacity of the receiving environment to resist major damage from an impact and/or to recover to its original state with limited or no human intervention. Resilience can be linked to a particular disturbance/impact or time of year, e.g., large birds of prey have different levels of resilience to noise disturbance depending on whether they are breeding or not. The RR assessment criteria are described in Table 17 below.

**TABLE 17: ASSESSMENT CRITERIA FOR RECEPTOR RESILIENCE.**

Receptor Resilience	Criteria
<b>Very High</b>	Habitat that can recover rapidly ( $\pm$ less than 5 years) to restore >75 % of the original species composition and functionality of the receptor functionality, or species that have a very high likelihood of remaining at a site



	even when disturbance or impact is occurring, or species that have a very high likelihood of returning to a site once the disturbance or impact has been removed.
<b>High</b>	Habitat that can recover relatively quickly ( $\pm$ 5 - 10 years) to restore >75 % of the original species composition and functionality of the receptor functionality, or species that have a high likelihood of remaining at a site even when disturbance or impact is occurring, or species that have a high likelihood of returning to a site once the disturbance or impact has been removed.
<b>Medium</b>	Will recover slowly ( $\pm$ more than 10 years) to restore >75 % of the original species composition and functionality of the receptor functionality, or species that have a moderate likelihood of remaining at a site even when disturbance or impact is occurring, or species that have a moderate likelihood of returning to a site once the disturbance or impact has been removed.
<b>Low</b>	Habitat that is unlikely to be able to recover fully after a relatively long period: >15 years required to restore $\pm$ 50% of the original species composition and functionality of the receptor functionality, or species that have a low likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a low likelihood of returning to a site once the disturbance or impact has been removed.
<b>Very Low</b>	Habitat that is unable to recover from major impacts, or species that are unlikely to remain at a site even when disturbance or impact is occurring, or species that are unlikely to return to a site once the disturbance or impact has been removed.

Guidelines to interpret Site Ecological Importance (SEI) in the context of the proposed development guidelines are presented in Table 2, Section 2.3 of this Scoping Report.

## APPENDIX B      COMPREHENSIVE IMPACT ASSESSMENT AND MITIGATION METHODOLOGY

A 7 - step approach was employed for the determination of significance of potential impacts that is both objective and scientific based to allow appointed specialists to retain independence throughout the assessment process. The method, outlined below, follow international EIA Regulatory reporting standards including the amended European Environmental Impact Assessment (EIA)<sup>17</sup> Directive (2014/52/EU) and IFC PS 6.

The 7 - step approach for determining the significance of impacts pre and post mitigation includes:

- **Step 1:** Predict potential impacts by means of an appraisal of:
  - Site surveys;
  - Project-related components and infrastructure;
  - Activities related with the project life-cycle;
  - The nature and profile of the receiving environment and potential sensitive environmental features and attributes;
  - Input received during public participation from all stakeholders; and
  - The relevant legal framework applicable to the proposed development.
- **Step 2:** Determination of whether the potential impacts identified in **Step 1** will be *direct* (caused by construction, operation, decommissioning or maintenance activities on the proposed development site or immediate surroundings of the site), *indirect* (not immediately observable or do not occur on the proposed development site or immediate surroundings of the site, but ultimately induced by project activities), *residual* (those impacts which remain after implementing mitigation) and *cumulative* (the combined impact of the project when considered in conjunction with similar projects in the proximity).
- **Step 3:** Description and determination of the significance of the predicted impacts in terms of the criteria below to ensure a consistent and systematic basis for the decision-making process. Significance is numerically quantified on the basis score of the following impact parameters:
  - **Extent (E)** of the impact: The geographical extent of the impact on a given environmental receptor;
  - **Duration (D)** of the impact: The length of permanence of the impact on the environmental receptor;
  - **Reversibility (R)** of the impact: The ability of the environmental receptor to rehabilitate or restore after the activity has caused environmental change;
  - **Magnitude (M)** of the impact: The degree of alteration of the affected environmental receptor; and

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<sup>17</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0052&rid=1>

- **Probability (P)** of the impact: The likelihood of the impact actually occurring.

A widely accepted numerical quantification of significance is the formula:

$$S = (E + D + R + M) * P$$

Where: Significance = (Extent + Duration + Reversibility + Magnitude) \* Probability

The following has also been considered when determining the significance of a potential impact:

- **Nature (N)** of the impact: A description of what causes the effect, what will be affected, and how it will be affected;
- **Status (S)** of the impact: Described either as positive, negative or neutral;
- **Cumulative impacts**; and
- Inclusion of **Public Comment**.

The significance of environmental impacts is determined and ranked by the criteria presented in Table 18 below. All criteria are ranked according to *Very Low, Low, Moderate, High* and *Very High* and are assigned scores of 1 to 5 respectively.

**TABLE 18: DEFINING THE SIGNIFICANCE IN TERMS OF THE IMPACT CRITERIA.**

Impact Criteria	Definition	Score	Criteria Description
Extent (E)	Site	1	Impact is on the site only.
	Local	2	Impact is localized inside the activity area.
	Regional	3	Impact is localized outside of the activity area.
	National	4	Widespread impact beyond the site boundary. May be defined in various ways, e.g., cadastral, catchment, topographic.
	International	5	Impact widespread far beyond site boundary, Nationally or beyond.
Duration (D)	Immediate	1	On impact only.



	Short Term	2	Quickly reversible, less than project life. Usually up to 5 years.
	Medium Term	3	Reversible over time. Usually between 5 and 10 years.
	Long Term	4	Longer than 10 years. Usually for the project life.
	Permanent	5	Indefinite.
Magnitude (M)	Very Low	1	No impact on processes.
	Low	2	<p>Qualitative: Minor deterioration, nuisance or irritation, minor changes in species/habitat/diversity or resource, no or very little quality deterioration.</p> <p>Quantitative: No measurable change; recommended level will never be exceeded.</p>
	Moderate	3	<p>Qualitative: Moderate deterioration, discomfort, partial loss of habitat/biodiversity/resource or slight alteration.</p> <p>Quantitative: Measurable deterioration; recommended level will occasionally be exceeded.</p>
	High	4	<p>Qualitative: Substantial deterioration, death, illness or injury, loss of habitat/diversity or resource, severe alteration or disturbance of important processes.</p> <p>Quantitative: Measurable deterioration; recommended level will often be exceeded (e.g., pollution).</p>
	Very High	5	Permanent cessation of processes.
Reversibility (R)	Reversible	1	Recovery which does not require rehabilitation and/or mitigation.



	Recoverable	3	Recovery which does require rehabilitation and/or mitigation.
	Irreversible	5	Not possible despite action. The impact will still persist and no mitigation will remedy or reverse the impact.
Probability (P)	Improbable	1	Not likely at all. No known risk or vulnerability to natural or induced hazards.
	Low Probability	2	Unlikely: Low likelihood; Seldom; Low risk or vulnerability to natural or induced hazards.
	Probable	3	Possible; Distinct possibility; Frequent; Medium risk or vulnerability to natural or induced hazards.
	Highly Probable	4	Highly likely that there will be a continuous impact. High risk or vulnerability to natural or induced hazards.
	Definite	5	Definite, regardless of prevention measures

The significance(s) of potential impacts identified according to the criteria above has been color-coded (Table 19) for the purpose of comparison. This color-coding will be used in impact tables.

**TABLE 19: COLOUR-CODING OF POTENTIAL IMPACTS TO DESCRIBE SIGNIFICANCE.**

Significance is deemed Negative (-)			Significance is deemed Positive (+)		
0 - 30	31 - 60	61 - 100	0 - 30	31 - 60	61 - 100
Low	Moderate	High	Low	Moderate	High

- **Step 4:** Determination of practical and reasonable mitigation measures based on specialists' inputs and field observations following the mitigation hierarchy (avoid, minimise, manage, mitigate, or rehabilitate);
- **Step 5:** Evaluation of predicted residual impacts after implementation of mitigation measures;
- **Step 6:** Determination of the significance of the impact taking into consideration the predicted residual impacts after implementation of mitigation measures; and

- **Step 7:** Based on an acceptable significance of the impact, determination of the need and desirability of the proposed development and an opinion as to whether the development should proceed or not.

The Assessment of the significance of potential impacts is then populated in an Impact Table. The definitions of the different mitigation measures are expanded and discussed below:

- **Avoidance or minimization:** If the assessment determines that unmitigated impacts as a result of the development will result in significant negative effects on biodiversity, consideration should be given to avoidance and minimization mitigation measures, for example through re-design of the project, relocation of activities, or through careful project timing (e.g., avoiding areas during periods of specific seasonal importance). Avoidance or minimisation of effects on biodiversity at source is a sure way of removing otherwise significant effects. The extent to which avoidance is used as opposed to other measures within the mitigation hierarchy will depend on several factors including the sensitivity/value of the biodiversity features affected. Hence, avoidance may be appropriate in the following circumstances:
  - where the biodiversity interests are only known to be present in this one location on earth and/or are irreplaceable;
  - where the biodiversity interests are found largely in the area affected by the project, and are already threatened and in current decline throughout their range, and if the project was implemented it would cause further decline; or
  - where there is an expectation that the only available practical techniques for rehabilitation, or restoration will fail.
- Application of the avoidance approach in the mitigation hierarchy requires detailed information and a site-specific assessment, with emphasis on the spatial assessment. Avoidance may not be a viable option for all projects (e.g., mining where the works are restricted to the locations of the ore bodies). Mitigation measures and offsetting are likely to be more substantive for such developments.
- **Mitigation:** Where significant effects on biodiversity have been identified, measures to mitigate impact need to be developed to reduce the effects, ideally to the point at which they are no longer significant. These measures include a range of approaches, for example modifying drainage patterns, reducing dust and noise, reducing patterns of vegetation clearance, erosion and sediment control, protection of wildlife corridors, timing of the works to avoid disturbance during key periods for wildlife. Most projects will have some mitigation built into the project design from the outset (and may be used routinely in a particular industry as good practice), but the assessment often identifies the need for additional measures. If time permits, and the mitigation is identified early enough in the process, changes can be made to the project design, and incorporated into the project description, as part of an iterative process. If not, then a list of measures should be contained within the assessment section, with reference to a project Biodiversity Action or Management Plan (BAP/BMP) that will be developed, or another mechanism to explain how they will be implemented. Other technical specialists need to be aware of the measures proposed for biodiversity (and vice versa), to make sure they do not conflict with or result in unintended effects for other topics.





- **Rehabilitation/restoration:** Where habitat will be lost, consideration must be given to the options of restoring that habitat, creation of new habitat of the same or better value or enhancing remaining habitat. All of these approaches can help reduce the significance of the effect. It may be possible to restore habitat on completion of the works, especially where the effect is short lived and where the soils and habitats are sufficiently robust to allow temporary storage. For example, on pipeline projects, soils and some habitat types which are removed to create a trench for the pipeline, can be temporarily stored adjacent to the trench, and then reinstated once the pipe has been laid. Often such restoration follows the construction work along the route, a procedure known as progressive restoration. This approach improves the likelihood of success by reducing the storage time of soils. Where temporary storage and restoration are not possible, other options to consider include, the creation of new habitat in the same location to replace that lost. The likely success of habitat creation, and the time over which it will occur, is very dependent on the habitat types affected, and also the effects on the underlying soil and drainage, and the extent to which they are damaged by the construction work and can then be repaired. The extent to which mitigation is possible must be assessed as some habitats may be irreplaceable, or take decades or more to create (e.g., some forests, bogs). In some cases restoration, or habitat creation, may not be possible within the area affected by a project, or elsewhere within a designated site that has been affected. Opportunities for enhancing habitats that remain, to the extent that they outweigh the losses caused by the development, should then be considered. This can be particularly helpful in locations where remaining habitats are already degraded (e.g., degraded bogs) and could be improved by management or reducing existing pressures.
- **Compensation/offsets:** Where residual significant negative effects remain after mitigation, offset/compensation measures need to be undertaken, usually outside of the area affected by the project. To achieve no net loss of biodiversity, it is important to aim to deliver net gain. This will allow, for example, natural failure of some measures (e.g., some habitat types may not be successfully created as planned or not created of the full are intended). It is possible that significant residual losses cannot be compensated for/offset, and in such circumstances the risks for the consenting of the project need to be raised with the project management team as soon as possible. Examples of this include if the habitat affected is irreplaceable, or if the habitat loss will result in the extinction of a species, or an unacceptable decline in its conservation status. Biodiversity compensation/offsets are designed to compensate for residual effects through the positive management of equivalent biodiversity elsewhere in the landscape outside the project PAOI. They should be developed using the principles listed below, and secured, managed and monitored for the long term.
  - The provision is to be based on a "like for like" basis (i.e., the same habitats/species/use and equivalent biodiversity value as that lost and as defined by the residual effects).
  - Alternatives (i.e., not "like for like") which deliver similar, or greater biodiversity value should be considered, and agreed with consenting authorities and relevant stakeholders, where "like for like" cannot be achieved, or the developer wishes to propose alternatives (despite being able to achieve "like for like").
  - Compensation/offsets which complement existing biodiversity management measures are preferred (e.g., locations adjacent to protected areas).

- Compensation/offsets should be in place and functioning prior to the impacts occurring, particularly where the habitats must support species of biodiversity importance that will be displaced once their existing habitat is lost.
- The location of compensation/offsets should also reflect their use. If for example, their importance is to provide new recreational biodiversity use, they need to be accessible to the current users, rather than some distance away. Similarly, connectivity for species to areas of habitat which remain may be important and new habitat creation elsewhere in the region would not achieve this.
- Implementation of compensation/offsets must not result in other significant effects, including on biodiversity. Compensation/offsets can take the form of positive management interventions such as restoration of degraded habitat, arrested degradation or averted risk, or protecting areas where there is imminent or projected loss of biodiversity values. More specifically, they can include:
  - restoration or enhancement of habitats outside the area of influence to achieve the equivalent biodiversity value to that lost;
  - landscape scale mitigation/offset programmes;
  - financial contributions to programmes for biodiversity management which will provide equivalent biodiversity value;
  - aggregations to provide compensation/offsets for losses from more than one project.
- Compensation/offsets cannot simply entail protecting an area of appropriate habitat which already exists, but has no current protection, and will not be subject to any future loss, or other negative effects. It is important to note that compensation/offsets are typically conceptualised and designed after an Environmental and Social Impact Assessment (ESIA) has been completed. The need for them is identified in an ESIA, but the details of the measures, and the offset accounting, is done separate from the ESIA unless specifically required by the client.

## APPENDIX C      COMPREHENSIVE LIST OF ANIMAL SPECIES POTENTIALLY PRESENT ON SITE

A comprehensive list of all animal species that are potentially present in the proposed Hugo WEF PAOI and their associated data sources are presented in **Table 20** below. The sources include the Global Biodiversity Information Facility (GBIF) database, The DFFE Online Screening Tool (ST) and the Biodiversity and Development Institute's Virtual Museum (VM) database.



**TABLE 20: COMPREHENSIVE LIST OF ANIMAL SPECIES POTENTIALLY PRESENT WITHIN THE PROPOSED HUGO WEF PROJECT PAOI.**

Family	Scientific Name	Source	Family	Scientific Name	Source
Brevicipitidae	<i>Breviceps montanus</i>	GBIF	Erebidae	<i>Thyretes hipotes</i>	GBIF
Bufoidea	<i>Sclerophrys capensis</i>	GBIF, VM	Erebidae	<i>Utetheisa pulchella</i>	GBIF
Bufoidea	<i>Vandijkophrynus angusticeps</i>	VM	Eresidae	<i>Gandanameno spenceri</i>	GBIF
Bufoidea	<i>Vandijkophrynus gariensis</i>	VM	Eriophyidae	<i>Colomerus vitis</i>	GBIF
Heleophrynidae	<i>Heleophryne purcelli</i>	VM	Eumenidae	<i>Delta emarginatum</i>	GBIF
Pipidae	<i>Xenopus laevis</i>	GBIF, VM	Eumenidae	<i>Delta lepeleteri</i>	GBIF
Pyxicephalidae	<i>Amietia fuscigula</i>	GBIF, VM	Eumenidae	<i>Eumenidiopsis</i> sp.	GBIF
Pyxicephalidae	<i>Cacosternum boettgeri</i>	VM	Flatidae	<i>Siphanta acuta</i>	GBIF
Pyxicephalidae	<i>Strongylopus grayii</i>	GBIF, VM	Formicidae	<i>Anoplolepis custodiens</i>	GBIF
Pyxicephalidae	<i>Tomopterna delalandii</i>	VM	Formicidae	<i>Anoplolepis steingroeveri</i>	GBIF
Accipitridae	<i>Accipiter melanoleucus</i>	GBIF	Formicidae	<i>Bothroponera pumicosa</i>	GBIF
Accipitridae	<i>Accipiter rufiventris</i>	GBIF	Formicidae	<i>Camponotus emarginatus</i>	GBIF
Accipitridae	<i>Accipiter tachiro</i>	GBIF	Formicidae	<i>Camponotus fulvopilosus</i>	GBIF
Accipitridae	<i>Aquila verreauxii</i>	GBIF, ST	Formicidae	<i>Camponotus maculatus</i>	GBIF
Accipitridae	<i>Buteo buteo</i>	GBIF, VM	Formicidae	<i>Camponotus niveosetosus</i>	GBIF
Accipitridae	<i>Buteo rufofuscus</i>	GBIF, VM	Formicidae	<i>Camponotus storeatus</i>	GBIF
Accipitridae	<i>Buteo trizonatus</i>	GBIF	Formicidae	<i>Camponotus vestitus</i>	GBIF
Accipitridae	<i>Circus maurus</i>	GBIF, ST, VM	Formicidae	<i>Crematogaster delagoensis</i> subsp. <i>merwei</i>	GBIF
Accipitridae	<i>Circus ranivorus</i>	GBIF	Formicidae	<i>Crematogaster orobia</i>	GBIF
Accipitridae	<i>Elanus caeruleus</i>	GBIF, VM	Formicidae	<i>Crematogaster peringueyi</i>	GBIF
Accipitridae	<i>Haliaeetus vocifer</i>	GBIF	Formicidae	<i>Lepisiota capensis</i>	GBIF
Accipitridae	<i>Hieraaetus pennatus</i>	GBIF, VM	Formicidae	<i>Monomorium fridae</i>	GBIF



Family	Scientific Name	Source	Family	Scientific Name	Source
Accipitridae	<i>Melierax canorus</i>	GBIF, VM	Formicidae	<i>Myrmecaria nigra</i>	GBIF
Accipitridae	<i>Milvus migrans parasitus</i>	GBIF	Formicidae	<i>Ocymyrmex barbiger</i>	GBIF
Accipitridae	<i>Polemaetus bellicosus</i>	GBIF	Formicidae	<i>Technomyrmex pallipes</i>	GBIF
Accipitridae	<i>Polyboroides typus</i>	GBIF, VM	Galinthiidae	<i>Harpagomantis tricolor</i>	GBIF
Acrocephalidae	<i>Acrocephalus baeticatus</i>	GBIF, VM	Geometridae	<i>Argyrophora trofonia</i>	GBIF
Acrocephalidae	<i>Acrocephalus gracilirostris</i>	GBIF	Geometridae	<i>Chiasmia brongusaria</i>	GBIF
Acrocephalidae	<i>Acrocephalus scirpaceus</i>	GBIF, VM	Geometridae	<i>Chlorerythra rubriplaga</i>	GBIF
Alaudidae	<i>Calandrella cinerea</i>	GBIF, VM	Geometridae	<i>Drepanogynis bifasciata</i>	GBIF
Alaudidae	<i>Calendulauda albescens</i>	VM	Geometridae	<i>Pseudomaenas intricata</i>	VM
Alaudidae	<i>Certhilauda subcoronata</i>	GBIF	Geometridae	<i>Rhodometra sacraria</i>	VM
Alaudidae	<i>Eremopterix verticalis</i>	GBIF	Geometridae	<i>Victoria albipicta</i>	GBIF
Alaudidae	<i>Galerida magnirostris</i>	GBIF, VM	Geoplanidae	<i>Bipalium kewense</i>	GBIF
Alaudidae	<i>Mirafrapa apiata</i>	GBIF	Gomphidae	<i>Ceratogomphus pictus</i>	GBIF
Alcedinidae	<i>Ceryle rudis</i>	GBIF	Gomphidae	<i>Paragomphus cognatus</i>	GBIF
Alcedinidae	<i>Corythornis cristatus</i>	GBIF	Gryllidae	<i>Gryllus bimaculatus</i>	GBIF
Alcedinidae	<i>Halcyon albiventris</i>	GBIF	Gryllidae	<i>Oecanthus capensis</i>	GBIF
Alcedinidae	<i>Megaceryle maxima</i>	GBIF, VM	Helicidae	<i>Cornu aspersum</i>	GBIF
Anatidae	<i>Alopochen aegyptiaca</i>	GBIF, VM	Helicidae	<i>Theba pisana</i>	GBIF
Anatidae	<i>Anas capensis</i>	GBIF, VM	Hesperiidae	<i>Ernsta nanus</i>	GBIF
Anatidae	<i>Anas erythrorhyncha</i>	GBIF, VM	Hesperiidae	<i>Metisella malgacha</i>	GBIF
Anatidae	<i>Anas platyrhynchos</i>	GBIF	Hesperiidae	<i>Spialia ferax</i>	VM
Anatidae	<i>Anas sparsa</i>	GBIF	Hesperiidae	<i>Spialia nanus</i>	VM
Anatidae	<i>Anas undulata</i>	GBIF, VM	Hesperiidae	<i>Spialia sataspes</i>	VM
Anatidae	<i>Cairina moschata</i>	GBIF	Hesperiidae	<i>Spialia spio</i>	GBIF, VM



Family	Scientific Name	Source	Family	Scientific Name	Source
Anatidae	<i>Netta erythrophthalma</i>	GBIF, VM	Hesperiidae	<i>Tsitana tulbagha</i> subsp. <i>kaplani</i>	GBIF, VM
Anatidae	<i>Oxyura maccoa</i>	GBIF	Hodotermitidae	<i>Microhodotermes viator</i>	GBIF
Anatidae	<i>Plectropterus gambensis</i>	GBIF, VM	Hormuridae	<i>Opisthacanthus capensis</i>	GBIF
Anatidae	<i>Spatula smithii</i>	GBIF	Hormuridae	<i>Opisthacanthus diremptus</i>	GBIF
Anatidae	<i>Tadorna cana</i>	GBIF, VM	Libellulidae	<i>Crocothemis erythraea</i>	GBIF, VM
Anhingidae	<i>Anhinga rufa</i>	GBIF, VM	Libellulidae	<i>Crocothemis sanguinolenta</i>	GBIF, VM
Apodidae	<i>Apus affinis</i>	GBIF	Libellulidae	<i>Nesciothemis farinosa</i>	GBIF
Apodidae	<i>Apus apus</i>	GBIF	Libellulidae	<i>Orthetrum caffrum</i>	GBIF, VM
Apodidae	<i>Apus barbatus</i>	GBIF	Libellulidae	<i>Orthetrum capicola</i>	VM
Apodidae	<i>Apus caffer</i>	GBIF	Libellulidae	<i>Orthetrum chrysostigma</i>	VM
Apodidae	<i>Cypsiurus parvus</i>	GBIF	Libellulidae	<i>Orthetrum julia</i>	GBIF, VM
Apodidae	<i>Tachymarptis melba</i>	GBIF, VM	Libellulidae	<i>Orthetrum trinacria</i>	GBIF, VM
Ardeidae	<i>Ardea cinerea</i>	GBIF, VM	Libellulidae	<i>Sympetrum fonscolombii</i>	GBIF, VM
Ardeidae	<i>Ardea melanocephala</i>	GBIF, VM	Libellulidae	<i>Trithemis arteriosa</i>	GBIF, VM
Ardeidae	<i>Bubulcus ibis</i>	GBIF, VM	Libellulidae	<i>Trithemis dorsalis</i>	GBIF, VM
Ardeidae	<i>Egretta garzetta</i>	GBIF	Libellulidae	<i>Trithemis furva</i>	GBIF, VM
Ardeidae	<i>Ixobrychus minutus</i>	GBIF	Libellulidae	<i>Trithemis kirbyi</i>	GBIF
Burhinidae	<i>Burhinus capensis</i>	GBIF	Libellulidae	<i>Trithemis sp.</i>	VM
Burhinidae	<i>Burhinus vermiculatus</i>	GBIF	Libellulidae	<i>Trithemis stictica</i>	GBIF, VM
Caprimulgidae	<i>Caprimulgus pectoralis</i>	GBIF	Libellulidae	<i>Zygonyx natalensis</i>	GBIF, VM
Chaetopidae	<i>Chaetops frenatus</i>	GBIF, VM	Lycaenidae	<i>Aloeides almeida</i>	VM
Charadriidae	<i>Charadrius pecuarius</i>	GBIF, VM	Lycaenidae	<i>Aloeides aranda</i>	GBIF, VM



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Charadriidae	<i>Charadrius tricollaris</i>	GBIF, VM	Lycaenidae	<i>Aloeides caledoni</i>	ST
Charadriidae	<i>Vanellus armatus</i>	GBIF, VM	Lycaenidae	<i>Aloeides pierus</i>	VM
Charadriidae	<i>Vanellus coronatus</i>	GBIF	Lycaenidae	<i>Aloeides thyra</i> subsp. <i>thyra</i>	VM
Ciconiidae	<i>Ciconia nigra</i>	GBIF, VM	Lycaenidae	<i>Anthene amarah</i> subsp. <i>amarah</i>	GBIF, VM
Cisticolidae	<i>Apalis thoracica</i>	GBIF, VM	Lycaenidae	<i>Anthene definita</i> subsp. <i>definita</i>	VM
Cisticolidae	<i>Cisticola fulvicapilla</i>	GBIF	Lycaenidae	<i>Anthene talboti</i>	VM
Cisticolidae	<i>Cisticola subruficapilla</i>	GBIF, VM	Lycaenidae	<i>Brephidium metophis</i>	GBIF, VM
Cisticolidae	<i>Cisticola textrix</i>	GBIF	Lycaenidae	<i>Cacyreus dicksoni</i>	GBIF, VM
Cisticolidae	<i>Cisticola tinniens</i>	GBIF, VM	Lycaenidae	<i>Cacyreus fracta</i> subsp. <i>fracta</i>	GBIF, VM
Cisticolidae	<i>Eremomela gregalis</i>	GBIF	Lycaenidae	<i>Cacyreus lingeus</i>	VM
Cisticolidae	<i>Eremomela icteropygialis</i>	GBIF, VM	Lycaenidae	<i>Cacyreus marshalli</i>	GBIF, VM
Cisticolidae	<i>Malcorus pectoralis</i>	GBIF	Lycaenidae	<i>Capys alpheus</i> subsp. <i>alpheus</i>	VM
Cisticolidae	<i>Phragmacia substriata</i>	VM	Lycaenidae	<i>Chrysoritis brooksi brooksi</i>	VM
Cisticolidae	<i>Prinia hypoxantha</i>	GBIF	Lycaenidae	<i>Chrysoritis chrysaor</i>	GBIF, VM
Cisticolidae	<i>Prinia maculosa</i>	GBIF, VM	Lycaenidae	<i>Chrysoritis felthami dukei</i>	VM
Coliidae	<i>Colius colius</i>	GBIF, VM	Lycaenidae	<i>Chrysoritis irene</i>	VM
Coliidae	<i>Colius striatus</i>	GBIF, VM	Lycaenidae	<i>Chrysoritis lysander</i>	GBIF
Coliidae	<i>Urocolius indicus</i>	GBIF, VM	Lycaenidae	<i>Chrysoritis nigricans</i> subsp. <i>nigricans</i>	VM
Columbidae	<i>Columba arquatrix</i>	GBIF, VM	Lycaenidae	<i>Chrysoritis pan lysander</i>	VM
Columbidae	<i>Columba guinea</i>	GBIF, VM	Lycaenidae	<i>Chrysoritis plutus</i>	VM
Columbidae	<i>Columba larvata</i>	GBIF	Lycaenidae	<i>Chrysoritis rileyi</i>	GBIF



Family	Scientific Name	Source	Family	Scientific Name	Source
Columbidae	<i>Columba livia</i>	GBIF	Lycaenidae	<i>Chrysoritis</i> sp.	GBIF
Columbidae	<i>Oena capensis</i>	GBIF, VM	Lycaenidae	<i>Chrysoritis turneri</i> subsp. <i>turneri</i>	VM
Columbidae	<i>Spilopelia senegalensis</i>	GBIF, VM	Lycaenidae	<i>Chrysoritis uranus</i> subsp. <i>uranus</i>	VM
Columbidae	<i>Streptopelia capicola</i>	GBIF, VM	Lycaenidae	<i>Deudorix antalus</i>	VM
Columbidae	<i>Streptopelia semitorquata</i>	GBIF, VM	Lycaenidae	<i>Durbaniella clarki</i> subsp. <i>phaea</i>	VM
Columbidae	<i>Turtur tympanistria</i>	GBIF	Lycaenidae	<i>Durbaniopsis saga</i>	VM
Corvidae	<i>Corvus albicollis</i>	GBIF, VM	Lycaenidae	<i>Eicochrysops messapus</i>	GBIF, VM
Corvidae	<i>Corvus albus</i>	GBIF, VM	Lycaenidae	<i>Lepidochrysops asteris</i>	VM
Corvidae	<i>Corvus capensis</i>	GBIF	Lycaenidae	<i>Lepidochrysops australis</i>	VM
Cuculidae	<i>Chrysococcyx klaas</i>	GBIF, VM	Lycaenidae	<i>Lepidochrysops bacchus</i>	VM
Dendrocygnidae	<i>Dendrocygna viduata</i>	VM	Lycaenidae	<i>Lepidochrysops dukei</i>	VM
Dicruridae	<i>Dicrurus adsimilis</i>	GBIF, VM	Lycaenidae	<i>Lepidochrysops puncticilia</i>	VM
Diomedeidae	<i>Thalassarche melanophris</i>	GBIF	Lycaenidae	<i>Lepidochrysops robertsoni</i>	VM
Emberizidae	<i>Emberiza capensis</i>	GBIF, VM	Lycaenidae	<i>Leptomyrina lara</i>	GBIF, VM
Emberizidae	<i>Emberiza impetuani</i>	GBIF	Lycaenidae	<i>Lycaena clarki</i>	VM
Emberizidae	<i>Emberiza tahapisi</i>	GBIF	Lycaenidae	<i>Oraidium barberae</i>	GBIF, VM
Estrildidae	<i>Coccopygia melanotis</i>	GBIF	Lycaenidae	<i>Phasis clavum clavum</i>	VM
Estrildidae	<i>Estrilda astrild</i>	GBIF, VM	Lycaenidae	<i>Phasis thero thero</i>	VM
Falconidae	<i>Falco peregrinus</i>	GBIF	Lycaenidae	<i>Tarucus thespis</i>	VM
Falconidae	<i>Falco rupicoloides</i>	GBIF	Lycaenidae	<i>Thestor brachycerus</i> subsp. <i>dukei</i>	VM
Falconidae	<i>Falco rupicolus</i>	VM	Lycaenidae	<i>Thestor braunsi</i>	VM
Fringillidae	<i>Crithagra albogularis</i>	GBIF, VM	Lycaenidae	<i>Thestor penningtoni</i>	VM
Fringillidae	<i>Crithagra flaviventris</i>	GBIF, VM	Lycaenidae	<i>Thestor pringlei</i>	VM





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Fringillidae	<i>Crithagra gularis</i>	GBIF, VM	Lycaenidae	<i>Thestor protumnus</i> subsp. <i>aridus</i>	VM
Fringillidae	<i>Crithagra leucoptera</i>	GBIF	Lycaenidae	<i>Thestor stepheni</i>	VM
Fringillidae	<i>Crithagra scotops</i>	GBIF	Lycaenidae	<i>Trimenia argyroplaga</i> subsp. <i>argyroplaga</i>	VM
Fringillidae	<i>Crithagra sulphurata</i>	GBIF	Lycaenidae	<i>Trimenia macmasteri</i> subsp. <i>macmasteri</i>	VM
Fringillidae	<i>Crithagra totta</i>	GBIF	Lycaenidae	<i>Zizeeria knysna</i> subsp. <i>knysna</i>	GBIF, VM
Fringillidae	<i>Serinus alario</i>	GBIF, VM	Lycidae	<i>Lycus ampliatus</i>	GBIF
Fringillidae	<i>Serinus canicollis</i>	GBIF, VM	Margarodidae	<i>Icerya purchasi</i>	GBIF
Fringillidae	<i>Serinus sulphuratus</i>	VM	Masaridae	<i>Quartinia antennata</i>	GBIF
Gruidae	<i>Anthropoides paradiseus</i>	GBIF	Meloidae	<i>Hycleus lunatus</i>	GBIF
Heliornithidae	<i>Podica senegalensis</i>	GBIF	Meloidae	<i>Hycleus quadriguttatus</i>	GBIF
Hirundinidae	<i>Delichon urbicum</i>	GBIF	Melyridae	<i>Melyris pubescens</i>	GBIF
Hirundinidae	<i>Hirundo albigularis</i>	GBIF	Myrmeleontidae	<i>Palpares speciosus</i>	VM
Hirundinidae	<i>Hirundo cucullata</i>	GBIF, VM	Myrmeleontidae	<i>Pamexis karoo</i>	VM
Hirundinidae	<i>Hirundo rustica</i>	GBIF, VM	Nemopteridae	<i>Concroce parva</i>	VM
Hirundinidae	<i>Psalidoprocne pristopectera</i>	GBIF	Noctuidae	<i>Caradrina atriluna</i>	GBIF
Hirundinidae	<i>Ptyonoprogne fuligula</i>	GBIF, VM	Noctuidae	<i>Diaphone eumela</i>	GBIF
Hirundinidae	<i>Riparia paludicola</i>	GBIF, VM	Noctuidae	<i>Helicoverpa armigera</i>	GBIF
Hirundinidae	<i>Riparia riparia</i>	GBIF	Noctuidae	<i>Spodoptera littoralis</i>	GBIF
Indicatoridae	<i>Indicator minor</i>	GBIF	Nymphalidae	<i>Acraea horta</i>	VM
Laniidae	<i>Lanius collaris</i>	GBIF, VM	Nymphalidae	<i>Aeropetes tulbaghia</i>	GBIF
Locustellidae	<i>Bradypterus baboecala</i>	GBIF	Nymphalidae	<i>Cassionympha detecta</i>	GBIF, VM
Lybiidae	<i>Tricholaema leucomelas</i>	GBIF, VM	Nymphalidae	<i>Charaxes brutus natalensis</i>	GBIF
Macrosphenidae	<i>Cryptillas victorini</i>	GBIF	Nymphalidae	<i>Charaxes pelias</i>	GBIF, VM



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Macrosphenidae	<i>Sphenoeacus afer</i>	GBIF	Nymphalidae	<i>Danaus chrysippus orientis</i>	GBIF, VM
Macrosphenidae	<i>Sylvietta rufescens</i>	GBIF, VM	Nymphalidae	<i>Melampias huebneri huebneri</i>	VM
Malaconotidae	<i>Laniarius ferrugineus</i>	GBIF, VM	Nymphalidae	<i>Pseudonympha southeysi</i> subsp. <i>wykehami</i>	VM
Malaconotidae	<i>Tchagra tchagra</i>	GBIF	Nymphalidae	<i>Pseudonympha trimenii namaquana</i>	GBIF
Malaconotidae	<i>Telophorus zeylonus</i>	GBIF, VM	Nymphalidae	<i>Pseudonympha trimenii trimenii</i>	VM
Meropidae	<i>Merops apiaster</i>	GBIF	Nymphalidae	<i>Stygionympha irrorata</i>	VM
Monarchidae	<i>Terpsiphone viridis</i>	GBIF	Nymphalidae	<i>Stygionympha vigilans</i>	GBIF, VM
Motacillidae	<i>Anthus cinnamomeus</i>	GBIF, VM	Nymphalidae	<i>Tarsocera cassus</i> subsp. <i>cassus</i>	VM
Motacillidae	<i>Anthus leucophrys</i>	GBIF	Nymphalidae	<i>Tarsocera dicksoni</i>	VM
Motacillidae	<i>Anthus nicholsoni</i>	GBIF, VM	Nymphalidae	<i>Tarsocera fulvina</i>	VM
Motacillidae	<i>Macronyx capensis</i>	GBIF	Nymphalidae	<i>Tarsocera</i> sp.	VM
Motacillidae	<i>Motacilla capensis</i>	GBIF, VM	Nymphalidae	<i>Torynesis hawequas</i>	VM
Muscicapidae	<i>Agricola infuscatus</i>	GBIF	Nymphalidae	<i>Torynesis mintha</i> subsp. <i>mintha</i>	VM
Muscicapidae	<i>Cercomela sinuata</i>	GBIF, VM	Nymphalidae	<i>Vanessa cardui</i>	GBIF, VM
Muscicapidae	<i>Cossypha caffra</i>	GBIF, VM	Oopeltidae	<i>Oopelta granulosa</i>	GBIF
Muscicapidae	<i>Emarginata schlegelii</i>	GBIF, VM	Papilionidae	<i>Papilio demodocus</i> subsp. <i>demodocus</i>	VM
Muscicapidae	<i>Monticola explorator</i>	GBIF	Parastrachiidae	<i>Dismegistus fimbriatus</i>	GBIF
Muscicapidae	<i>Monticola rupestris</i>	GBIF, VM	Pieridae	<i>Belenois aurota</i>	VM
Muscicapidae	<i>Muscicapa adusta</i>	GBIF	Pieridae	<i>Belenois creona</i> subsp. <i>severina</i>	GBIF
Muscicapidae	<i>Oenanthe familiaris</i>	GBIF, VM	Pieridae	<i>Colias electo electo</i>	VM
Muscicapidae	<i>Oenanthe monticola</i>	GBIF, VM	Pieridae	<i>Mylothris agathina</i> subsp. <i>agathina</i>	GBIF



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Family	Scientific Name	Source	Family	Scientific Name	Source
Muscicapidae	<i>Oenanthe pileata</i>	GBIF, VM	Pieridae	<i>Pontia helice helice</i>	GBIF, VM
Muscicapidae	<i>Saxicola torquatus</i>	GBIF, VM	Platycnemididae	<i>Allocnemis leucosticta</i>	GBIF, VM
Muscicapidae	<i>Sigelus silens</i>	GBIF, VM	Platycnemididae	<i>Elatoneura frenulata</i>	GBIF, VM
Muscicapidae	<i>Tychaedon coryphoeus</i>	GBIF, VM	Potamonautidae	<i>Potamonautes barnardi</i>	GBIF
Nectariniidae	<i>Anthobaphes violacea</i>	GBIF, VM	Potamonautidae	<i>Potamonautes perlatus</i>	GBIF
Nectariniidae	<i>Chalcomitra amethystina</i>	GBIF	Psychidae	<i>Criocharacta amphictis</i>	GBIF
Nectariniidae	<i>Cinnyris afer</i>	GBIF	Pyrgomorphidae	<i>Dictyophorus spumans</i>	GBIF
Nectariniidae	<i>Cinnyris chalybeus</i>	GBIF, VM	Pyrgomorphidae	<i>Phymateus leprosus</i>	GBIF
Nectariniidae	<i>Nectarinia famosa</i>	GBIF, VM	Pyrrhocoridae	<i>Cenaeus carnifex</i>	GBIF
Numididae	<i>Numida meleagris</i>	GBIF, VM	Pyrrhocoridae	<i>Scantius forsteri</i>	GBIF
Oriolidae	<i>Oriolus larvatus</i>	GBIF	Rhyparochromidae	<i>Polycrates consutus</i>	GBIF
Otididae	<i>Eupodotis afra</i>	GBIF, ST, VM	Scarabaeidae	<i>Catharsius tricornutus</i>	VM
Otididae	<i>Neotis ludwigii</i>	VM	Scarabaeidae	<i>Copris capensis</i>	VM
Paridae	<i>Melaniparus afer</i>	GBIF	Scarabaeidae	<i>Diplognatha gagates</i> subsp. <i>silicea</i>	GBIF
Passeridae	<i>Passer diffusus</i>	GBIF	Scarabaeidae	<i>Euoniticellus triangulatus</i>	VM
Passeridae	<i>Passer domesticus</i>	GBIF, VM	Scarabaeidae	<i>Kirprellius syrictus</i>	GBIF
Passeridae	<i>Passer melanurus</i>	GBIF, VM	Scarabaeidae	<i>Mausoleopsis amabilis</i>	GBIF
Phalacrocoracidae	<i>Microcarbo africanus</i>	GBIF	Scarabaeidae	<i>Onitis caffer</i>	VM
Phalacrocoracidae	<i>Phalacrocorax africanus</i>	GBIF, VM	Scarabaeidae	<i>Onthophagus binodis</i>	VM
Phalacrocoracidae	<i>Phalacrocorax carbo</i>	GBIF	Scarabaeidae	<i>Onthophagus cameloides</i>	VM
Phalacrocoracidae	<i>Phalacrocorax lucidus</i>	GBIF, VM	Scarabaeidae	<i>Pachnoda sinuata</i> subsp. <i>flaviventris</i>	GBIF
Phasianidae	<i>Coturnix coturnix</i>	GBIF, VM	Scarabaeidae	<i>Scarabaeus bonellii</i>	VM





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Phasianidae	<i>Pternistis capensis</i>	GBIF, VM	Scarabaeidae	<i>Trichostetha capensis</i>	GBIF
Phasianidae	<i>Scleroptila afra</i>	GBIF	Scarabaeidae	<i>Trichostetha fascicularis</i> subsp. <i>fascicularis</i>	GBIF
Phoenicopteridae	<i>Phoenicopterus minor</i>	VM	Scorpionidae	<i>Opisthophthalmus chaperi</i>	GBIF
Phylloscopidae	<i>Phylloscopus trochilus</i>	GBIF	Scorpionidae	<i>Opisthophthalmus karrooensis</i>	GBIF
Picidae	<i>Dendropicos fuscescens</i>	GBIF, VM	Scutelleridae	<i>Deroplax silphoides</i>	GBIF
Picidae	<i>Geocolaptes olivaceus</i>	GBIF	Sicariidae	<i>Loxosceles</i> sp.	VM
Platysteiridae	<i>Batis capensis</i>	GBIF, VM	Sphingidae	<i>Temnora pylas</i>	GBIF
Platysteiridae	<i>Batis pririt</i>	GBIF	Synlestidae	<i>Chlorolestes tessellatus</i>	VM
Ploceidae	<i>Euplectes capensis</i>	GBIF, VM	Synlestidae	<i>Ecchlorolestes peringueyi</i>	VM
Ploceidae	<i>Euplectes orix</i>	GBIF, VM	Syrphidae	<i>Eupeodes corollae</i>	GBIF
Ploceidae	<i>Ploceus capensis</i>	GBIF, VM	Tabanidae	<i>Rhigioglossa edentula</i>	GBIF
Ploceidae	<i>Ploceus velatus</i>	GBIF, VM	Tabanidae	<i>Tabanus taeniatus</i>	GBIF
Ploceidae	<i>Quelea quelea</i>	GBIF, VM	Tenebrionidae	<i>Moluris gibba</i>	GBIF
Podicipedidae	<i>Podiceps cristatus</i>	GBIF, VM	Tettigoniidae	<i>Hetrodes pupus</i>	GBIF
Podicipedidae	<i>Podiceps nigricollis</i>	GBIF, VM	Theraphosidae	<i>Harpactira dictator</i>	GBIF, VM
Podicipedidae	<i>Tachybaptus ruficollis</i>	GBIF, VM	Thericleidae	<i>Thericlesiella meridionalis</i>	GBIF
Procellariidae	<i>Procellaria aequinoctialis</i>	GBIF	Theridiidae	<i>Latrodectus geometricus</i>	GBIF
Promeropidae	<i>Promerops cafer</i>	GBIF, VM	Thomisidae	<i>Synema imitatrix</i>	GBIF
Pycnonotidae	<i>Andropadus importunus</i>	GBIF, VM	Uloboridae	<i>Uloborus plumipes</i>	GBIF
Pycnonotidae	<i>Phyllastrephus terrestris</i>	GBIF	Zodariidae	<i>Psammorygma aculeatum</i>	GBIF
Pycnonotidae	<i>Pycnonotus capensis</i>	GBIF, VM	Batherygidae	<i>Georychus capensis</i>	VM



Family	Scientific Name	Source	Family	Scientific Name	Source
Rallidae	<i>Fulica cristata</i>	GBIF, VM	Bovidae	<i>Alcelaphus buselaphus caama</i>	VM
Rallidae	<i>Gallinula chloropus</i>	GBIF, VM	Bovidae	<i>Antidorcas marsupialis</i>	GBIF, VM
Recurvirostridae	<i>Himantopus himantopus</i>	GBIF, VM	Bovidae	<i>Damaliscus pygargus</i> subsp. <i>pygargus</i>	VM
Recurvirostridae	<i>Recurvirostra avosetta</i>	VM	Bovidae	<i>Oreotragus oreotragus</i>	GBIF, VM
Remizidae	<i>Anthoscopus minutus</i>	GBIF	Bovidae	<i>Oryx gazella</i>	VM
Sagittariidae	<i>Sagittarius serpentarius</i>	GBIF	Bovidae	<i>Pelea capreolus</i>	GBIF, VM
Scolopacidae	<i>Actitis hypoleucos</i>	GBIF	Bovidae	<i>Raphicerus melanotis</i>	GBIF
Scolopacidae	<i>Calidris ferruginea</i>	GBIF	Bovidae	<i>Redunca fulvorufula</i>	VM
Scolopacidae	<i>Calidris minuta</i>	GBIF	Bovidae	<i>Sylvicapra grimmia</i>	GBIF
Scolopacidae	<i>Calidris pugnax</i>	GBIF	Bovidae	<i>Syncerus caffer</i>	VM
Scolopacidae	<i>Tringa nebularia</i>	GBIF	Bovidae	<i>Tragelaphus oryx</i>	GBIF, VM
Scopidae	<i>Scopus umbretta</i>	GBIF	Canidae	<i>Otocyon megalotis</i>	GBIF, VM
Stenostiridae	<i>Stenostira scita</i>	GBIF, VM	Cercopithecidae	<i>Papio ursinus</i>	GBIF, VM
Strigidae	<i>Bubo africanus</i>	GBIF	Chrysochloridae	<i>Chrysochloris asiatica</i>	VM
Struthionidae	<i>Struthio camelus</i>	GBIF, VM	Elephantidae	<i>Loxodonta africana</i>	VM
Sturnidae	<i>Lamprotornis bicolor</i>	GBIF, VM	Equidae	<i>Equus quagga</i>	GBIF
Sturnidae	<i>Onychognathus morio</i>	GBIF, VM	Felidae	<i>Caracal caracal</i>	GBIF, VM
Sturnidae	<i>Onychognathus nabouroup</i>	GBIF	Felidae	<i>Felis catus</i>	GBIF
Sturnidae	<i>Sturnus vulgaris</i>	GBIF, VM	Felidae	<i>Felis silvestris</i>	VM
Sylviidae	<i>Curruca layardi</i>	GBIF	Felidae	<i>Panthera leo</i>	VM
Sylviidae	<i>Curruca subcoerulea</i>	GBIF, VM	Felidae	<i>Panthera pardus</i>	GBIF, VM
Threskiornithidae	<i>Bostrychia hagedash</i>	GBIF, VM	Gliridae	<i>Graphiurus ocellaris</i>	VM



Family	Scientific Name	Source	Family	Scientific Name	Source
Threskiornithidae	<i>Platalea alba</i>	GBIF, VM	Herpestidae	<i>Cynictis penicillata</i>	VM
Threskiornithidae	<i>Threskiornis aethiopicus</i>	GBIF, VM	Herpestidae	<i>Herpestes pulverulentus</i>	GBIF, VM
Turdidae	<i>Turdus olivaceus</i>	GBIF, VM	Hippopotamidae	<i>Hippopotamus amphibius</i>	VM
Turdidae	<i>Turdus smithi</i>	GBIF	Leporidae	<i>Bunolagus monticularis</i>	ST
Turnicidae	<i>Turnix hottentottus</i>	GBIF	Leporidae	<i>Lepus saxatilis</i>	VM
Tytonidae	<i>Tyto alba</i>	GBIF	Leporidae	<i>Pronolagus saundersiae</i>	GBIF
Upupidae	<i>Upupa africana</i>	GBIF, VM	Muridae	<i>Aethomys namaquensis</i>	VM
Upupidae	<i>Upupa epops</i>	GBIF	Muridae	<i>Gerbilliscus afra</i>	VM
Viduidae	<i>Vidua macroura</i>	GBIF	Muridae	<i>Otomys irroratus</i>	GBIF, VM
Zosteropidae	<i>Zosterops pallidus</i>	GBIF	Muridae	<i>Otomys unisulcatus</i>	VM
Zosteropidae	<i>Zosterops virens</i>	GBIF, VM	Muridae	<i>Rhabdomys pumilio</i>	GBIF, VM
Acrididae	<i>Acanthacris ruficornis</i> subsp. <i>ruficornis</i>	GBIF	Mustelidae	<i>Aonyx capensis</i>	VM
Aeshnidae	<i>Anax imperator</i>	GBIF, VM	Mustelidae	<i>Mellivora capensis</i>	GBIF, VM
Aeshnidae	<i>Anax speratus</i>	GBIF, VM	Orycteropodidae	<i>Orycteropus afer</i>	VM
Aeshnidae	<i>Pinheyschna subpupillata</i>	VM	Procaviidae	<i>Procavia capensis</i>	GBIF, VM
Aeshnidae	<i>Zosteraeschna minuscula</i>	GBIF	Soricidae	<i>Crocidura</i> sp.	VM
Aleyrodidae	<i>Aleurothrixus floccosus</i>	GBIF	Soricidae	<i>Myosorex varius</i>	VM
Aphididae	<i>Aphis nerii</i>	GBIF	Suidae	<i>Potamochoerus larvatus</i>	GBIF
Apidae	<i>Amegilla atrocincta</i>	GBIF	Suidae	<i>Potamochoerus porcus</i>	VM
Apidae	<i>Apis mellifera</i>	GBIF	Vespertilionidae	<i>Eptesicus hottentotus</i>	VM
Apidae	<i>Apis mellifera</i> subsp. <i>capensis</i>	GBIF	Vespertilionidae	<i>Neoromicia capensis</i>	GBIF
Apidae	<i>Xylocopa caffra</i>	GBIF	Viverridae	<i>Genetta genetta</i>	VM
Araneidae	<i>Argiope australis</i>	GBIF	Viverridae	<i>Genetta tigrina</i>	GBIF
Araneidae	<i>Argiope trifasciata</i>	GBIF	Agamidae	<i>Agama atra</i>	GBIF, VM



Family	Scientific Name	Source	Family	Scientific Name	Source
Araneidae	<i>Caerostris sexcupidata</i>	GBIF	Atractaspididae	<i>Homoroselaps lacteus</i>	GBIF, VM
Araneidae	<i>Trichonephila fenestrata</i> subsp. <i>fenestrata</i>	GBIF	Chamaeleonidae	<i>Bradypodion gutturale</i>	GBIF, VM
Armadillidiidae	<i>Armadillidium vulgare</i>	GBIF	Colubridae	<i>Crotaphopeltis hotamboeia</i>	GBIF, VM
Bacillidae	<i>Phalces brevis</i>	GBIF	Colubridae	<i>Dasypeltis scabra</i>	VM
Blaberidae	<i>Aptera fusca</i>	GBIF	Colubridae	<i>Dispholidus typus</i>	VM
Blattidae	<i>Deropeltis erythrocephala</i>	GBIF	Cordylidae	<i>Chamaesaura anguina</i>	GBIF, VM
Brachyceridae	<i>Brachycerus obesus</i>	GBIF	Cordylidae	<i>Cordylus cordylus</i>	GBIF, VM
Buprestidae	<i>Acmaeodera karooana</i>	GBIF	Cordylidae	<i>Hemicordylus capensis</i>	VM
Buprestidae	<i>Acmaeodera trifasciata</i>	GBIF	Cordylidae	<i>Karusasaurus polyzonus</i>	VM
Buprestidae	<i>Julodis viridipes</i>	GBIF	Cordylidae	<i>Pseudocordylus microlepidotus</i>	GBIF, VM
Buprestidae	<i>Neojulodis picta</i> subsp. <i>picta</i>	GBIF	Elapidae	<i>Naja nivea</i>	GBIF, VM
Buthidae	<i>Parabuthus planicauda</i>	GBIF	Gekkonidae	<i>Afrogecko porphyreus</i>	VM
Buthidae	<i>Uroplectes carinatus</i>	GBIF	Gekkonidae	<i>Chondrodactylus bibronii</i>	GBIF, VM
Buthidae	<i>Uroplectes lineatus</i>	GBIF	Gekkonidae	<i>Goggia incognita</i>	VM
Calliphoridae	<i>Chrysomya chloropyga</i>	GBIF	Gekkonidae	<i>Goggia microlepidota</i>	VM
Carabidae	<i>Anthia decemguttata</i>	GBIF	Gekkonidae	<i>Lygodactylus capensis</i>	GBIF
Carabidae	<i>Cicindela lurida</i>	GBIF	Gekkonidae	<i>Pachydactylus geitje</i>	GBIF, VM
Cecidomyiidae	<i>Dasineura rubiformis</i>	GBIF	Gekkonidae	<i>Pachydactylus maculatus</i>	VM
Cerambycidae	<i>Anubis scalaris</i> subsp. <i>scalaris</i>	GBIF	Gekkonidae	<i>Pachydactylus oculatus</i>	GBIF, VM
Cerambycidae	<i>Litopus latipes</i>	GBIF	Gerrhosauridae	<i>Tetradactylus tetradactylus</i>	VM
Cerambycidae	<i>Phoracantha semipunctata</i>	GBIF	Lacertidae	<i>Australolacerta australis</i>	GBIF, VM
Cerambycidae	<i>Promeces longipes</i>	GBIF	Lacertidae	<i>Meroles knoxii</i>	VM
Cerambycidae	<i>Zographus oculator</i>	GBIF	Lacertidae	<i>Nucras tessellata</i>	VM
Cercopidae	<i>Locris arithmetica</i>	GBIF	Lacertidae	<i>Pedioplanis burchelli</i>	VM





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Family	Scientific Name	Source	Family	Scientific Name	Source
Chrysomelidae	<i>Conchyloctenia punctata</i>	GBIF	Lacertidae	<i>Pedioplanis lineocellata</i>	GBIF, VM
Cleridae	<i>Trichodes aulicus</i>	GBIF	Lacertidae	<i>Tropidosaura gularis</i>	VM
Coccinellidae	<i>Harmonia axyridis</i>	GBIF	Lacertidae	<i>Tropidosaura montana</i> subsp. <i>montana</i>	VM
Coccinellidae	<i>Hippodamia variegata</i>	GBIF	Lamprophiidae	<i>Boaedon capensis</i>	VM
Coccinellidae	<i>Lioadalia flavomaculata</i>	GBIF	Lamprophiidae	<i>Duberria lutrix lutrix</i>	VM
Coccinellidae	<i>Psyllobora variegata</i>	GBIF	Lamprophiidae	<i>Lamprophis aurora</i>	VM
Coenagrionidae	<i>Africallagma glaucum</i>	GBIF, VM	Lamprophiidae	<i>Lamprophis guttatus</i>	GBIF, VM
Coenagrionidae	<i>Ischnura senegalensis</i>	GBIF, VM	Lamprophiidae	<i>Lycodonomorphus rufulus</i>	VM
Coenagrionidae	<i>Pseudagrion furcigerum</i>	GBIF	Lamprophiidae	<i>Pseudaspis cana</i>	VM
Coenagrionidae	<i>Pseudagrion kersteni</i>	GBIF, VM	Pelomedusidae	<i>Pelomedusa galeata</i>	GBIF
Coenagrionidae	<i>Pseudagrion massaicum</i>	GBIF	Psammophiidae	<i>Psammophis notostictus</i>	GBIF, VM
Corydalidae	<i>Chloroniella peringueyi</i>	GBIF	Psammophiidae	<i>Psammophylax rhombeatus</i>	GBIF, VM
Corydalidae	<i>Platychauliodes capensis</i>	VM	Scincidae	<i>Acontias meleagris</i>	VM
Corydalidae	<i>Taeniochauliodes ochraceopennis</i>	VM	Scincidae	<i>Trachylepis capensis</i>	VM
Crambidae	<i>Antigastra morysalis</i>	GBIF	Scincidae	<i>Trachylepis homalocephala</i>	GBIF, VM
Curculionidae	<i>Lixus schoenherri</i>	GBIF	Scincidae	<i>Trachylepis variegata</i>	GBIF, VM
Deroplatyidae	<i>Popa spurca</i>	GBIF	Testudinidae	<i>Chersina angulata</i>	GBIF, VM
Dinidoridae	<i>Coridius nubilus</i>	GBIF	Testudinidae	<i>Homopus areolatus</i>	GBIF, VM
Erebidae	<i>Bracharoa tricolor</i>	GBIF	Testudinidae	<i>Psammobates tentorius</i> subsp.	VM
Erebidae	<i>Dysgonia torrida</i>	GBIF	Testudinidae	<i>Psammobates tentorius</i> subsp. <i>tentorius</i>	VM
Erebidae	<i>Grammodes stolidia</i>	GBIF, VM	Testudinidae	<i>Stigmochelys pardalis</i>	GBIF
Erebidae	<i>Lacipa picta</i>	GBIF	Typhlopidae	<i>Rhinotyphlops lalandei</i>	VM





# ERM

Family	Scientific Name	Source	Family	Scientific Name	Source
Erebidae	<i>Laelia fusca</i>	GBIF	Viperidae	<i>Bitis arietans</i>	GBIF, VM
Erebidae	<i>Rhodogastria amasis</i>	GBIF	Viperidae	<i>Bitis rubida</i>	GBIF

## APPENDIX D COMPREHENSIVE LIST OF PLANT SPECIES POTENTIALLY PRESENT ON SITE

A comprehensive list of all plant species that are potentially present in the proposed Hugo WEF PAOI and their associated data sources are presented in Table 21 below. The sources include the SANBI POSA Brahms (B) database, the Global Biodiversity Information Facility (GBIF) database, The DFFE Online Screening Tool (ST) and the Biodiversity and Development Institute’s Virtual Museum (VM) database.

**TABLE 21: COMPREHENSIVE LIST OF PLANT SPECIES POTENTIALLY PRESENT WITHIN THE PROPOSED HUGO WEF PROJECT PAOI.**

Family	Species	Source	Family	Species	Source
Acanthaceae	<i>Blepharis capensis</i>	GBIF	Fabaceae	<i>Aspalathus shawii</i> subsp. <i>shawii</i>	B, GBIF
Achariaceae	<i>Kiggelaria africana</i>	GBIF	Fabaceae	<i>Aspalathus simii</i>	B
Agavaceae	<i>Agave sisalana</i>	B	Fabaceae	<i>Aspalathus smithii</i>	B
Aizoaceae	<i>Acrodon bellidiflorus</i>	GBIF	Fabaceae	<i>Aspalathus spiculata</i>	GBIF
Aizoaceae	<i>Acrosanthes anceps</i>	B	Fabaceae	<i>Aspalathus spinosa</i>	GBIF
Aizoaceae	<i>Acrosanthes humifusa</i>	GBIF	Fabaceae	<i>Aspalathus spinosa</i> subsp. <i>flavispina</i>	GBIF
Aizoaceae	<i>Acrosanthes parviflora</i>	GBIF	Fabaceae	<i>Aspalathus spinosa</i> subsp. <i>spinosa</i>	GBIF
Aizoaceae	<i>Aizoon africanum</i>	GBIF	Fabaceae	<i>Aspalathus stenophylla</i>	B
Aizoaceae	<i>Amphibolia laevis</i>	B	Fabaceae	<i>Aspalathus steudeliana</i>	B
Aizoaceae	<i>Antimima aristulata</i>	GBIF	Fabaceae	<i>Aspalathus tridentata</i> subsp. <i>tridentata</i>	B
Aizoaceae	<i>Antimima condensa</i>	B, ST	Fabaceae	<i>Aspalathus triquetra</i>	B
Aizoaceae	<i>Antimima leipoldtii</i>	GBIF	Fabaceae	<i>Aspalathus wittebergensis</i>	B
Aizoaceae	<i>Antimima mutica</i>	B, GBIF	Fabaceae	<i>Bauhinia galpinii</i>	GBIF
Aizoaceae	<i>Antimima peersii</i>	GBIF	Fabaceae	<i>Calobota cytisoides</i>	GBIF
Aizoaceae	<i>Braunsia apiculata</i>	GBIF	Fabaceae	<i>Calobota elongata</i>	B



Family	Species	Source	Family	Species	Source
Aizoaceae	<i>Carpobrotus edulis</i>	B, GBIF	Fabaceae	<i>Crotalaria excisa</i> <i>subsp. excisa</i>	GBIF
Aizoaceae	<i>Carpobrotus edulis</i> <i>subsp. edulis</i>	GBIF	Fabaceae	<i>Cyclopia genistoides</i>	GBIF
Aizoaceae	<i>Carpobrotus mellei</i>	GBIF	Fabaceae	<i>Cyclopia glabra</i>	B
Aizoaceae	<i>Cephalophyllum</i> <i>alstonii</i>	B	Fabaceae	<i>Dipogon lignosus</i>	B, GBIF
Aizoaceae	<i>Cephalophyllum</i> <i>ceresianum</i>	B	Fabaceae	<i>Gleditsia triacanthos</i>	GBIF
Aizoaceae	<i>Cephalophyllum</i> <i>diversiphyllum</i>	GBIF	Fabaceae	<i>Hypocalyptus</i> <i>coluteoides</i>	GBIF
Aizoaceae	<i>Cephalophyllum loreum</i>	GBIF	Fabaceae	<i>Hypocalyptus</i> <i>oxalidifolius</i>	GBIF
Aizoaceae	<i>Cephalophyllum</i> <i>purpureoalbum</i>	GBIF	Fabaceae	<i>Hypocalyptus</i> <i>sophoroides</i>	B, GBIF
Aizoaceae	<i>Cephalophyllum</i> <i>subulatoides</i>	B, GBIF	Fabaceae	<i>Indigofera burchellii</i>	GBIF
Aizoaceae	<i>Cheiridopsis</i> <i>namaquensis</i>	GBIF	Fabaceae	<i>Indigofera capillaris</i>	B, GBIF
Aizoaceae	<i>Cleretum papulosum</i>	GBIF	Fabaceae	<i>Indigofera</i> <i>complicata</i>	GBIF
Aizoaceae	<i>Cleretum papulosum</i> <i>subsp. papulosum</i>	GBIF	Fabaceae	<i>Indigofera frutescens</i>	B
Aizoaceae	<i>Conophytum</i> <i>bicarinatum</i>	B	Fabaceae	<i>Indigofera</i> <i>heterophylla</i>	B, GBIF
Aizoaceae	<i>Conophytum</i> <i>minusculum</i>	B	Fabaceae	<i>Indigofera humifusa</i>	B, GBIF
Aizoaceae	<i>Conophytum</i> <i>obcordellum</i> subsp. <i>obcordellum</i>	B	Fabaceae	<i>Indigofera meyeriana</i>	GBIF
Aizoaceae	<i>Conophytum</i> <i>truncatum</i> subsp. <i>viridicatum</i>	GBIF	Fabaceae	<i>Indigofera pilgeriana</i>	GBIF
Aizoaceae	<i>Drosanthemum</i> <i>acuminatum</i>	GBIF	Fabaceae	<i>Indigofera priorii</i>	GBIF
Aizoaceae	<i>Drosanthemum</i> <i>brevifolium</i>	B	Fabaceae	<i>Indigofera</i> sp.	GBIF
Aizoaceae	<i>Drosanthemum</i> <i>calycinum</i>	GBIF	Fabaceae	<i>Lebeckia pauciflora</i>	B, GBIF



Family	Species	Source	Family	Species	Source
Aizoaceae	<i>Drosanthemum collinum</i>	B	Fabaceae	<i>Lessertia frutescens</i>	GBIF
Aizoaceae	<i>Drosanthemum comptonii</i>	B	Fabaceae	<i>Lessertia frutescens</i> subsp. <i>frutescens</i>	B, GBIF
Aizoaceae	<i>Drosanthemum delicatulum</i>	B	Fabaceae	<i>Lessertia frutescens</i> subsp. <i>microphylla</i>	GBIF
Aizoaceae	<i>Drosanthemum expersum</i>	B	Fabaceae	<i>Lessertia stenoloba</i>	B
Aizoaceae	<i>Drosanthemum giffenii</i>	GBIF, ST	Fabaceae	<i>Liparia latifolia</i>	GBIF
Aizoaceae	<i>Drosanthemum globosum</i>	GBIF	Fabaceae	<i>Lotononis argentea</i>	GBIF, ST
Aizoaceae	<i>Drosanthemum gracillimum</i>	GBIF	Fabaceae	<i>Lotononis brevicaulis</i>	B
Aizoaceae	<i>Drosanthemum hispidum</i>	GBIF	Fabaceae	<i>Lotononis gracilifolia</i>	GBIF, ST
Aizoaceae	<i>Drosanthemum karrooense</i>	GBIF	Fabaceae	<i>Medicago polymorpha</i>	GBIF
Aizoaceae	<i>Drosanthemum parvifolium</i>	GBIF	Fabaceae	<i>Medicago sativa</i>	GBIF
Aizoaceae	<i>Drosanthemum praecultum</i>	GBIF	Fabaceae	<i>Melilotus indicus</i>	GBIF
Aizoaceae	<i>Drosanthemum pulchrum</i>	GBIF	Fabaceae	<i>Otholobium</i> sp. nov (Storton & Zanotvska 11281 NBG)	ST
Aizoaceae	<i>Drosanthemum semiglobosum</i>	B, GBIF	Fabaceae	<i>Otholobium striatum</i>	B
Aizoaceae	<i>Drosanthemum speciosum</i>	GBIF	Fabaceae	<i>Podalyria calyptрата</i>	GBIF
Aizoaceae	<i>Drosanthemum striatum</i>	B	Fabaceae	<i>Podalyria myrtillifolia</i>	GBIF
Aizoaceae	<i>Drosanthemum thudichumii</i>	B	Fabaceae	<i>Prosopis glandulosa</i> var. <i>torreyana</i>	B
Aizoaceae	<i>Drosanthemum tuberculiferum</i>	GBIF, ST	Fabaceae	<i>Psoralea candicans</i>	GBIF
Aizoaceae	<i>Drosanthemum worcesterense</i>	ST	Fabaceae	<i>Psoralea ensifolia</i>	GBIF
Aizoaceae	<i>Erepsia aspera</i>	B	Fabaceae	<i>Psoralea hirta</i>	GBIF
Aizoaceae	<i>Erepsia bracteata</i>	GBIF	Fabaceae	<i>Psoralea odoratissima</i>	GBIF



Family	Species	Source	Family	Species	Source
Aizoaceae	<i>Erepsia gracilis</i>	B	Fabaceae	<i>Psoralea ramulosa</i>	B
Aizoaceae	<i>Esterhuysenia alpina</i>	B	Fabaceae	<i>Psoralea speciosa</i>	GBIF
Aizoaceae	<i>Esterhuysenia inlaudens</i>	ST	Fabaceae	<i>Psoralea spicata</i>	GBIF
Aizoaceae	<i>Esterhuysenia stokoei</i>	B	Fabaceae	<i>Psoralea spissa</i>	GBIF
Aizoaceae	<i>Galenia africana</i>	B	Fabaceae	<i>Psoralea striata</i>	GBIF
Aizoaceae	<i>Galenia fruticosa</i>	B	Fabaceae	<i>Psoralea usitata</i>	B
Aizoaceae	<i>Galenia procumbens</i>	B	Fabaceae	<i>Psoralea verrucosa</i>	B, GBIF
Aizoaceae	<i>Gibbaeum gibbosum</i>	GBIF	Fabaceae	<i>Rafnia amplexicaulis</i>	B
Aizoaceae	<i>Gibbaeum pubescens</i>	B	Fabaceae	<i>Rafnia capensis</i> subsp. <i>capensis</i>	B
Aizoaceae	<i>Glottiphyllum depressum</i>	GBIF	Fabaceae	<i>Rafnia capensis</i> subsp. <i>dichotoma</i>	B
Aizoaceae	<i>Hereroa acuminata</i>	GBIF	Fabaceae	<i>Rafnia rostrata</i> subsp. <i>rostrata</i>	B
Aizoaceae	<i>Lampranthus aduncus</i>	GBIF	Fabaceae	<i>Senna multiglandulosa</i>	GBIF
Aizoaceae	<i>Lampranthus caudatus</i>	B	Fabaceae	Sensitive Species 1209	B
Aizoaceae	<i>Lampranthus dissimilis</i>	B	Fabaceae	Sensitive Species 142	GBIF
Aizoaceae	<i>Lampranthus elegans</i>	GBIF	Fabaceae	Sensitive Species 207	B
Aizoaceae	<i>Lampranthus falcatus</i>	B, GBIF	Fabaceae	Sensitive Species 654	B
Aizoaceae	<i>Lampranthus francesiae</i>	B	Fabaceae	Sensitive Species 692	B
Aizoaceae	<i>Lampranthus laetus</i>	B	Fabaceae	Sensitive Species 871	GBIF
Aizoaceae	<i>Lampranthus mucronatus</i>	B	Fabaceae	<i>Sesbania punicea</i>	GBIF
Aizoaceae	<i>Lampranthus pocockiae</i>	B	Fabaceae	<i>Stirtonanthus insignis</i>	B, GBIF
Aizoaceae	<i>Lampranthus spiniformis</i>	GBIF	Fabaceae	<i>Tephrosia capensis</i>	GBIF
Aizoaceae	<i>Leipoldtia schultzei</i>	GBIF	Fabaceae	<i>Trifolium repens</i>	GBIF
Aizoaceae	<i>Lithops comptonii</i>	B	Fabaceae	<i>Vachellia karroo</i>	B, GBIF
Aizoaceae	<i>Malephora lutea</i>	GBIF	Fabaceae	<i>Vachellia sieberiana</i>	GBIF
Aizoaceae	<i>Mesembryanthemum crystallinum</i>	B, GBIF	Fabaceae	<i>Vicia benghalensis</i>	GBIF





Family	Species	Source	Family	Species	Source
Aizoaceae	<i>Mesembryanthemum grossum</i>	B	Fabaceae	<i>Vicia sativa</i>	GBIF
Aizoaceae	<i>Mesembryanthemum guerichianum</i>	GBIF	Fabaceae	<i>Wiborgia mucronata</i>	B
Aizoaceae	<i>Mesembryanthemum junceum</i>	GBIF	Fabaceae	<i>Wiborgia tenuifolia</i>	GBIF
Aizoaceae	<i>Mesembryanthemum longistylum</i>	B, GBIF	Fabaceae	<i>Xiphotheca fruticosa</i>	B, GBIF
Aizoaceae	<i>Mesembryanthemum noctiflorum subsp. defoliatum</i>	GBIF	Fabroniaceae	<i>Ischyrodon lepturus</i>	GBIF
Aizoaceae	<i>Mesembryanthemum nodiflorum</i>	GBIF	Fumariaceae	<i>Cysticapnos vesicaria subsp. vesicaria</i>	B, GBIF
Aizoaceae	<i>Mesembryanthemum tortuosum</i>	GBIF	Funariaceae	<i>Funaria spathulata</i>	B
Aizoaceae	<i>Octopoma nanum</i>	ST	Gentianaceae	<i>Chironia baccifera</i>	B, GBIF
Aizoaceae	<i>Oscularia deltoides</i>	B, GBIF	Gentianaceae	<i>Sebaea aurea</i>	GBIF
Aizoaceae	<i>Phiambolia francisci</i>	GBIF	Gentianaceae	<i>Sebaea exacoides</i>	GBIF
Aizoaceae	<i>Phiambolia gydouwensis</i>	GBIF	Gentianaceae	<i>Sebaea membranacea</i>	B
Aizoaceae	<i>Phiambolia littlewoodii</i>	ST	Geraniaceae	<i>Erodium cicutarium</i>	GBIF
Aizoaceae	<i>Psilocalon bicorne</i>	B	Geraniaceae	<i>Erodium moschatum</i>	B
Aizoaceae	<i>Ruschia amicornum</i>	B	Geraniaceae	<i>Geranium molle</i>	GBIF
Aizoaceae	<i>Ruschia approximata</i>	GBIF	Geraniaceae	<i>Pelargonium abrotanifolium</i>	B, GBIF
Aizoaceae	<i>Ruschia caroli</i>	GBIF	Geraniaceae	<i>Pelargonium alchemilloides</i>	GBIF
Aizoaceae	<i>Ruschia concava</i>	B	Geraniaceae	<i>Pelargonium alternans</i>	GBIF
Aizoaceae	<i>Ruschia divaricata</i>	B	Geraniaceae	<i>Pelargonium alternans subsp. alternans</i>	GBIF
Aizoaceae	<i>Ruschia frederici</i>	GBIF	Geraniaceae	<i>Pelargonium articulatum</i>	GBIF
Aizoaceae	<i>Ruschia lineolata</i>	B, GBIF	Geraniaceae	<i>Pelargonium burgerianum</i>	GBIF
Aizoaceae	<i>Ruschia multiflora</i>	B, GBIF	Geraniaceae	<i>Pelargonium buysii</i>	B



Family	Species	Source	Family	Species	Source
Aizoaceae	<i>Ruschia pungens</i>	B, GBIF	Geraniaceae	<i>Pelargonium candicans</i>	B, GBIF
Aizoaceae	<i>Ruschia rigida</i>	B	Geraniaceae	<i>Pelargonium carnosum</i>	B, GBIF
Aizoaceae	<i>Ruschia tenella</i>	GBIF	Geraniaceae	<i>Pelargonium carnosum subsp. ferulaceum</i>	GBIF
Aizoaceae	<i>Ruschia tumidula</i>	B	Geraniaceae	<i>Pelargonium caucalifolium subsp. caucalifolium</i>	B, GBIF
Aizoaceae	<i>Ruschiella argentea</i>	B, GBIF	Geraniaceae	<i>Pelargonium citronellum</i>	GBIF
Aizoaceae	<i>Ruschiella henricii</i>	B	Geraniaceae	<i>Pelargonium columbinum</i>	GBIF
Aizoaceae	<i>Ruschiella lunulata</i>	B, GBIF	Geraniaceae	<i>Pelargonium coronopifolium</i>	GBIF
Aizoaceae	<i>Smicrostigma viride</i>	GBIF	Geraniaceae	<i>Pelargonium crispum</i>	B, GBIF
Aizoaceae	<i>Tanquana prismatica</i>	B	Geraniaceae	<i>Pelargonium crithmifolium</i>	B, GBIF
Aizoaceae	<i>Tetragonia fruticosa</i>	B	Geraniaceae	<i>Pelargonium elongatum</i>	B, GBIF
Aizoaceae	<i>Tetragonia saligna</i>	B, GBIF	Geraniaceae	<i>Pelargonium englerianum</i>	GBIF
Aizoaceae	<i>Tetragonia sarcophylla</i>	B	Geraniaceae	<i>Pelargonium fissifolium</i>	GBIF
Aizoaceae	<i>Trichodiadema marlothii</i>	B, GBIF	Geraniaceae	<i>Pelargonium glutinosum</i>	B, GBIF
Aizoaceae	<i>Trichodiadema pomeridianum</i>	GBIF	Geraniaceae	<i>Pelargonium grossularioides</i>	GBIF
Aizoaceae	<i>Vlokia ater</i>	GBIF	Geraniaceae	<i>Pelargonium hermaniifolium</i>	GBIF
Alliaceae	<i>Tulbaghia capensis</i>	B, GBIF	Geraniaceae	<i>Pelargonium hispidum</i>	B, GBIF
Amaranthaceae	<i>Atriplex lindleyi subsp. inflata</i>	GBIF	Geraniaceae	<i>Pelargonium hypoleucum</i>	GBIF
Amaranthaceae	<i>Atriplex nummularia</i>	GBIF	Geraniaceae	<i>Pelargonium hystrix</i>	GBIF
Amaranthaceae	<i>Atriplex semibaccata</i>	B, GBIF	Geraniaceae	<i>Pelargonium laevigatum subsp. diversifolium</i>	GBIF



Family	Species	Source	Family	Species	Source
Amaranthaceae	<i>Caroxylon aphyllum</i>	GBIF	Geraniaceae	<i>Pelargonium laevigatum</i> subsp. <i>laevigatum</i>	GBIF
Amaryllidaceae	<i>Agapanthus praecox</i> subsp. <i>praecox</i>	GBIF	Geraniaceae	<i>Pelargonium lanceolatum</i>	B, GBIF
Amaryllidaceae	<i>Allium synnotii</i>	GBIF	Geraniaceae	<i>Pelargonium lobatum</i>	GBIF
Amaryllidaceae	<i>Boophone disticha</i>	GBIF	Geraniaceae	<i>Pelargonium longicaule</i> var. <i>longicaule</i>	GBIF
Amaryllidaceae	<i>Crossyne guttata</i>	GBIF	Geraniaceae	<i>Pelargonium longifolium</i>	B
Amaryllidaceae	<i>Cyrtanthus angustifolius</i>	B, GBIF	Geraniaceae	<i>Pelargonium luteolum</i>	GBIF
Amaryllidaceae	<i>Gethyllis campanulata</i>	B	Geraniaceae	<i>Pelargonium luteopetalum</i>	GBIF
Amaryllidaceae	<i>Gethyllis transkarooica</i>	B	Geraniaceae	<i>Pelargonium multicaule</i> subsp. <i>multicaule</i>	GBIF
Amaryllidaceae	<i>Gethyllis verrucosa</i>	GBIF	Geraniaceae	<i>Pelargonium myrrhifolium</i>	GBIF
Amaryllidaceae	<i>Gethyllis villosa</i>	B	Geraniaceae	<i>Pelargonium myrrhifolium</i> var. <i>coriandrifolium</i>	GBIF
Amaryllidaceae	<i>Haemanthus coccineus</i>	B, GBIF	Geraniaceae	<i>Pelargonium myrrhifolium</i> var. <i>myrrhifolium</i>	GBIF
Amaryllidaceae	<i>Haemanthus sanguineus</i>	GBIF	Geraniaceae	<i>Pelargonium nanum</i>	GBIF
Amaryllidaceae	<i>Hessea stellaris</i>	B, GBIF	Geraniaceae	<i>Pelargonium nervifolium</i>	GBIF
Amaryllidaceae	<i>Nerine humilis</i>	B, GBIF	Geraniaceae	<i>Pelargonium ovale</i> subsp. <i>hyalinum</i>	GBIF
Amaryllidaceae	<i>Nerine ridleyi</i>	B	Geraniaceae	<i>Pelargonium ovale</i> subsp. <i>ovale</i>	GBIF
Amaryllidaceae	<i>Nerine sarniensis</i>	B, GBIF	Geraniaceae	<i>Pelargonium papilionaceum</i>	GBIF
Amaryllidaceae	<i>Strumaria tenella</i>	B	Geraniaceae	<i>Pelargonium patulum</i>	GBIF



Family	Species	Source	Family	Species	Source
Amaryllidaceae	<i>Strumaria tenella</i> <i>subsp. tenella</i>	GBIF	Geraniaceae	<i>Pelargonium patulum</i> <i>var. patulum</i>	GBIF
Anacampserotaceae	<i>Anacampseros arachnoides</i>	GBIF	Geraniaceae	<i>Pelargonium patulum</i> <i>var. tenuilobum</i>	GBIF
Anacampserotaceae	<i>Anacampseros filamentosa</i>	B	Geraniaceae	<i>Pelargonium peltatum</i>	GBIF
Anacampserotaceae	<i>Anacampseros lanceolata</i> <i>subsp. lanceolata</i>	B	Geraniaceae	<i>Pelargonium pillansii</i>	GBIF
Anacampserotaceae	<i>Anacampseros retusa</i>	B, GBIF	Geraniaceae	<i>Pelargonium pilosellifolium</i>	GBIF
Anacampserotaceae	<i>Anacampseros telephiastrum</i>	GBIF	Geraniaceae	<i>Pelargonium rapaceum</i>	B, GBIF
Anacardiaceae	<i>Ozoroa dispar</i>	B	Geraniaceae	<i>Pelargonium ribifolium</i>	GBIF
Anacardiaceae	<i>Searsia angustifolia</i>	GBIF	Geraniaceae	<i>Pelargonium scabrum</i>	B, GBIF
Anacardiaceae	<i>Searsia dissecta</i>	B	Geraniaceae	<i>Pelargonium tetragonum</i>	GBIF
Anacardiaceae	<i>Searsia lancea</i>	GBIF	Geraniaceae	<i>Pelargonium trifidum</i>	GBIF
Anacardiaceae	<i>Searsia longispina</i>	GBIF	Geraniaceae	<i>Pelargonium triste</i>	GBIF
Anacardiaceae	<i>Searsia lucida</i>	GBIF	Geraniaceae	<i>Pelargonium zonale</i>	B, GBIF
Anacardiaceae	<i>Searsia pallens</i>	B, GBIF	Gleicheniaceae	<i>Gleichenia polypodioides</i>	B, GBIF
Anacardiaceae	<i>Searsia pyroides</i> <i>var. pyroides</i>	GBIF	Grimmiaceae	<i>Grimmia laevigata</i>	B
Anacardiaceae	<i>Searsia tomentosa</i>	GBIF	Grimmiaceae	<i>Grimmia pulvinata</i>	B
Anemiaceae	<i>Anemia caffrorum</i>	GBIF	Gunneraceae	<i>Gunnera perpensa</i>	GBIF
Apiaceae	<i>Anginon difforme</i>	GBIF	Haemodoraceae	<i>Dilatris ixiioides</i>	B, GBIF
Apiaceae	<i>Anginon fruticosum</i>	B, GBIF	Haemodoraceae	<i>Wachendorfia multiflora</i>	GBIF
Apiaceae	<i>Anginon swellendamense</i>	GBIF	Haemodoraceae	<i>Wachendorfia paniculata</i>	B, GBIF
Apiaceae	<i>Apium graveolens</i>	B	Haemodoraceae	<i>Wachendorfia thyrsiflora</i>	GBIF
Apiaceae	<i>Arctopus echinatus</i>	GBIF	Hemerocallidaceae	<i>Caesia contorta</i>	B, GBIF



Family	Species	Source	Family	Species	Source
Apiaceae	<i>Dasispermum tenue</i>	GBIF	Hyacinthaceae	<i>Albuca canadensis</i>	GBIF
Apiaceae	<i>Deverra denudata</i> subsp. <i>aphylla</i>	B	Hyacinthaceae	<i>Albuca longipes</i>	GBIF
Apiaceae	<i>Itasina filifolia</i>	B	Hyacinthaceae	<i>Albuca setosa</i>	GBIF
Apiaceae	<i>Lichtensteinia latifolia</i>	GBIF	Hyacinthaceae	<i>Albuca suaveolens</i>	GBIF
Apiaceae	<i>Notobubon capense</i>	GBIF	Hyacinthaceae	<i>Albuca viscosa</i>	B, GBIF
Apiaceae	<i>Notobubon gummiferum</i>	GBIF	Hyacinthaceae	<i>Drimia intricata</i>	B
Apiaceae	<i>Notobubon sonderi</i>	GBIF	Hyacinthaceae	<i>Drimia multifolia</i>	B
Apiaceae	<i>Notobubon tenuifolium</i>	GBIF	Hyacinthaceae	<i>Drimia physodes</i>	B, GBIF
Apiaceae	<i>Peucedanum ferulaceum</i>	B	Hyacinthaceae	<i>Lachenalia ameliae</i>	B
Apocynaceae	<i>Carissa bispinosa</i>	B, GBIF	Hyacinthaceae	<i>Lachenalia attenuata</i>	B
Apocynaceae	<i>Carissa haematocarpa</i>	GBIF	Hyacinthaceae	<i>Lachenalia aurioliae</i>	B, GBIF
Apocynaceae	<i>Ceropegia occulta</i>	GBIF	Hyacinthaceae	<i>Lachenalia comptonii</i>	B
Apocynaceae	<i>Cynanchum obtusifolium</i>	GBIF	Hyacinthaceae	<i>Lachenalia contaminata</i>	B
Apocynaceae	<i>Cynanchum viminale</i>	GBIF	Hyacinthaceae	<i>Lachenalia ensifolia</i>	GBIF
Apocynaceae	<i>Cynanchum viminale</i> subsp. <i>viminale</i>	GBIF	Hyacinthaceae	<i>Lachenalia judithiae</i>	GBIF
Apocynaceae	<i>Duvalia caespitosa</i>	GBIF	Hyacinthaceae	<i>Lachenalia juncifolia</i>	B, GBIF
Apocynaceae	<i>Duvalia elegans</i>	GBIF	Hyacinthaceae	<i>Lachenalia mutabilis</i>	GBIF
Apocynaceae	<i>Eustegia minuta</i>	GBIF	Hyacinthaceae	<i>Lachenalia obscura</i>	B, GBIF
Apocynaceae	<i>Gomphocarpus cancellatus</i>	GBIF	Hyacinthaceae	<i>Lachenalia orchioides</i>	GBIF
Apocynaceae	<i>Gomphocarpus fruticosus</i>	GBIF	Hyacinthaceae	<i>Lachenalia perryae</i>	B, GBIF
Apocynaceae	<i>Huernia pillansii</i>	B	Hyacinthaceae	<i>Lachenalia unifolia</i>	GBIF
Apocynaceae	<i>Microlooma sagittatum</i>	B, GBIF	Hyacinthaceae	<i>Lachenalia zeyheri</i>	B
Apocynaceae	<i>Microlooma tenuifolium</i>	GBIF	Hyacinthaceae	<i>Massonia depressa</i>	B, GBIF
Apocynaceae	<i>Orbea variegata</i>	GBIF	Hyacinthaceae	<i>Ornithogalum dubium</i>	B, GBIF
Apocynaceae	<i>Piaranthus geminatus</i>	GBIF	Hyacinthaceae	<i>Ornithogalum hispidum</i>	B, GBIF



Family	Species	Source	Family	Species	Source
Apocynaceae	<i>Quaqua arenicola</i> subsp. <i>arenicola</i>	B	Hyacinthaceae	<i>Ornithogalum maculatum</i>	B, GBIF
Apocynaceae	<i>Quaqua arida</i>	GBIF	Hyacinthaceae	<i>Veltheimia capensis</i>	B, GBIF
Apocynaceae	<i>Quaqua linearis</i>	GBIF	Hydnoraceae	<i>Hydnora africana</i>	GBIF
Apocynaceae	<i>Quaqua mammillaris</i>	GBIF	Hymenophyllaceae	<i>Hymenophyllum tunbrigense</i>	GBIF
Apocynaceae	<i>Quaqua pillansii</i>	GBIF	Hypoxidaceae	<i>Pauridia aquatica</i>	B
Apocynaceae	<i>Quaqua ramosa</i>	GBIF	Hypoxidaceae	<i>Pauridia capensis</i>	B, GBIF
Apocynaceae	<i>Sarcostemma viminale</i> subsp. <i>viminale</i>	B	Hypoxidaceae	<i>Pauridia maryae</i>	GBIF
Apocynaceae	<i>Schizoglossum aschersonianum</i>	GBIF	Hypoxidaceae	<i>Pauridia serrata</i>	GBIF
Apocynaceae	<i>Schizoglossum aschersonianum</i> var. <i>aschersonianum</i>	GBIF	Hypoxidaceae	<i>Pauridia serrata</i> subsp. <i>serrata</i>	B
Apocynaceae	<i>Stapelia hirsuta</i>	GBIF	Hypoxidaceae	<i>Spiloxene aemulans</i>	B
Apocynaceae	<i>Stapelia hirsuta</i> var. <i>hirsuta</i>	GBIF	Hypoxidaceae	<i>Spiloxene aquatica</i>	B
Apocynaceae	<i>Stapelia paniculata</i> subsp. <i>scitula</i>	GBIF	Hypoxidaceae	<i>Spiloxene capensis</i>	B
Apocynaceae	<i>Stapelia rufa</i>	GBIF	Hypoxidaceae	<i>Spiloxene ovata</i>	B
Apocynaceae	<i>Stapeliopsis saxatilis</i>	GBIF	Hypoxidaceae	<i>Spiloxene serrata</i> var. <i>serrata</i>	B
Apocynaceae	<i>Tridentea gemmiflora</i>	GBIF	Iridaceae	<i>Afrocrocus unifolius</i>	B, GBIF
Apocynaceae	<i>Vinca major</i>	GBIF	Iridaceae	<i>Aristea spiralis</i>	GBIF
Apocynaceae	<i>Xysmalobium gomphocarpoides</i>	GBIF	Iridaceae	<i>Babiana ambigua</i>	GBIF
Apocynaceae	<i>Xysmalobium gomphocarpoides</i> var. <i>gomphocarpoides</i>	GBIF	Iridaceae	<i>Babiana cuneata</i>	GBIF
Apocynaceae	<i>Xysmalobium undulatum</i>	GBIF	Iridaceae	<i>Babiana nana</i>	GBIF
Araceae	<i>Zantedeschia aethiopica</i>	B, GBIF	Iridaceae	<i>Babiana patula</i>	GBIF
Asparagaceae	<i>Asparagus aethiopicus</i>	GBIF	Iridaceae	<i>Babiana sambucina</i>	B, GBIF
Asparagaceae	<i>Asparagus asparagoides</i>	GBIF	Iridaceae	<i>Babiana sambucina</i> subsp. <i>sambucina</i>	B, GBIF





Family	Species	Source	Family	Species	Source
Asparagaceae	<i>Asparagus capensis</i>	GBIF	Iridaceae	<i>Babiana scariosa</i>	B
Asparagaceae	<i>Asparagus kraussianus</i>	B	Iridaceae	<i>Bobartia orientalis</i> <i>subsp. orientalis</i>	GBIF
Asparagaceae	<i>Asparagus lignosus</i>	GBIF	Iridaceae	<i>Chasmanthe</i> <i>aethiopica</i>	GBIF
Asparagaceae	<i>Asparagus mollis</i>	ST	Iridaceae	<i>Chasmanthe bicolor</i>	GBIF
Asparagaceae	<i>Asparagus mucronatus</i>	B	Iridaceae	<i>Ferraria crispa</i>	B
Asparagaceae	<i>Asparagus retrofractus</i>	B, GBIF	Iridaceae	<i>Ferraria divaricata</i> <i>subsp. divaricata</i>	B
Asparagaceae	<i>Asparagus rubicundus</i>	B, GBIF	Iridaceae	<i>Ferraria variabilis</i>	GBIF
Asparagaceae	<i>Asparagus scandens</i>	GBIF	Iridaceae	<i>Freesia</i> <i>caryophyllacea</i>	GBIF
Asparagaceae	<i>Asparagus suaveolens</i>	B	Iridaceae	<i>Freesia refracta</i>	GBIF
Asparagaceae	<i>Chlorophytum crispum</i>	GBIF	Iridaceae	<i>Geissorhiza</i> <i>heterostyla</i>	B, GBIF
Asparagaceae	<i>Chlorophytum</i> <i>graminifolium</i>	GBIF	Iridaceae	<i>Geissorhiza</i> <i>heterostyla</i> subsp. <i>rosea</i>	B
Asparagaceae	<i>Dipcadi brevifolium</i>	GBIF	Iridaceae	<i>Geissorhiza juncea</i>	B
Asparagaceae	<i>Drimia capensis</i>	GBIF	Iridaceae	<i>Geissorhiza</i> <i>ornithogaloides</i>	GBIF
Asparagaceae	<i>Drimia elata</i>	GBIF	Iridaceae	<i>Geissorhiza</i> <i>ornithogaloides</i> subsp. <i>marlothii</i>	B, GBIF
Asparagaceae	<i>Drimia exuviata</i>	GBIF	Iridaceae	<i>Geissorhiza</i> <i>ornithogaloides</i> subsp. <i>ornithogaloides</i>	GBIF
Asparagaceae	<i>Drimia fragrans</i>	GBIF	Iridaceae	<i>Geissorhiza ovalifolia</i>	B
Asparagaceae	<i>Drimia platyphylla</i>	GBIF	Iridaceae	<i>Geissorhiza ovata</i>	GBIF
Asparagaceae	<i>Drimia sigmoidea</i>	GBIF	Iridaceae	<i>Gladiolus alatus</i>	B, GBIF
Asparagaceae	<i>Eriospermum alcicorne</i>	GBIF	Iridaceae	<i>Gladiolus cardinalis</i>	B, GBIF
Asparagaceae	<i>Eriospermum dregei</i>	GBIF	Iridaceae	<i>Gladiolus carinatus</i>	B, GBIF
Asparagaceae	<i>Eriospermum</i> <i>paradoxum</i>	GBIF	Iridaceae	<i>Gladiolus carneus</i>	GBIF
Asparagaceae	<i>Eriospermum</i> <i>proliferum</i>	GBIF	Iridaceae	<i>Gladiolus ceresianus</i>	GBIF



Family	Species	Source	Family	Species	Source
Asparagaceae	<i>Eucomis regia</i>	GBIF	Iridaceae	<i>Gladiolus debilis</i>	GBIF
Asparagaceae	<i>Furcraea foetida</i>	GBIF	Iridaceae	<i>Gladiolus floribundus</i>	B, GBIF
Asparagaceae	<i>Ledebouria ovalifolia</i>	GBIF	Iridaceae	<i>Gladiolus gracilis</i>	GBIF
Asparagaceae	<i>Massonia setulosa</i>	GBIF	Iridaceae	<i>Gladiolus grandiflorus</i>	B, GBIF
Asparagaceae	<i>Massonia triflora</i>	GBIF	Iridaceae	<i>Gladiolus guthriei</i>	B, GBIF
Asparagaceae	<i>Ornithogalum graminifolium</i>	GBIF	Iridaceae	<i>Gladiolus inflatus</i>	GBIF
Asparagaceae	<i>Ornithogalum rupestre</i>	GBIF	Iridaceae	<i>Gladiolus liliaceus</i>	GBIF
Asphodelaceae	<i>Aloe chabaudii</i> var. <i>chabaudii</i>	B	Iridaceae	<i>Gladiolus maculatus</i>	B, GBIF
Asphodelaceae	<i>Aloe comosa</i>	B	Iridaceae	<i>Gladiolus patersoniae</i>	B
Asphodelaceae	<i>Aloe microstigma</i>	GBIF	Iridaceae	<i>Gladiolus permeabilis</i>	GBIF
Asphodelaceae	<i>Aloe perfoliata</i>	B, GBIF	Iridaceae	<i>Gladiolus permeabilis</i> subsp. <i>edulis</i>	B
Asphodelaceae	<i>Aloe striata</i>	B, GBIF	Iridaceae	<i>Gladiolus permeabilis</i> subsp. <i>permeabilis</i>	B, GBIF
Asphodelaceae	<i>Astroloba corrugata</i>	GBIF	Iridaceae	<i>Gladiolus quadrangularis</i>	B, GBIF
Asphodelaceae	<i>Bulbine abyssinica</i>	B, GBIF	Iridaceae	<i>Gladiolus rogersii</i>	B, GBIF
Asphodelaceae	<i>Bulbine frutescens</i>	GBIF	Iridaceae	<i>Gladiolus rudis</i>	B
Asphodelaceae	<i>Bulbine lagopus</i>	B, GBIF	Iridaceae	<i>Gladiolus scullyi</i>	B
Asphodelaceae	<i>Bulbine mesembryanthoides</i>	GBIF	Iridaceae	<i>Gladiolus stefaniae</i>	GBIF
Asphodelaceae	<i>Bulbine mesembryanthoides</i> subsp. <i>mesembryanthoides</i>	B	Iridaceae	<i>Gladiolus tristis</i>	GBIF
Asphodelaceae	<i>Bulbine praemorsa</i>	GBIF	Iridaceae	<i>Gladiolus venustus</i>	B, GBIF
Asphodelaceae	<i>Bulbine succulenta</i>	B, GBIF	Iridaceae	<i>Gladiolus virescens</i>	B, GBIF
Asphodelaceae	<i>Bulbinella cauda-felis</i>	B	Iridaceae	<i>Hesperantha acuta</i> subsp. <i>acuta</i>	B
Asphodelaceae	<i>Bulbinella elata</i>	B	Iridaceae	<i>Hesperantha bachmannii</i>	B, GBIF
Asphodelaceae	<i>Bulbinella latifolia</i> subsp. <i>denticulata</i>	B	Iridaceae	<i>Hesperantha cucullata</i>	GBIF



Family	Species	Source	Family	Species	Source
Asphodelaceae	<i>Bulbinella nutans</i>	B	Iridaceae	<i>Hesperantha falcata</i>	B, GBIF
Asphodelaceae	<i>Bulbinella nutans</i> subsp. <i>nutans</i>	B, GBIF	Iridaceae	<i>Hesperantha flava</i>	GBIF
Asphodelaceae	<i>Bulbinella nutans</i> subsp. <i>turfosicola</i>	B	Iridaceae	<i>Hesperantha humilis</i>	B, GBIF
Asphodelaceae	<i>Bulbinella triquetra</i>	B, GBIF	Iridaceae	<i>Hesperantha marlothii</i>	B
Asphodelaceae	<i>Gasteria disticha</i>	GBIF	Iridaceae	<i>Hesperantha radiata</i>	GBIF
Asphodelaceae	<i>Gasteria disticha</i> var. <i>disticha</i>	B, GBIF	Iridaceae	<i>Ixia capillaris</i>	B
Asphodelaceae	<i>Gasteria disticha</i> var. <i>langebergensis</i>	GBIF	Iridaceae	<i>Ixia exiliflora</i>	B
Asphodelaceae	<i>Gasteria retusa</i>	B	Iridaceae	<i>Ixia fucata</i>	GBIF, ST
Asphodelaceae	<i>Haworthia arachnoidea</i>	GBIF	Iridaceae	<i>Ixia latifolia</i>	B, GBIF
Asphodelaceae	<i>Haworthia arachnoidea</i> var. <i>arachnoidea</i>	B, GBIF	Iridaceae	<i>Ixia latifolia</i> var. <i>latifolia</i>	GBIF
Asphodelaceae	<i>Haworthia herbacea</i> var. <i>lupula</i>	B	Iridaceae	<i>Ixia mostertii</i>	B
Asphodelaceae	<i>Haworthia maculata</i>	B	Iridaceae	<i>Ixia nutans</i>	B
Asphodelaceae	<i>Haworthia maraisii</i>	GBIF	Iridaceae	<i>Ixia oxalidiflora</i>	B, GBIF, ST
Asphodelaceae	<i>Haworthia maraisii</i> var. <i>maraisii</i>	GBIF	Iridaceae	<i>Ixia paucifolia</i>	B, GBIF
Asphodelaceae	<i>Haworthia mucronata</i>	GBIF	Iridaceae	<i>Ixia polystachya</i>	B
Asphodelaceae	<i>Haworthia pulchella</i> var. <i>pulchella</i>	B, GBIF	Iridaceae	<i>Ixia simulans</i>	GBIF
Asphodelaceae	<i>Haworthia reticulata</i> var. <i>reticulata</i>	B	Iridaceae	<i>Ixia stenophylla</i>	GBIF
Asphodelaceae	<i>Haworthia venosa</i>	B	Iridaceae	<i>Ixia stolonifera</i>	B, GBIF
Asphodelaceae	<i>Kniphofia sarmentosa</i>	B, GBIF	Iridaceae	<i>Ixia vanzijliae</i>	B
Asphodelaceae	<i>Kniphofia uvaria</i>	B, GBIF	Iridaceae	<i>Lapeirousia plicata</i>	GBIF
Asphodelaceae	<i>Trachyandra flexifolia</i>	B	Iridaceae	<i>Lapeirousia pyramidalis</i>	GBIF
Asphodelaceae	<i>Trachyandra revoluta</i>	B	Iridaceae	<i>Lapeirousia pyramidalis</i> subsp. <i>pyramidalis</i>	GBIF
Asphodelaceae	<i>Tulista pumila</i>	GBIF	Iridaceae	<i>Melasphaerula graminea</i>	B, GBIF



Family	Species	Source	Family	Species	Source
Asteraceae	<i>Asplenium aethiopicum</i>	GBIF	Iridaceae	<i>Moraea angusta</i>	B
Asteraceae	<i>Achyranthemum paniculatum</i>	B, GBIF	Iridaceae	<i>Moraea ciliata</i>	B, GBIF
Asteraceae	<i>Anderbergia elsiae</i>	ST	Iridaceae	<i>Moraea cookii</i>	GBIF
Asteraceae	<i>Arctotheca calendula</i>	GBIF	Iridaceae	<i>Moraea crista</i>	GBIF
Asteraceae	<i>Arctotheca prostrata</i>	GBIF	Iridaceae	<i>Moraea cuspidata</i>	B
Asteraceae	<i>Arctotis arctotoides</i>	B	Iridaceae	<i>Moraea falcifolia</i>	GBIF
Asteraceae	<i>Arctotis candida</i>	B	Iridaceae	<i>Moraea fugacissima</i>	GBIF
Asteraceae	<i>Arctotis dregei</i>	GBIF	Iridaceae	<i>Moraea fugax</i>	GBIF
Asteraceae	<i>Arctotis revoluta</i>	B	Iridaceae	<i>Moraea gawleri</i>	B, GBIF
Asteraceae	<i>Arctotis subacaulis</i>	GBIF	Iridaceae	<i>Moraea inconspicua</i>	GBIF
Asteraceae	<i>Artemisia afra</i>	GBIF	Iridaceae	<i>Moraea inconspicua subsp. inconspicua</i>	GBIF
Asteraceae	<i>Artemisia afra var. afra</i>	B	Iridaceae	<i>Moraea karroica</i>	B, GBIF
Asteraceae	<i>Athanasia flexuosa</i>	B	Iridaceae	<i>Moraea lewisiae</i>	GBIF
Asteraceae	<i>Athanasia hirsuta</i>	B, GBIF, ST	Iridaceae	<i>Moraea macronyx</i>	B, GBIF
Asteraceae	<i>Athanasia linifolia</i>	B	Iridaceae	<i>Moraea miniata</i>	GBIF
Asteraceae	<i>Athanasia trifurcata</i>	GBIF	Iridaceae	<i>Moraea polyanthos</i>	B
Asteraceae	<i>Berkheya armata</i>	GBIF	Iridaceae	<i>Moraea setifolia</i>	GBIF
Asteraceae	<i>Berkheya barbata</i>	GBIF	Iridaceae	<i>Moraea thomasiae</i>	B, GBIF
Asteraceae	<i>Berkheya carlinifolia</i>	GBIF	Iridaceae	<i>Moraea tricuspudata</i>	GBIF
Asteraceae	<i>Berkheya heterophylla</i>	GBIF	Iridaceae	<i>Moraea tripetala</i>	B, GBIF
Asteraceae	<i>Berkheya heterophylla var. radiata</i>	B, GBIF	Iridaceae	<i>Moraea tripetala subsp. tripetala</i>	GBIF
Asteraceae	<i>Berkheya onobromoides</i>	GBIF	Iridaceae	<i>Moraea tripetala subsp. violacea</i>	B, GBIF
Asteraceae	<i>Berkheya onobromoides var. carlinoides</i>	GBIF	Iridaceae	<i>Moraea unguiculata</i>	GBIF
Asteraceae	<i>Berkheya onobromoides var. onobromoides</i>	GBIF	Iridaceae	<i>Moraea virgata</i>	GBIF
Asteraceae	<i>Berkheya spinosa</i>	GBIF	Iridaceae	<i>Romulea atrandra</i>	GBIF



Family	Species	Source	Family	Species	Source
Asteraceae	<i>Bolandia pedunculosa</i>	GBIF	Iridaceae	<i>Romulea atrandra</i> var. <i>atrandra</i>	B, GBIF
Asteraceae	<i>Brachylaena neriifolia</i>	B, GBIF	Iridaceae	<i>Romulea atrandra</i> var. <i>esterhuyseniae</i>	B, GBIF
Asteraceae	<i>Chrysocoma ciliata</i>	B, GBIF	Iridaceae	<i>Romulea austinii</i>	GBIF
Asteraceae	<i>Chrysocoma valida</i>	B	Iridaceae	<i>Romulea flava</i>	GBIF
Asteraceae	<i>Cichorium intybus</i>	GBIF	Iridaceae	<i>Romulea hallii</i>	GBIF
Asteraceae	<i>Cineraria alchemilloides</i>	B	Iridaceae	<i>Romulea luteiflora</i>	B
Asteraceae	<i>Cirsium vulgare</i>	GBIF	Iridaceae	<i>Romulea malaniae</i>	B, ST
Asteraceae	<i>Conyza scabrida</i>	B	Iridaceae	<i>Romulea minutiflora</i>	B, GBIF
Asteraceae	<i>Corymbium villosum</i>	GBIF	Iridaceae	<i>Romulea rosea</i>	GBIF
Asteraceae	<i>Cotula coronopifolia</i>	GBIF	Iridaceae	<i>Romulea rosea</i> var. <i>rosea</i>	GBIF
Asteraceae	<i>Cotula macroglossa</i>	B, GBIF	Iridaceae	<i>Romulea setifolia</i> var. <i>ceresiana</i>	B
Asteraceae	<i>Crassothonna alba</i>	GBIF	Iridaceae	<i>Romulea setifolia</i> var. <i>setifolia</i>	B
Asteraceae	<i>Crassothonna capensis</i>	GBIF	Iridaceae	<i>Romulea sphaerocarpa</i>	B
Asteraceae	<i>Crassothonna protecta</i>	GBIF	Iridaceae	<i>Romulea tetragona</i>	GBIF
Asteraceae	<i>Cullumia bisulca</i>	B	Iridaceae	<i>Romulea tortuosa</i>	GBIF
Asteraceae	<i>Cullumia patula</i> subsp. <i>patula</i>	GBIF	Iridaceae	<i>Romulea tortuosa</i> subsp. <i>depauperata</i>	B
Asteraceae	<i>Cullumia patula</i> subsp. <i>uncinata</i>	GBIF	Iridaceae	<i>Romulea tortuosa</i> subsp. <i>tortuosa</i>	B, GBIF
Asteraceae	<i>Cullumia sulcata</i>	GBIF	Iridaceae	<i>Romulea vlokii</i>	GBIF
Asteraceae	<i>Cullumia sulcata</i> var. <i>sulcata</i>	B, GBIF	Iridaceae	<i>Tritonia pallida</i>	GBIF
Asteraceae	<i>Curio acaulis</i>	GBIF	Iridaceae	<i>Tritonia pallida</i> subsp. <i>pallida</i>	B
Asteraceae	<i>Curio archeri</i>	GBIF	Iridaceae	<i>Tritoniopsis</i> <i>antholyza</i>	GBIF
Asteraceae	<i>Curio citriformis</i>	GBIF	Iridaceae	<i>Tritoniopsis dodii</i>	GBIF
Asteraceae	<i>Curio radicans</i>	GBIF	Iridaceae	<i>Tritoniopsis ramosa</i>	GBIF



Family	Species	Source	Family	Species	Source
Asteraceae	<i>Curio repens</i>	GBIF	Iridaceae	<i>Tritoniopsis ramosa</i> <i>var. ramosa</i>	GBIF
Asteraceae	<i>Curio talinoides</i>	GBIF	Iridaceae	<i>Watsonia aletroides</i>	B, GBIF
Asteraceae	<i>Curio talinoides</i> var. <i>aizoides</i>	GBIF	Iridaceae	<i>Watsonia meriana</i>	GBIF
Asteraceae	<i>Cymbopappus</i> <i>adenosolen</i>	GBIF	Iridaceae	<i>Watsonia zeyheri</i>	B
Asteraceae	<i>Dicerotheramnus</i> <i>adpressus</i>	GBIF	Iridaceae	<i>Xenoscapa fistulosa</i>	B, GBIF
Asteraceae	<i>Dicerotheramnus</i> <i>rhinocerotis</i>	B, GBIF	Juncaceae	<i>Juncus lomatoophyllus</i>	GBIF
Asteraceae	<i>Dimorphotheca</i> <i>chrysanthemifolia</i>	B	Juncaceae	<i>Juncus punctorius</i>	B
Asteraceae	<i>Dimorphotheca</i> <i>cuneata</i>	B, GBIF	Juncaginaceae	<i>Triglochin bulbosa</i>	GBIF
Asteraceae	<i>Dimorphotheca</i> <i>montana</i>	B	Lamiaceae	<i>Coleus barbatus</i> var. <i>grandis</i>	GBIF
Asteraceae	<i>Dimorphotheca</i> <i>nudicaulis</i>	GBIF	Lamiaceae	<i>Lamium</i> <i>amplexicaule</i>	GBIF
Asteraceae	<i>Dimorphotheca</i> <i>nudicaulis</i> var. <i>nudicaulis</i>	B	Lamiaceae	<i>Leonotis leonurus</i>	GBIF
Asteraceae	<i>Dimorphotheca sinuata</i>	GBIF	Lamiaceae	<i>Mentha longifolia</i>	GBIF
Asteraceae	<i>Disparago pilosa</i>	B	Lamiaceae	<i>Mentha longifolia</i> <i>subsp. capensis</i>	GBIF
Asteraceae	<i>Dolichostrix ericoides</i>	GBIF	Lamiaceae	<i>Plectranthus</i> <i>ramosior</i>	B
Asteraceae	<i>Edmondia fasciculata</i>	B	Lamiaceae	<i>Pseudodictamnus</i> <i>africanus</i>	GBIF
Asteraceae	<i>Edmondia pinifolia</i>	GBIF	Lamiaceae	<i>Salvia africana</i>	GBIF
Asteraceae	<i>Edmondia sesamoides</i>	B, GBIF	Lamiaceae	<i>Salvia</i> <i>chamelaeagnea</i>	B, GBIF
Asteraceae	<i>Elytropappus hispidus</i>	B	Lamiaceae	<i>Salvia disermas</i>	GBIF
Asteraceae	<i>Eriocephalus africanus</i>	GBIF	Lamiaceae	<i>Stachys aethiopica</i>	B, GBIF
Asteraceae	<i>Eriocephalus africanus</i> var. <i>paniculatus</i>	B	Lamiaceae	<i>Stachys sublobata</i>	B
Asteraceae	<i>Eriocephalus</i> <i>aromaticus</i>	B, GBIF	Lauraceae	<i>Cassytha ciliolata</i>	GBIF





Family	Species	Source	Family	Species	Source
Asteraceae	<i>Eriocephalus ericoides</i>	GBIF	Lauraceae	<i>Cryptocarya angustifolia</i>	B
Asteraceae	<i>Eriocephalus ericoides</i> subsp. <i>ericoides</i>	B, GBIF	Lentibulariaceae	<i>Utricularia bisquamata</i>	GBIF
Asteraceae	<i>Eriocephalus microphyllus</i> var. <i>carinosus</i>	ST	Limeaceae	<i>Limeum aethiopicum</i>	GBIF
Asteraceae	<i>Eriocephalus punctulatus</i>	B	Limeaceae	<i>Limeum capense</i>	B
Asteraceae	<i>Euryops abrotanifolius</i>	B, GBIF	Limeaceae	<i>Limeum telephioides</i> var. <i>telephioides</i>	GBIF
Asteraceae	<i>Euryops imbricatus</i>	B, GBIF	Lobeliaceae	<i>Lobelia setacea</i>	B
Asteraceae	<i>Euryops lateriflorus</i>	B	Loranthaceae	<i>Moquiniella rubra</i>	GBIF
Asteraceae	<i>Euryops othonnoides</i>	B	Loranthaceae	<i>Septulina glauca</i>	GBIF
Asteraceae	<i>Euryops tagetoides</i>	B	Lycopodiaceae	<i>Lycopodium clavatum</i>	GBIF
Asteraceae	<i>Euryops tenuissimus</i>	GBIF	Malvaceae	<i>Abutilon sonneratianum</i>	GBIF
Asteraceae	<i>Euryops tenuissimus</i> subsp. <i>tenuissimus</i>	B, GBIF	Malvaceae	<i>Anisodonteia dissecta</i>	GBIF
Asteraceae	<i>Felicia amoena</i>	GBIF	Malvaceae	<i>Anisodonteia elegans</i>	B
Asteraceae	<i>Felicia amoena</i> subsp. <i>stricta</i>	B	Malvaceae	<i>Anisodonteia procumbens</i>	B
Asteraceae	<i>Felicia bellidioides</i> subsp. <i>foliata</i>	B	Malvaceae	<i>Anisodonteia triloba</i>	B, GBIF
Asteraceae	<i>Felicia denticulata</i>	B	Malvaceae	<i>Grewia occidentalis</i>	GBIF
Asteraceae	<i>Felicia filifolia</i>	GBIF	Malvaceae	<i>Hermannia alnifolia</i>	GBIF
Asteraceae	<i>Felicia filifolia</i> subsp. <i>bodkinii</i>	B	Malvaceae	<i>Hermannia althaeifolia</i>	B, GBIF
Asteraceae	<i>Felicia filifolia</i> subsp. <i>filifolia</i>	GBIF	Malvaceae	<i>Hermannia angularis</i>	B, GBIF
Asteraceae	<i>Felicia filifolia</i> subsp. <i>schaeferi</i>	B, GBIF	Malvaceae	<i>Hermannia confusa</i>	GBIF
Asteraceae	<i>Felicia filifolia</i> subsp. <i>schlechteri</i>	B	Malvaceae	<i>Hermannia cuneifolia</i> var. <i>cuneifolia</i>	B
Asteraceae	<i>Felicia hispida</i>	B	Malvaceae	<i>Hermannia diversistipula</i>	GBIF



Family	Species	Source	Family	Species	Source
Asteraceae	<i>Felicia macrorrhiza</i>	B	Malvaceae	<i>Hermannia filifolia</i>	GBIF
Asteraceae	<i>Felicia venusta</i>	B	Malvaceae	<i>Hermannia filifolia</i> <i>var. filifolia</i>	GBIF
Asteraceae	<i>Gazania xsplendens</i>	GBIF	Malvaceae	<i>Hermannia holosericea</i>	GBIF
Asteraceae	<i>Gerbera serrata</i>	GBIF	Malvaceae	<i>Hermannia hyssopifolia</i>	GBIF
Asteraceae	<i>Gnaphalium declinatum</i>	GBIF	Malvaceae	<i>Hermannia multiflora</i>	B
Asteraceae	<i>Gorteria integrifolia</i>	GBIF	Malvaceae	<i>Hermannia muricata</i>	B, GBIF
Asteraceae	<i>Gorteria piloselloides</i>	GBIF	Malvaceae	<i>Hermannia odorata</i>	GBIF
Asteraceae	<i>Helichrysum acrophilum</i>	B	Malvaceae	<i>Hermannia pulverata</i>	B
Asteraceae	<i>Helichrysum asperum</i> <i>var. albidulum</i>	B, GBIF	Malvaceae	<i>Hermannia salviifolia</i>	GBIF
Asteraceae	<i>Helichrysum cylindriflorum</i>	B, GBIF	Malvaceae	<i>Hibiscus aethiopicus</i>	GBIF
Asteraceae	<i>Helichrysum excisum</i>	GBIF	Malvaceae	<i>Hibiscus pusillus</i>	B, GBIF
Asteraceae	<i>Helichrysum felinum</i>	GBIF	Malvaceae	<i>Hibiscus trionum</i>	GBIF
Asteraceae	<i>Helichrysum foetidum</i>	GBIF	Marsileaceae	<i>Marsilea macrocarpa</i>	B
Asteraceae	<i>Helichrysum hamulosum</i>	B, GBIF	Melanthaceae	<i>Melianthus major</i>	GBIF
Asteraceae	<i>Helichrysum hebelepis</i>	B	Menispermaceae	<i>Cissampelos capensis</i>	GBIF
Asteraceae	<i>Helichrysum helianthemifolium</i>	B	Mniaceae	<i>Pohlia elongata</i>	B
Asteraceae	<i>Helichrysum indicum</i>	B	Molluginaceae	<i>Adenogramma glomerata</i>	GBIF
Asteraceae	<i>Helichrysum interzonale</i>	B	Molluginaceae	<i>Pharnaceum ciliare</i>	GBIF
Asteraceae	<i>Helichrysum lambertianum</i>	B	Molluginaceae	<i>Pharnaceum dichotomum</i>	GBIF
Asteraceae	<i>Helichrysum lancifolium</i>	B, GBIF	Molluginaceae	<i>Psammotropha quadrangularis</i>	GBIF
Asteraceae	<i>Helichrysum leontonyx</i>	GBIF	Montiniaceae	<i>Montinia caryophyllacea</i>	GBIF
Asteraceae	<i>Helichrysum moesianum</i>	B	Moraceae	<i>Ficus carica</i>	GBIF



Family	Species	Source	Family	Species	Source
Asteraceae	<i>Helichrysum nudifolium</i> var. <i>nudifolium</i>	GBIF	Myricaceae	<i>Morella integra</i>	GBIF
Asteraceae	<i>Helichrysum pandurifolium</i>	B	Myricaceae	<i>Morella quercifolia</i>	B
Asteraceae	<i>Helichrysum patulum</i>	B, GBIF	Myricaceae	<i>Morella serrata</i>	GBIF
Asteraceae	<i>Helichrysum petiolare</i>	B	Myrsinaceae	<i>Rapanea melanophloeos</i>	B, GBIF
Asteraceae	<i>Helichrysum pulchellum</i>	B	Myrtaceae	<i>Eucalyptus camaldulensis</i>	GBIF
Asteraceae	<i>Helichrysum retortum</i>	B	Myrtaceae	<i>Metrosideros angustifolia</i>	B, GBIF
Asteraceae	<i>Helichrysum rutilans</i>	B, GBIF	Neuradaceae	<i>Grielum humifusum</i> var. <i>humifusum</i>	B
Asteraceae	<i>Helichrysum spiralepis</i>	B	Oleaceae	<i>Olea europaea</i>	GBIF
Asteraceae	<i>Helichrysum stoloniferum</i>	B	Oleaceae	<i>Olea europaea</i> subsp. <i>cuspidata</i>	GBIF
Asteraceae	<i>Helichrysum teretifolium</i>	B	Orchidaceae	<i>Acrolophia capensis</i>	B
Asteraceae	<i>Helichrysum tinctum</i>	B	Orchidaceae	<i>Bartholina burmanniana</i>	B, GBIF
Asteraceae	<i>Helichrysum zeyheri</i>	GBIF	Orchidaceae	<i>Bartholina etheliae</i>	GBIF
Asteraceae	<i>Heterolepis aliena</i>	B, GBIF	Orchidaceae	<i>Bonatea speciosa</i>	GBIF
Asteraceae	<i>Hippia frutescens</i>	GBIF	Orchidaceae	<i>Ceratandra globosa</i>	GBIF
Asteraceae	<i>Hymenolepis calva</i>	B, GBIF	Orchidaceae	<i>Disa atricapilla</i>	B
Asteraceae	<i>Hymenolepis crithmifolia</i>	GBIF	Orchidaceae	<i>Disa atrorubens</i>	GBIF
Asteraceae	<i>Hymenolepis dentata</i>	B	Orchidaceae	<i>Disa bifida</i>	VM
Asteraceae	<i>Hymenolepis gnidioides</i>	B, GBIF	Orchidaceae	<i>Disa bifida</i>	GBIF
Asteraceae	<i>Hymenolepis incisa</i>	B	Orchidaceae	<i>Disa bracteata</i>	GBIF
Asteraceae	<i>Hypochaeris radicata</i>	GBIF	Orchidaceae	<i>Disa comosa</i>	GBIF
Asteraceae	<i>Ifloga ambigua</i>	GBIF	Orchidaceae	<i>Disa cornuta</i>	GBIF
Asteraceae	<i>Lactuca serriola</i>	GBIF	Orchidaceae	<i>Disa densiflora</i>	GBIF
Asteraceae	<i>Lasiospermum bipinnatum</i>	B	Orchidaceae	<i>Disa graminifolia</i>	GBIF
Asteraceae	<i>Macleodium spinosum</i>	GBIF	Orchidaceae	<i>Disa harveyana</i> subsp. <i>harveyana</i>	GBIF



Family	Species	Source	Family	Species	Source
Asteraceae	<i>Mairia burchellii</i>	GBIF	Orchidaceae	<i>Disa inflexa</i>	GBIF
Asteraceae	<i>Metalasia acuta</i>	B, GBIF	Orchidaceae	<i>Disa lineata</i>	GBIF
Asteraceae	<i>Metalasia brevifolia</i>	B	Orchidaceae	<i>Disa obliqua</i>	B
Asteraceae	<i>Metalasia cephalotes</i>	B	Orchidaceae	<i>Disa ovalifolia</i>	VM
Asteraceae	<i>Metalasia densa</i>	B, GBIF	Orchidaceae	<i>Disa ovalifolia</i>	GBIF
Asteraceae	<i>Metalasia eburnea</i>	GBIF	Orchidaceae	<i>Disa salteri</i>	GBIF
Asteraceae	<i>Metalasia fastigiata</i>	B	Orchidaceae	<i>Disa spathulata</i> subsp. <i>spathulata</i>	GBIF
Asteraceae	<i>Metalasia helmei</i>	B, GBIF, ST	Orchidaceae	<i>Disa spathulata</i> subsp. <i>tripartita</i>	VM
Asteraceae	<i>Metalasia muricata</i>	B	Orchidaceae	<i>Disa vaginata</i>	GBIF
Asteraceae	<i>Metalasia phillipsii</i> subsp. <i>incurva</i>	B	Orchidaceae	<i>Disa venosa</i>	B
Asteraceae	<i>Monticapra pilosa</i>	B	Orchidaceae	<i>Disperis bolusiana</i>	VM
Asteraceae	<i>Muscosomorphe</i> <i>aretioides</i>	GBIF	Orchidaceae	<i>Disperis bolusiana</i> subsp. <i>bolusiana</i>	B, GBIF
Asteraceae	<i>Myrovernix</i> <i>glandulosus</i>	GBIF	Orchidaceae	<i>Disperis capensis</i>	GBIF
Asteraceae	<i>Myrovernix scaber</i>	B	Orchidaceae	<i>Disperis capensis</i> var. <i>capensis</i>	GBIF
Asteraceae	<i>Nidorella ivifolia</i>	GBIF	Orchidaceae	<i>Disperis purpurata</i> subsp. <i>purpurata</i>	GBIF
Asteraceae	<i>Oedera calycina</i>	GBIF	Orchidaceae	<i>Disperis villosa</i>	B, GBIF
Asteraceae	<i>Oedera capensis</i>	B, GBIF	Orchidaceae	<i>Holothrix aspera</i>	GBIF
Asteraceae	<i>Oedera genistifolia</i>	B, GBIF	Orchidaceae	<i>Holothrix brevipedata</i>	B
Asteraceae	<i>Oedera hirta</i>	B	Orchidaceae	<i>Holothrix cernua</i>	GBIF
Asteraceae	<i>Oedera pungens</i> subsp. <i>trinervis</i>	GBIF	Orchidaceae	<i>Holothrix exilis</i>	GBIF
Asteraceae	<i>Oedera resinifera</i>	B	Orchidaceae	<i>Holothrix grandiflora</i>	GBIF
Asteraceae	<i>Oedera sedifolia</i>	B	Orchidaceae	<i>Holothrix secunda</i>	B, GBIF
Asteraceae	<i>Oedera speciosa</i>	GBIF	Orchidaceae	<i>Holothrix villosa</i>	GBIF
Asteraceae	<i>Oedera squarrosa</i>	B, GBIF	Orchidaceae	<i>Holothrix villosa</i> var. <i>villosa</i>	GBIF
Asteraceae	<i>Oedera tricephala</i>	GBIF	Orchidaceae	<i>Orthochilus tabularis</i>	GBIF



Family	Species	Source	Family	Species	Source
Asteraceae	<i>Oldenburgia paradoxa</i>	GBIF	Orchidaceae	<i>Pachites bodkinii</i>	ST
Asteraceae	<i>Oligocarpus calendulaceus</i>	B	Orchidaceae	<i>Pterygodium acutifolium</i>	GBIF
Asteraceae	<i>Oncosiphon pilulifer</i>	B	Orchidaceae	<i>Pterygodium catholicum</i>	B, GBIF
Asteraceae	<i>Osteospermum ilicifolium</i>	GBIF	Orchidaceae	<i>Pterygodium inversum</i>	GBIF
Asteraceae	<i>Osteospermum moniliferum</i>	GBIF	Orchidaceae	<i>Pterygodium orobanchoides</i>	GBIF
Asteraceae	<i>Osteospermum moniliferum subsp. moniliferum</i>	GBIF	Orchidaceae	<i>Pterygodium pentherianum</i>	B
Asteraceae	<i>Osteospermum polygaloides</i>	GBIF	Orchidaceae	<i>Pterygodium platypetalum</i>	VM
Asteraceae	<i>Osteospermum scariosum</i>	GBIF	Orchidaceae	<i>Pterygodium platypetalum</i>	B, GBIF
Asteraceae	<i>Osteospermum sinuatum</i>	GBIF	Orchidaceae	<i>Pterygodium schelpei</i>	B, GBIF
Asteraceae	<i>Othonna arbuscula</i>	B	Orchidaceae	<i>Pterygodium volucris</i>	B, GBIF
Asteraceae	<i>Othonna auriculifolia</i>	B, GBIF	Orchidaceae	<i>Satyrium bicorne</i>	GBIF
Asteraceae	<i>Othonna gymnodiscus</i>	GBIF	Orchidaceae	<i>Satyrium erectum</i>	B, GBIF
Asteraceae	<i>Othonna hederifolia</i>	GBIF	Orchidaceae	<i>Satyrium humile</i>	GBIF
Asteraceae	<i>Othonna lobata</i>	B	Orchidaceae	<i>Satyrium pumilum</i>	GBIF
Asteraceae	<i>Othonna oleracea</i>	GBIF	Orchidaceae	<i>Satyrium rupestre</i>	GBIF
Asteraceae	<i>Othonna parviflora</i>	B, GBIF	Orchidaceae	<i>Satyrium sp.</i>	GBIF
Asteraceae	<i>Othonna perfoliata</i>	GBIF	Orchidaceae	<i>Schizodium bifidum</i>	B
Asteraceae	<i>Othonna protecta</i>	B	Orobanchaceae	<i>Harveya bodkinii</i>	GBIF
Asteraceae	<i>Othonna quinquedentata</i>	B	Orobanchaceae	<i>Harveya purpurea</i>	GBIF
Asteraceae	<i>Othonna ramulosa</i>	B, GBIF	Orobanchaceae	<i>Harveya purpurea subsp. purpurea</i>	GBIF
Asteraceae	<i>Othonna retrofracta</i>	GBIF	Orobanchaceae	<i>Hyobanche glabrata</i>	B, GBIF
Asteraceae	<i>Othonna undulosa</i>	GBIF	Orobanchaceae	<i>Hyobanche sanguinea</i>	B, GBIF
Asteraceae	<i>Pegolettia baccaridifolia</i>	GBIF	Orobanchaceae	<i>Phelipanche nana</i>	GBIF



Family	Species	Source	Family	Species	Source
Asteraceae	<i>Pentatrichia kuntzei</i>	GBIF	Osmundaceae	<i>Osmunda regalis</i>	B
Asteraceae	<i>Pentzia dentata</i>	GBIF	Osmundaceae	<i>Todea barbara</i>	GBIF
Asteraceae	<i>Pentzia elegans</i>	GBIF	Oxalidaceae	<i>Oxalis bifida</i>	GBIF
Asteraceae	<i>Pentzia incana</i>	GBIF	Oxalidaceae	<i>Oxalis burkei</i>	GBIF
Asteraceae	<i>Phymaspermum trifidum</i>	GBIF	Oxalidaceae	<i>Oxalis capillacea</i>	GBIF
Asteraceae	<i>Pteronia aspalatha</i>	B	Oxalidaceae	<i>Oxalis caprina</i>	GBIF
Asteraceae	<i>Pteronia aspera</i>	GBIF	Oxalidaceae	<i>Oxalis ciliaris</i>	B, GBIF
Asteraceae	<i>Pteronia bolusii</i>	B	Oxalidaceae	<i>Oxalis commutata</i>	GBIF
Asteraceae	<i>Pteronia cinerea</i>	B, GBIF	Oxalidaceae	<i>Oxalis convexula</i>	B, GBIF
Asteraceae	<i>Pteronia elongata</i>	GBIF	Oxalidaceae	<i>Oxalis depressa</i>	B, GBIF
Asteraceae	<i>Pteronia fasciculata</i>	GBIF	Oxalidaceae	<i>Oxalis dregei</i>	GBIF
Asteraceae	<i>Pteronia fastigiata</i>	B	Oxalidaceae	<i>Oxalis eckloniana</i>	B, GBIF
Asteraceae	<i>Pteronia flexicaulis</i>	GBIF	Oxalidaceae	<i>Oxalis eckloniana</i> var. <i>eckloniana</i>	B
Asteraceae	<i>Pteronia glauca</i>	B	Oxalidaceae	<i>Oxalis engleriana</i>	GBIF
Asteraceae	<i>Pteronia glomerata</i>	B, GBIF	Oxalidaceae	<i>Oxalis fergusoniae</i>	GBIF
Asteraceae	<i>Pteronia hutchinsoniana</i>	GBIF	Oxalidaceae	<i>Oxalis fibrosa</i>	B, GBIF
Asteraceae	<i>Pteronia incana</i>	GBIF	Oxalidaceae	<i>Oxalis flava</i>	GBIF
Asteraceae	<i>Pteronia membranacea</i>	B	Oxalidaceae	<i>Oxalis flava</i> var. <i>flava</i>	B, GBIF
Asteraceae	<i>Pteronia oblanceolata</i>	B	Oxalidaceae	<i>Oxalis heterophylla</i>	B, GBIF
Asteraceae	<i>Pteronia paniculata</i>	B, GBIF	Oxalidaceae	<i>Oxalis inaequalis</i>	GBIF
Asteraceae	<i>Pulicaria scabra</i>	B, GBIF	Oxalidaceae	<i>Oxalis incarnata</i>	B
Asteraceae	<i>Relhania calycina</i> subsp. <i>apiculata</i>	B	Oxalidaceae	<i>Oxalis leptogramma</i>	GBIF
Asteraceae	<i>Relhania tricephala</i>	B	Oxalidaceae	<i>Oxalis lindaviana</i>	B
Asteraceae	<i>Rhynchosidium sessiliflorum</i>	GBIF	Oxalidaceae	<i>Oxalis melanosticta</i>	GBIF
Asteraceae	<i>Rosenia humilis</i>	B	Oxalidaceae	<i>Oxalis melanosticta</i> var. <i>melanosticta</i>	GBIF
Asteraceae	<i>Schistostephium umbellatum</i>	B	Oxalidaceae	<i>Oxalis multicaulis</i>	B





Family	Species	Source	Family	Species	Source
Asteraceae	<i>Senecio abbreviatus</i>	GBIF	Oxalidaceae	<i>Oxalis obtusa</i>	B, GBIF
Asteraceae	<i>Senecio agapetes</i>	B	Oxalidaceae	<i>Oxalis orbicularis</i>	GBIF
Asteraceae	<i>Senecio albifolius</i>	B	Oxalidaceae	<i>Oxalis pardalis</i>	B
Asteraceae	<i>Senecio amabilis</i>	B	Oxalidaceae	<i>Oxalis pes-caprae</i>	GBIF
Asteraceae	<i>Senecio bipinnatus</i>	GBIF	Oxalidaceae	<i>Oxalis pes-caprae</i> var. <i>sericea</i>	GBIF
Asteraceae	<i>Senecio chrysocoma</i>	B	Oxalidaceae	<i>Oxalis pocockiae</i>	B, GBIF
Asteraceae	<i>Senecio comptonii</i>	GBIF	Oxalidaceae	<i>Oxalis polyphylla</i>	GBIF
Asteraceae	<i>Senecio cymbalariifolius</i>	GBIF	Oxalidaceae	<i>Oxalis polyphylla</i> var. <i>polyphylla</i>	GBIF
Asteraceae	<i>Senecio incertus</i>	B	Oxalidaceae	<i>Oxalis purpurea</i>	B
Asteraceae	<i>Senecio junceus</i>	GBIF	Oxalidaceae	<i>Oxalis</i> sp.	GBIF
Asteraceae	<i>Senecio lineatus</i>	GBIF	Oxalidaceae	<i>Oxalis stellata</i>	GBIF
Asteraceae	<i>Senecio paarlensis</i>	B	Oxalidaceae	<i>Oxalis stenorrhyncha</i>	B
Asteraceae	<i>Senecio paniculatus</i>	B, GBIF	Oxalidaceae	<i>Oxalis truncatula</i>	B
Asteraceae	<i>Senecio pinifolius</i>	B, GBIF	Papaveraceae	<i>Cysticapnos cracca</i>	GBIF
Asteraceae	<i>Senecio pubigerus</i>	B	Papaveraceae	<i>Eschscholzia californica</i> subsp. <i>californica</i>	B
Asteraceae	<i>Senecio purpureus</i>	GBIF	Papaveraceae	<i>Fumaria muralis</i> subsp. <i>muralis</i>	GBIF
Asteraceae	<i>Senecio robertiifolius</i>	B	Peraceae	<i>Clutia alaternoides</i>	GBIF
Asteraceae	<i>Senecio sarcoides</i>	GBIF	Peraceae	<i>Clutia alaternoides</i> var. <i>alaternoides</i>	B
Asteraceae	<i>Senecio umbellatus</i>	B	Peraceae	<i>Clutia laxa</i>	GBIF
Asteraceae	<i>Seriphium plumosum</i>	B, GBIF	Peraceae	<i>Clutia marginata</i>	B, GBIF
Asteraceae	<i>Seriphium spirale</i>	GBIF	Peraceae	<i>Clutia rubricaulis</i>	B
Asteraceae	<i>Stoebe aethiopica</i>	B, GBIF	Peraceae	<i>Clutia tomentosa</i>	GBIF
Asteraceae	<i>Stoebe capitata</i>	GBIF	Phytolaccaceae	<i>Phytolacca dioica</i>	GBIF
Asteraceae	<i>Stoebe fusca</i>	B, GBIF	Pinaceae	<i>Pinus pinaster</i>	GBIF
Asteraceae	<i>Stoebe spiralis</i>	B	Pinaceae	<i>Pinus radiata</i>	GBIF
Asteraceae	<i>Syncarpha canescens</i>	GBIF	Piperaceae	<i>Peperomia retusa</i>	GBIF



Family	Species	Source	Family	Species	Source
Asteraceae	<i>Syncarpha canescens</i> subsp. <i>canescens</i>	B	Pittosporaceae	<i>Pittosporum undulatum</i>	GBIF
Asteraceae	<i>Syncarpha canescens</i> subsp. <i>tricolor</i>	GBIF	Plantaginaceae	<i>Misopates orontium</i>	B, GBIF
Asteraceae	<i>Syncarpha dregeana</i>	GBIF	Plantaginaceae	<i>Misopates orontium</i> subsp. <i>orontium</i>	GBIF
Asteraceae	<i>Syncarpha dykei</i>	B	Plantaginaceae	<i>Plantago cafra</i>	B
Asteraceae	<i>Syncarpha eximia</i>	GBIF	Plantaginaceae	<i>Veronica anagallis-aquatica</i>	GBIF
Asteraceae	<i>Syncarpha gnaphaloides</i>	GBIF	Plantaginaceae	<i>Veronica persica</i>	GBIF
Asteraceae	<i>Syncarpha loganiana</i>	B, GBIF	Plumbaginaceae	<i>Limonium amoenum</i>	B
Asteraceae	<i>Syncarpha staezelina</i>	B, GBIF	Plumbaginaceae	<i>Limonium sinuatum</i> subsp. <i>sinuatum</i>	GBIF
Asteraceae	<i>Syncarpha variegata</i>	GBIF	Poaceae	<i>Anthoxanthum dregeanum</i>	B
Asteraceae	<i>Syncarpha vestita</i>	B	Poaceae	<i>Aristida congesta</i> subsp. <i>congesta</i>	B
Asteraceae	<i>Tripteris aghillana</i>	B	Poaceae	<i>Arundo donax</i>	GBIF
Asteraceae	<i>Ursinia anethoides</i>	GBIF	Poaceae	<i>Briza maxima</i>	B, GBIF
Asteraceae	<i>Ursinia anthemoides</i>	GBIF	Poaceae	<i>Briza minor</i>	GBIF
Asteraceae	<i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	B, GBIF	Poaceae	<i>Bromus diandrus</i>	B
Asteraceae	<i>Ursinia calenduliflora</i>	B	Poaceae	<i>Bromus pectinatus</i>	B, GBIF
Asteraceae	<i>Ursinia macropoda</i>	B	Poaceae	<i>Capeochloa arundinacea</i>	GBIF
Asteraceae	<i>Ursinia nana</i>	GBIF	Poaceae	<i>Cenchrus caudatus</i>	GBIF
Asteraceae	<i>Ursinia oreogena</i>	B	Poaceae	<i>Cenchrus setaceus</i>	GBIF
Asteraceae	<i>Ursinia pilifera</i>	B, GBIF	Poaceae	<i>Chaetobromus involucratus</i> subsp. <i>dregeanus</i>	B
Asteraceae	<i>Zyrphelis microcephala</i> subsp. <i>microcephala</i>	B	Poaceae	<i>Cymbopogon marginatus</i>	GBIF
Bartramiaceae	<i>Anacolia breutelii</i> var. <i>breutelii</i>	B	Poaceae	<i>Cynodon dactylon</i>	GBIF
Bartramiaceae	<i>Bartramia hampeana</i>	B, GBIF	Poaceae	<i>Digitaria eriantha</i>	B
Bartramiaceae	<i>Breutelia substricta</i>	B	Poaceae	<i>Ehrharta calycina</i>	B, GBIF



Family	Species	Source	Family	Species	Source
Blechnaceae	<i>Blechnaceae</i>	GBIF	Poaceae	<i>Ehrharta delicatula</i>	B
Blechnaceae	<i>Blechnum inflexum</i>	B	Poaceae	<i>Ehrharta eburnea</i>	B
Blechnaceae	<i>Blechnum punctulatum</i> var. <i>atherstonei</i>	B	Poaceae	<i>Ehrharta erecta</i> var. <i>erecta</i>	B
Blechnaceae	<i>Lomariocycas tabularis</i>	GBIF	Poaceae	<i>Ehrharta longiflora</i>	B
Boraginaceae	<i>Amsinckia menziesii</i>	GBIF	Poaceae	<i>Ehrharta melicoides</i>	B
Boraginaceae	<i>Anchusa capensis</i>	GBIF	Poaceae	<i>Ehrharta thunbergii</i>	B, GBIF
Boraginaceae	<i>Lobostemon echioides</i>	B, GBIF	Poaceae	<i>Eragrostis curvula</i>	B
Boraginaceae	<i>Lobostemon fruticosus</i>	B, GBIF	Poaceae	<i>Fingerhuthia africana</i>	B
Boraginaceae	<i>Lobostemon glaber</i>	B	Poaceae	<i>Hordeum capense</i>	B
Boraginaceae	<i>Lobostemon glaucophyllus</i>	GBIF	Poaceae	<i>Hyparrhenia hirta</i>	B, GBIF
Boraginaceae	<i>Lobostemon laevigatus</i>	B	Poaceae	<i>Karoochloa purpurea</i>	B
Boraginaceae	<i>Lobostemon oederiaefolius</i>	B	Poaceae	<i>Koeleria capensis</i>	B
Brassicaceae	<i>Alyssum minutum</i>	B, GBIF	Poaceae	<i>Melica racemosa</i>	B
Brassicaceae	<i>Brassica rapa</i>	GBIF	Poaceae	<i>Melinis repens</i>	GBIF
Brassicaceae	<i>Heliophila arenosa</i>	B	Poaceae	<i>Merxmuellera stricta</i>	B
Brassicaceae	<i>Heliophila bulbostyla</i>	B, GBIF	Poaceae	<i>Paspalum dilatatum</i>	GBIF
Brassicaceae	<i>Heliophila carnosa</i>	B, GBIF	Poaceae	<i>Pentameris acinosa</i>	B
Brassicaceae	<i>Heliophila cornuta</i>	GBIF	Poaceae	<i>Pentameris airoides</i> subsp. <i>airoides</i>	B
Brassicaceae	<i>Heliophila cornuta</i> var. <i>squamata</i>	B, GBIF	Poaceae	<i>Pentameris densifolia</i>	B
Brassicaceae	<i>Heliophila crithmifolia</i>	B, GBIF	Poaceae	<i>Pentameris eriostoma</i>	GBIF
Brassicaceae	<i>Heliophila dregeana</i>	B	Poaceae	<i>Pentameris horrida</i>	B
Brassicaceae	<i>Heliophila elata</i>	ST	Poaceae	<i>Pentameris pallida</i>	B
Brassicaceae	<i>Heliophila juncea</i>	B, GBIF	Poaceae	<i>Pentameris rigidissima</i>	B
Brassicaceae	<i>Heliophila linearis</i> var. <i>linearifolia</i>	GBIF	Poaceae	<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	B
Brassicaceae	<i>Heliophila meyeri</i>	GBIF	Poaceae	<i>Pentaschistis eriostoma</i>	B



Family	Species	Source	Family	Species	Source
Brassicaceae	<i>Heliophila pectinata</i>	B, GBIF	Poaceae	<i>Pentaschistis horrida</i>	B
Brassicaceae	<i>Heliophila pendula</i>	B, GBIF	Poaceae	<i>Pentaschistis pallida</i>	B
Brassicaceae	<i>Heliophila pinnata</i>	B, GBIF	Poaceae	<i>Pentaschistis rigidissima</i>	B
Brassicaceae	<i>Heliophila scoparia</i>	GBIF	Poaceae	<i>Phragmites australis</i>	GBIF
Brassicaceae	<i>Heliophila scoparia var. aspera</i>	GBIF	Poaceae	<i>Phragmites australis subsp. australis</i>	GBIF
Brassicaceae	<i>Heliophila squamata</i>	B	Poaceae	<i>Polypogon monspeliensis</i>	B
Brassicaceae	<i>Heliophila suavissima</i>	B	Poaceae	<i>Stipagrostis zeyheri subsp. macropus</i>	B
Brassicaceae	<i>Heliophila suborbicularis</i>	B	Poaceae	<i>Tenaxia stricta</i>	B, GBIF
Brassicaceae	<i>Heliophila subulata</i>	GBIF	Poaceae	<i>Themeda triandra</i>	GBIF
Brassicaceae	<i>Heliophila subulata subsp. subulata</i>	GBIF	Poaceae	<i>Tribolium hispidum</i>	B, GBIF
Brassicaceae	<i>Heliophila tricuspadata</i>	GBIF	Poaceae	<i>Tribolium obliterum</i>	B
Brassicaceae	<i>Heliophila xylopoda</i>	GBIF	Poaceae	<i>Tribolium obtusifolium</i>	B
Brassicaceae	<i>Lepidium africanum subsp. africanum</i>	GBIF	Poaceae	<i>Tribolium purpureum</i>	B
Brassicaceae	<i>Sisymbrium capense</i>	GBIF	Poaceae	<i>Urochloa serrata</i>	GBIF
Bruniaceae	<i>Audouinia esterhuyseniae</i>	B	Polygalaceae	<i>Muraltia alopecuroides</i>	B
Bruniaceae	<i>Berzelia abrotanoides</i>	GBIF	Polygalaceae	<i>Muraltia ericaefolia</i>	B
Bruniaceae	<i>Brunia noduliflora</i>	B, GBIF	Polygalaceae	<i>Muraltia ericifolia</i>	GBIF
Bruniaceae	<i>Pseudobaeckea africana</i>	B	Polygalaceae	<i>Muraltia heisteria</i>	B, GBIF
Bruniaceae	<i>Staavia capitella</i>	B	Polygalaceae	<i>Muraltia macrocarpa</i>	B
Bryaceae	<i>Bryum canariense</i>	B	Polygalaceae	<i>Muraltia muraltioides</i>	GBIF
Cactaceae	<i>Cylindropuntia imbricata subsp. imbricata</i>	GBIF	Polygalaceae	<i>Muraltia parvifolia</i>	B, GBIF
Cactaceae	<i>Opuntia aurantiaca</i>	B	Polygalaceae	<i>Muraltia rhamnoides</i>	GBIF
Cactaceae	<i>Opuntia ficus-indica</i>	GBIF	Polygalaceae	<i>Muraltia spinosa</i>	B, GBIF



Family	Species	Source	Family	Species	Source
Cactaceae	<i>Trichocereus spachianus</i>	GBIF	Polygalaceae	<i>Polygala affinis</i>	GBIF
Campanulaceae	<i>Cyphia digitata</i>	GBIF	Polygalaceae	<i>Polygala bracteolata</i>	GBIF
Campanulaceae	<i>Cyphia volubilis</i>	GBIF	Polygalaceae	<i>Polygala fruticosa</i>	GBIF
Campanulaceae	<i>Grammatotheca bergiana</i>	GBIF	Polygalaceae	<i>Polygala microlopha</i>	GBIF
Campanulaceae	<i>Lobelia capillifolia</i>	GBIF	Polygalaceae	<i>Polygala microlopha</i> var. <i>microlopha</i>	GBIF
Campanulaceae	<i>Lobelia erinus</i>	GBIF	Polygalaceae	<i>Polygala scabra</i>	B
Campanulaceae	<i>Lobelia linearis</i>	GBIF	Polygalaceae	<i>Polygala teretifolia</i>	B, GBIF
Campanulaceae	<i>Lobelia pinifolia</i>	GBIF	Polygalaceae	<i>Polygala umbellata</i>	B
Campanulaceae	<i>Lobelia tomentosa</i>	GBIF	Polygalaceae	<i>Polygala wittebergensis</i>	B
Campanulaceae	<i>Prismatocarpus diffusus</i>	B, GBIF	Polygonaceae	<i>Persicaria decipiens</i>	GBIF
Campanulaceae	<i>Prismatocarpus pedunculatus</i>	B, GBIF	Polygonaceae	<i>Polygonum aviculare</i>	B
Campanulaceae	<i>Prismatocarpus sessilis</i>	B	Polygonaceae	<i>Polygonum plebeium</i>	GBIF
Campanulaceae	<i>Prismatocarpus sessilis</i> var. <i>sessilis</i>	B	Polygonaceae	<i>Rumex acetosella</i>	GBIF
Campanulaceae	<i>Prismatocarpus tenerrimus</i>	B	Polygonaceae	<i>Rumex cordatus</i>	GBIF
Campanulaceae	<i>Wahlenbergia capensis</i>	GBIF	Pottiaceae	<i>Ephemerum namaquense</i>	B
Campanulaceae	<i>Wahlenbergia cernua</i>	GBIF	Pottiaceae	<i>Pseudocrossidium crinitum</i>	B
Campanulaceae	<i>Wahlenbergia neorigida</i>	B	Pottiaceae	<i>Tetrapterum tetragonum</i>	B
Campanulaceae	<i>Wahlenbergia nodosa</i>	GBIF	Pottiaceae	<i>Triquetrella mxinwana</i>	B, GBIF
Campanulaceae	<i>Wahlenbergia oxyphylla</i>	GBIF	Primulaceae	<i>Lysimachia arvensis</i>	GBIF
Capparaceae	<i>Cadaba aphylla</i>	B, GBIF	Primulaceae	<i>Lysimachia loeflingii</i>	GBIF
Caryophyllaceae	<i>Dianthus bolusii</i>	GBIF	Primulaceae	<i>Myrsine africana</i>	GBIF
Caryophyllaceae	<i>Herniaria pearsonii</i>	GBIF	Proteaceae	<i>Aulax pallasia</i>	B
Caryophyllaceae	<i>Petrorhagia dubia</i>	GBIF	Proteaceae	<i>Banksia speciosa</i>	B



Family	Species	Source	Family	Species	Source
Caryophyllaceae	<i>Petrorhagia prolifera</i>	GBIF	Proteaceae	<i>Brabejum stellatifolium</i>	GBIF
Caryophyllaceae	<i>Pollichia campestris</i>	GBIF	Proteaceae	<i>Hakea sericea</i>	GBIF
Caryophyllaceae	<i>Silene burchellii</i>	GBIF	Proteaceae	<i>Leucadendron arcuatum</i>	B
Caryophyllaceae	<i>Silene burchellii</i> subsp. <i>pilosellifolia</i>	GBIF	Proteaceae	<i>Leucadendron barkerae</i>	B, GBIF
Caryophyllaceae	<i>Silene gallica</i>	GBIF	Proteaceae	<i>Leucadendron comosum</i>	B
Caryophyllaceae	<i>Silene gallica</i> var. <i>quinquevulnera</i>	GBIF	Proteaceae	<i>Leucadendron comosum</i> subsp. <i>comosum</i>	B, GBIF
Caryophyllaceae	<i>Silene undulata</i>	B, GBIF	Proteaceae	<i>Leucadendron cordatum</i>	B, GBIF, ST
Caryophyllaceae	<i>Silene undulata</i> subsp. <i>undulata</i>	GBIF	Proteaceae	<i>Leucadendron eucalyptifolium</i>	GBIF
Caryophyllaceae	<i>Spergularia media</i>	GBIF	Proteaceae	<i>Leucadendron glaberrimum</i> subsp. <i>glaberrimum</i>	B
Caryophyllaceae	<i>Spergularia rubra</i>	GBIF	Proteaceae	<i>Leucadendron pubescens</i>	B
Caryophyllaceae	<i>Stellaria media</i>	GBIF	Proteaceae	<i>Leucadendron rubrum</i>	B, GBIF
Celastraceae	<i>Gloveria integrifolia</i>	GBIF	Proteaceae	<i>Leucadendron salignum</i>	B, GBIF
Celastraceae	<i>Gymnosporia buxifolia</i>	GBIF	Proteaceae	<i>Leucadendron spissifolium</i> subsp. <i>spissifolium</i>	B, GBIF
Celastraceae	<i>Maytenus acuminata</i>	GBIF	Proteaceae	<i>Leucadendron teretifolium</i>	GBIF
Celastraceae	<i>Maytenus acuminata</i> var. <i>acuminata</i>	B, GBIF	Proteaceae	<i>Leucospermum calligerum</i>	B, GBIF
Celastraceae	<i>Maytenus oleoides</i>	B, GBIF	Proteaceae	<i>Leucospermum catherinae</i>	B
Celastraceae	<i>Pterocelastrus tricuspidatus</i>	GBIF	Proteaceae	<i>Leucospermum cordifolium</i>	GBIF
Colchicaceae	<i>Colchicum burchellii</i> subsp. <i>burchellii</i>	GBIF	Proteaceae	<i>Leucospermum reflexum</i>	GBIF
Colchicaceae	<i>Colchicum cuspidatum</i>	B, GBIF	Proteaceae	<i>Leucospermum spatulatum</i>	B



Family	Species	Source	Family	Species	Source
Colchicaceae	<i>Ornithoglossum undulatum</i>	GBIF	Proteaceae	<i>Leucospermum tottum</i>	B
Colchicaceae	<i>Wurmbea inusta</i>	GBIF	Proteaceae	<i>Mimetes cucullatus</i>	B, GBIF
Colchicaceae	<i>Wurmbea marginata</i>	GBIF	Proteaceae	<i>Paranomus candicans</i>	B
Colchicaceae	<i>Wurmbea variabilis</i>	GBIF	Proteaceae	<i>Protea acaulos</i>	B
Commelinaceae	<i>Commelina africana</i>	GBIF	Proteaceae	<i>Protea acuminata</i>	B
Commelinaceae	<i>Commelina africana subsp. africana</i>	GBIF	Proteaceae	<i>Protea amplexicaulis</i>	B
Convolvulaceae	<i>Ipomoea albivenia</i>	B	Proteaceae	<i>Protea aurea subsp. aurea</i>	GBIF
Crassulaceae	<i>Adromischus caryophyllaceus</i>	GBIF	Proteaceae	<i>Protea canaliculata</i>	B, GBIF
Crassulaceae	<i>Adromischus filicaulis</i>	B, GBIF	Proteaceae	<i>Protea coronata</i>	GBIF
Crassulaceae	<i>Adromischus filicaulis subsp. marlothii</i>	B, GBIF	Proteaceae	<i>Protea cynaroides</i>	GBIF
Crassulaceae	<i>Adromischus leucophyllus</i>	B	Proteaceae	<i>Protea effusa</i>	B
Crassulaceae	<i>Adromischus maculatus</i>	GBIF	Proteaceae	<i>Protea eximia</i>	B, GBIF
Crassulaceae	<i>Adromischus triflorus</i>	B, GBIF	Proteaceae	<i>Protea grandiceps</i>	GBIF
Crassulaceae	<i>Cotyledon cuneata</i>	GBIF	Proteaceae	<i>Protea holosericea</i>	ST
Crassulaceae	<i>Cotyledon orbiculata</i>	GBIF	Proteaceae	<i>Protea humiflora</i>	GBIF
Crassulaceae	<i>Cotyledon orbiculata var. orbiculata</i>	GBIF	Proteaceae	<i>Protea laevis</i>	B, GBIF
Crassulaceae	<i>Cotyledon orbiculata var. spuria</i>	GBIF	Proteaceae	<i>Protea lanceolata</i>	GBIF
Crassulaceae	<i>Cotyledon papillaris</i>	GBIF	Proteaceae	<i>Protea laurifolia</i>	B, GBIF
Crassulaceae	<i>Crassula arborescens</i>	GBIF	Proteaceae	<i>Protea lorifolia</i>	B, GBIF
Crassulaceae	<i>Crassula atropurpurea</i>	GBIF	Proteaceae	<i>Protea magnifica</i>	B, GBIF
Crassulaceae	<i>Crassula atropurpurea var. anomala</i>	GBIF	Proteaceae	<i>Protea neriifolia</i>	B, GBIF
Crassulaceae	<i>Crassula atropurpurea var. atropurpurea</i>	B	Proteaceae	<i>Protea nitida</i>	B, GBIF
Crassulaceae	<i>Crassula atropurpurea var. purcellii</i>	B	Proteaceae	<i>Protea pendula</i>	B





Family	Species	Source	Family	Species	Source
Crassulaceae	<i>Crassula atropurpurea</i> var. <i>watermeyeri</i>	B	Proteaceae	<i>Protea punctata</i>	B, GBIF
Crassulaceae	<i>Crassula barbata</i>	GBIF	Proteaceae	<i>Protea repens</i>	B, GBIF
Crassulaceae	<i>Crassula biplanata</i>	GBIF	Proteaceae	<i>Protea revoluta</i>	B, GBIF
Crassulaceae	<i>Crassula campestris</i>	GBIF	Proteaceae	<i>Protea rupicola</i>	ST
Crassulaceae	<i>Crassula capitella</i> subsp. <i>thyrsoiflora</i>	GBIF	Proteaceae	<i>Protea scabriuscula</i>	B
Crassulaceae	<i>Crassula ciliata</i>	GBIF	Proteaceae	<i>Protea scolopendriifolia</i>	B, GBIF
Crassulaceae	<i>Crassula clavata</i>	GBIF	Proteaceae	<i>Protea</i> sp.	GBIF
Crassulaceae	<i>Crassula columnaris</i>	GBIF	Proteaceae	<i>Protea subulifolia</i>	B
Crassulaceae	<i>Crassula columnaris</i> subsp. <i>columnaris</i>	GBIF	Proteaceae	<i>Protea sulphurea</i>	B, GBIF
Crassulaceae	<i>Crassula cotyledonis</i>	GBIF	Proteaceae	<i>Protea welwitschii</i>	B
Crassulaceae	<i>Crassula decumbens</i> var. <i>decumbens</i>	GBIF	Proteaceae	<i>Protea witzenbergiana</i>	B
Crassulaceae	<i>Crassula deltoidea</i>	GBIF	Proteaceae	<i>Serruria acrocarpa</i>	B
Crassulaceae	<i>Crassula dependens</i>	B	Proteaceae	<i>Serruria balanocephala</i>	GBIF
Crassulaceae	<i>Crassula expansa</i>	GBIF	Proteaceae	<i>Serruria decipiens</i>	B
Crassulaceae	<i>Crassula expansa</i> subsp. <i>expansa</i>	GBIF	Proteaceae	<i>Serruria dodii</i>	B
Crassulaceae	<i>Crassula hemisphaerica</i>	GBIF	Proteaceae	<i>Serruria gremialis</i>	B
Crassulaceae	<i>Crassula lanceolata</i> subsp. <i>lanceolata</i>	GBIF	Proteaceae	<i>Sorocephalus lanatus</i>	B
Crassulaceae	<i>Crassula montana</i>	GBIF	Proteaceae	<i>Spatalla incurva</i>	B
Crassulaceae	<i>Crassula montana</i> subsp. <i>montana</i>	GBIF	Proteaceae	<i>Vexatorella latebrosa</i>	GBIF
Crassulaceae	<i>Crassula multiflora</i>	GBIF	Proteaceae	<i>Vexatorella obtusata</i>	B
Crassulaceae	<i>Crassula multiflora</i> subsp. <i>multiflora</i>	GBIF	Proteaceae	<i>Vexatorella obtusata</i> subsp. <i>albomontana</i>	GBIF
Crassulaceae	<i>Crassula muricata</i>	GBIF	Proteaceae	<i>Vexatorella obtusata</i> subsp. <i>obtusata</i>	B, GBIF
Crassulaceae	<i>Crassula muscosa</i>	GBIF	Pteridaceae	<i>Adiantum aethiopicum</i>	B



Family	Species	Source	Family	Species	Source
Crassulaceae	<i>Crassula muscosa</i> var. <i>muscosa</i>	B, GBIF	Pteridaceae	<i>Cheilanthes capensis</i>	GBIF
Crassulaceae	<i>Crassula natans</i>	GBIF	Pteridaceae	<i>Cheilanthes contracta</i>	B, GBIF
Crassulaceae	<i>Crassula natans</i> var. <i>natans</i>	GBIF	Pteridaceae	<i>Cheilanthes hastata</i>	GBIF
Crassulaceae	<i>Crassula nemorosa</i>	GBIF	Pteridaceae	<i>Cheilanthes parviloba</i>	GBIF
Crassulaceae	<i>Crassula nudicaulis</i>	B, GBIF	Pteridaceae	<i>Pellaea calomelanos</i>	GBIF
Crassulaceae	<i>Crassula nudicaulis</i> var. <i>platyphylla</i>	GBIF	Pteridaceae	<i>Pellaea pteroides</i>	GBIF
Crassulaceae	<i>Crassula obtusa</i>	GBIF	Pylaisiadelphaceae	<i>Isopterygium tenerum</i>	B
Crassulaceae	<i>Crassula orbicularis</i>	GBIF	Ranunculaceae	<i>Clematis brachiata</i>	GBIF
Crassulaceae	<i>Crassula pageae</i>	GBIF	Ranunculaceae	<i>Knowltonia tenuifolia</i>	GBIF
Crassulaceae	<i>Crassula pellucida</i>	GBIF	Ranunculaceae	<i>Knowltonia vesicatoria</i> subsp. <i>vesicatoria</i>	GBIF
Crassulaceae	<i>Crassula perforata</i>	GBIF	Ranunculaceae	<i>Myosurus minimus</i>	GBIF
Crassulaceae	<i>Crassula perforata</i> subsp. <i>perforata</i>	GBIF	Ranunculaceae	<i>Ranunculus multifidus</i>	GBIF
Crassulaceae	<i>Crassula pubescens</i>	GBIF	Restionaceae	<i>Anthochortus ecklonii</i>	B
Crassulaceae	<i>Crassula pubescens</i> subsp. <i>pubescens</i>	B	Restionaceae	<i>Askidiosperma capitatum</i>	B
Crassulaceae	<i>Crassula pyramidalis</i>	GBIF	Restionaceae	<i>Askidiosperma nitidum</i>	B
Crassulaceae	<i>Crassula rupestris</i>	GBIF	Restionaceae	<i>Cannomois aristata</i>	GBIF
Crassulaceae	<i>Crassula rupestris</i> subsp. <i>rupestris</i>	GBIF	Restionaceae	<i>Cannomois congesta</i>	GBIF
Crassulaceae	<i>Crassula saxifraga</i>	GBIF	Restionaceae	<i>Cannomois parviflora</i>	B, GBIF
Crassulaceae	<i>Crassula sebaeoides</i>	GBIF	Restionaceae	<i>Cannomois primosii</i>	B
Crassulaceae	<i>Crassula simulans</i>	GBIF	Restionaceae	<i>Cannomois robusta</i>	B
Crassulaceae	<i>Crassula strigosa</i>	GBIF	Restionaceae	<i>Cannomois scirpoides</i>	B
Crassulaceae	<i>Crassula subaphylla</i>	GBIF	Restionaceae	<i>Cannomois virgata</i>	B
Crassulaceae	<i>Crassula subulata</i>	GBIF	Restionaceae	<i>Elegia asperiflora</i>	B
Crassulaceae	<i>Crassula subulata</i> var. <i>hispida</i>	GBIF	Restionaceae	<i>Elegia capensis</i>	B



Family	Species	Source	Family	Species	Source
Crassulaceae	<i>Crassula subulata</i> var. <i>subulata</i>	GBIF	Restionaceae	<i>Elegia filacea</i>	B
Crassulaceae	<i>Crassula tetragona</i>	GBIF	Restionaceae	<i>Elegia stokoei</i>	B
Crassulaceae	<i>Crassula tetragona</i> subsp. <i>lignescens</i>	GBIF	Restionaceae	<i>Hydrophilus rattrayi</i>	B
Crassulaceae	<i>Crassula tetragona</i> subsp. <i>tetragona</i>	GBIF	Restionaceae	<i>Hypodiscus laevigatus</i>	GBIF
Crassulaceae	<i>Crassula thunbergiana</i> subsp. <i>thunbergiana</i>	GBIF	Restionaceae	<i>Hypodiscus neesii</i>	B
Crassulaceae	<i>Crassula tomentosa</i>	GBIF	Restionaceae	<i>Hypodiscus striatus</i>	B
Crassulaceae	<i>Crassula tomentosa</i> var. <i>tomentosa</i>	GBIF	Restionaceae	<i>Ischyrolepis sieberi</i>	B
Crassulaceae	<i>Crassula umbella</i>	GBIF	Restionaceae	<i>Restio aridus</i>	B, ST
Crassulaceae	<i>Crassula umbellata</i>	GBIF	Restionaceae	<i>Restio capensis</i>	GBIF
Crassulaceae	<i>Crassula vaillantii</i>	GBIF	Restionaceae	<i>Restio distichus</i>	B
Crassulaceae	<i>Tylecodon cacalioides</i>	GBIF	Restionaceae	<i>Restio distractus</i>	B
Crassulaceae	<i>Tylecodon paniculatus</i>	B, GBIF	Restionaceae	<i>Restio distylis</i>	B
Crassulaceae	<i>Tylecodon reticulatus</i>	GBIF	Restionaceae	<i>Restio laniger</i>	B
Crassulaceae	<i>Tylecodon reticulatus</i> subsp. <i>reticulatus</i>	GBIF	Restionaceae	<i>Restio luxurians</i>	B, GBIF
Crassulaceae	<i>Tylecodon ventricosus</i>	GBIF	Restionaceae	<i>Restio nanus</i>	GBIF
Crassulaceae	<i>Tylecodon wallichii</i>	GBIF	Restionaceae	<i>Restio ocreatus</i>	B
Crassulaceae	<i>Tylecodon wallichii</i> subsp. <i>wallichii</i>	B, GBIF	Restionaceae	<i>Restio paniculatus</i>	B, GBIF
Cucurbitaceae	<i>Cucumis myriocarpus</i>	GBIF	Restionaceae	<i>Restio perplexus</i>	B
Cucurbitaceae	<i>Kedrostis capensis</i>	B, GBIF	Restionaceae	<i>Restio quadratus</i>	GBIF
Cucurbitaceae	<i>Kedrostis nana</i> var. <i>zeyheri</i>	GBIF	Restionaceae	<i>Restio rudolfii</i>	B
Cunoniaceae	<i>Cunonia capensis</i>	GBIF	Restionaceae	<i>Restio sieberi</i>	GBIF
Cupressaceae	<i>Widdringtonia nodiflora</i>	GBIF	Restionaceae	<i>Restio strobilifer</i>	B
Cyatheaceae	<i>Cyathea capensis</i>	GBIF	Restionaceae	<i>Restio triticeus</i>	GBIF
Cyperaceae	<i>Carex capensis</i>	GBIF	Restionaceae	<i>Restio venustus</i>	B
Cyperaceae	<i>Cyperus marginatus</i>	B	Restionaceae	<i>Restio vimineus</i>	GBIF



Family	Species	Source	Family	Species	Source
Cyperaceae	<i>Cyperus nitidus</i>	GBIF	Restionaceae	<i>Restio virgeus</i>	GBIF
Cyperaceae	<i>Cyperus polystachyos</i> var. <i>polystachyos</i>	GBIF	Restionaceae	<i>Restio wittebergensis</i>	GBIF
Cyperaceae	<i>Cyperus thunbergii</i>	GBIF	Restionaceae	<i>Rhodocoma capensis</i>	GBIF
Cyperaceae	<i>Eleocharis limosa</i>	GBIF	Restionaceae	<i>Rhodocoma fruticosa</i>	GBIF
Cyperaceae	<i>Ficinia brevifolia</i>	GBIF	Restionaceae	<i>Staberoha cernua</i>	B
Cyperaceae	<i>Ficinia deusta</i>	GBIF	Restionaceae	<i>Staberoha distachyos</i>	B
Cyperaceae	<i>Ficinia esterhuyseniae</i>	B	Restionaceae	<i>Thamnochortus acuminatus</i>	B
Cyperaceae	<i>Ficinia marginata</i>	GBIF	Restionaceae	<i>Thamnochortus cinereus</i>	B
Cyperaceae	<i>Ficinia nigrescens</i>	GBIF	Restionaceae	<i>Thamnochortus fruticosus</i>	GBIF
Cyperaceae	<i>Ficinia nodosa</i>	GBIF	Restionaceae	<i>Thamnochortus platypteris</i>	B
Cyperaceae	<i>Ficinia stolonifera</i>	B	Restionaceae	<i>Thamnochortus schlechteri</i>	B
Cyperaceae	<i>Fuirena hirsuta</i>	GBIF	Restionaceae	<i>Willdenowia arescens</i>	GBIF
Cyperaceae	<i>Isolepis digitata</i>	GBIF	Restionaceae	<i>Willdenowia bolusii</i>	B
Cyperaceae	<i>Isolepis prolifera</i>	B, GBIF	Rhamnaceae	<i>Noltea africana</i>	GBIF
Cyperaceae	<i>Tetraria involuocrata</i>	GBIF	Rhamnaceae	<i>Phylica ambigua</i>	B
Cyperaceae	<i>Tetraria ustulata</i>	GBIF	Rhamnaceae	<i>Phylica buxifolia</i>	B
Cytinaceae	<i>Cytinus sanguineus</i>	B, GBIF	Rhamnaceae	<i>Phylica comptonii</i>	ST
Dennstaedtiaceae	<i>Pteridium aquilinum</i> subsp. <i>capense</i>	GBIF	Rhamnaceae	<i>Phylica debilis</i>	B
Dipsacaceae	<i>Scabiosa columbaria</i>	B, GBIF	Rhamnaceae	<i>Phylica excelsa</i> var. <i>excelsa</i>	B
Ditrichaceae	<i>Ceratodon purpureus</i> subsp. <i>stenocarpus</i>	B	Rhamnaceae	<i>Phylica odorata</i>	B, GBIF
Droseraceae	<i>Drosera acaulis</i>	B	Rosaceae	<i>Acaena latebrosa</i>	B, GBIF
Droseraceae	<i>Drosera aliciae</i>	GBIF	Rosaceae	<i>Cliffortia atrata</i>	B
Droseraceae	<i>Drosera capensis</i>	B	Rosaceae	<i>Cliffortia baccans</i>	B
Droseraceae	<i>Drosera cistiflora</i>	GBIF	Rosaceae	<i>Cliffortia crenata</i>	B, GBIF
Droseraceae	<i>Drosera ramentacea</i>	GBIF	Rosaceae	<i>Cliffortia cristata</i>	B



Family	Species	Source	Family	Species	Source
Droseraceae	<i>Drosera trinervia</i>	B, GBIF	Rosaceae	<i>Cliffortia erectisepala</i>	GBIF
Droseraceae	<i>Drosera zeyheri</i>	GBIF	Rosaceae	<i>Cliffortia gracillima</i>	GBIF
Ebenaceae	<i>Diospyros austroafricana</i>	GBIF	Rosaceae	<i>Cliffortia hantamensis</i>	GBIF
Ebenaceae	<i>Diospyros glabra</i>	B, GBIF	Rosaceae	<i>Cliffortia neglecta</i>	GBIF
Ebenaceae	<i>Euclea polyandra</i>	GBIF	Rosaceae	<i>Cliffortia odorata</i>	GBIF
Ebenaceae	<i>Euclea undulata</i>	GBIF	Rosaceae	<i>Cliffortia pulchella</i>	GBIF
Ericaceae	<i>Erica abietina</i> subsp. <i>aurantiaca</i>	B	Rosaceae	<i>Cliffortia ruscifolia</i>	GBIF
Ericaceae	<i>Erica anguliger</i>	B, GBIF	Rosaceae	<i>Cliffortia sericea</i>	GBIF
Ericaceae	<i>Erica arcuata</i>	B	Rosaceae	<i>Cliffortia strobilifera</i>	B, GBIF
Ericaceae	<i>Erica areolata</i>	B	Rubiaceae	<i>Anthospermum galioides</i>	GBIF
Ericaceae	<i>Erica articularis</i>	GBIF	Rubiaceae	<i>Anthospermum spathulatum</i>	GBIF
Ericaceae	<i>Erica benthamiana</i>	B	Rubiaceae	<i>Carpacoce scabra</i>	GBIF
Ericaceae	<i>Erica bergiana</i>	GBIF	Rubiaceae	<i>Galium tomentosum</i>	GBIF
Ericaceae	<i>Erica bruniades</i>	B	Rubiaceae	<i>Rubia petiolaris</i>	GBIF
Ericaceae	<i>Erica caffra</i>	GBIF	Ruscaceae	<i>Eriospermum bayeri</i>	B
Ericaceae	<i>Erica caffra</i> var. <i>caffra</i>	B, GBIF	Rutaceae	<i>Acmadenia matroosbergensis</i>	B, GBIF, ST
Ericaceae	<i>Erica calycina</i>	GBIF	Rutaceae	<i>Acmadenia sheilae</i>	GBIF
Ericaceae	<i>Erica calycina</i> var. <i>calycina</i>	B	Rutaceae	<i>Acmadenia teretifolia</i>	B
Ericaceae	<i>Erica calycina</i> var. <i>longibracteata</i>	B	Rutaceae	<i>Adenandra mundiifolia</i>	GBIF
Ericaceae	<i>Erica cerinthoides</i>	GBIF	Rutaceae	<i>Agathosma adenandriflora</i>	B
Ericaceae	<i>Erica cerinthoides</i> var. <i>cerinthoides</i>	B, GBIF	Rutaceae	<i>Agathosma barnesiaie</i>	B
Ericaceae	<i>Erica cetrata</i>	B	Rutaceae	<i>Agathosma capensis</i>	B
Ericaceae	<i>Erica coacervata</i>	B	Rutaceae	<i>Agathosma cerefolium</i>	B
Ericaceae	<i>Erica coccinea</i>	B, GBIF	Rutaceae	<i>Agathosma crassifolia</i>	B, GBIF



Family	Species	Source	Family	Species	Source
Ericaceae	<i>Erica coccinea</i> subsp. <i>coccinea</i>	GBIF	Rutaceae	<i>Agathosma divaricata</i>	B
Ericaceae	<i>Erica conspicua</i> subsp. <i>conspicua</i>	B	Rutaceae	<i>Agathosma foetidissima</i>	GBIF
Ericaceae	<i>Erica conspicua</i> subsp. <i>roseoflora</i>	B	Rutaceae	<i>Agathosma marlothii</i>	B
Ericaceae	<i>Erica constantia</i>	ST	Rutaceae	<i>Agathosma ovata</i>	B
Ericaceae	<i>Erica corifolia</i> var. <i>corifolia</i>	B	Rutaceae	<i>Agathosma pentachotoma</i>	B
Ericaceae	<i>Erica cristiflora</i> var. <i>cristiflora</i>	B	Rutaceae	<i>Agathosma squamosa</i>	B
Ericaceae	<i>Erica curviflora</i>	B, GBIF	Rutaceae	<i>Agathosma subteretifolia</i>	B
Ericaceae	<i>Erica daphniflora</i> var. <i>daphniflora</i>	B	Rutaceae	<i>Diosma acmaeophylla</i>	B
Ericaceae	<i>Erica daphniflora</i> var. <i>muscari</i>	B	Rutaceae	<i>Diosma pedicellata</i>	B
Ericaceae	<i>Erica discolor</i>	GBIF	Rutaceae	<i>Diosma strumosa</i>	B
Ericaceae	<i>Erica dodii</i>	B	Rutaceae	<i>Euchaetis elsieae</i>	B, GBIF
Ericaceae	<i>Erica erasmia</i>	B	Rutaceae	<i>Macrostylis tenuis</i>	B
Ericaceae	<i>Erica eremioides</i> subsp. <i>eremioides</i>	B	Salicaceae	<i>Populus xcanescens</i>	GBIF
Ericaceae	<i>Erica glandulipila</i>	B, ST	Salicaceae	<i>Salix mucronata</i>	GBIF
Ericaceae	<i>Erica glauca</i> var. <i>glauca</i>	B	Santalaceae	<i>Colpoon compressum</i>	GBIF
Ericaceae	<i>Erica gnaphaloides</i>	B	Santalaceae	<i>Thesidium podocarpum</i>	B
Ericaceae	<i>Erica grandiflora</i>	GBIF	Santalaceae	<i>Thesium carinatum</i>	B
Ericaceae	<i>Erica grandiflora</i> subsp. <i>grandiflora</i>	GBIF	Santalaceae	<i>Thesium juncifolium</i>	B
Ericaceae	<i>Erica grata</i>	GBIF	Sapindaceae	<i>Dodonaea viscosa</i>	GBIF
Ericaceae	<i>Erica haemastoma</i>	B	Sapindaceae	<i>Dodonaea viscosa</i> subsp. <i>angustifolia</i>	GBIF
Ericaceae	<i>Erica haematosiphon</i>	B	Sapotaceae	<i>Sideroxylon inerme</i> subsp. <i>inerme</i>	GBIF
Ericaceae	<i>Erica hispiduloides</i>	B	Schizaeaceae	<i>Schizaea pectinata</i>	B, GBIF
Ericaceae	<i>Erica junonia</i> var. <i>junonia</i>	B	Scrophulariaceae	<i>Aptosimum indivisum</i>	GBIF



Family	Species	Source	Family	Species	Source
Ericaceae	<i>Erica junonia</i> var. <i>minor</i>	B	Scrophulariaceae	<i>Buddleja saligna</i>	GBIF
Ericaceae	<i>Erica lateralis</i>	B, GBIF	Scrophulariaceae	<i>Chaenostoma caeruleum</i>	B, GBIF
Ericaceae	<i>Erica leptopus</i>	B	Scrophulariaceae	<i>Chaenostoma decipiens</i>	B
Ericaceae	<i>Erica leptopus</i> var. <i>leptopus</i>	B, GBIF	Scrophulariaceae	<i>Chaenostoma glabratum</i>	B
Ericaceae	<i>Erica leucanthera</i>	B, GBIF	Scrophulariaceae	<i>Chaenostoma macrosiphon</i>	B
Ericaceae	<i>Erica leucodesmia</i>	B, GBIF	Scrophulariaceae	<i>Chaenostoma uncinatum</i>	B
Ericaceae	<i>Erica leucopelta</i>	GBIF	Scrophulariaceae	<i>Chenopodiopsis hirta</i>	B
Ericaceae	<i>Erica leucopelta</i> var. <i>leucopelta</i>	B	Scrophulariaceae	<i>Cromidon varicalyx</i>	B
Ericaceae	<i>Erica maderi</i>	B	Scrophulariaceae	<i>Diascia hexensis</i>	B
Ericaceae	<i>Erica maesta</i> var. <i>maesta</i>	B	Scrophulariaceae	<i>Diascia humilis</i>	B
Ericaceae	<i>Erica mammosa</i>	B, GBIF	Scrophulariaceae	<i>Diascia maculata</i>	B
Ericaceae	<i>Erica maximiliani</i>	B	Scrophulariaceae	<i>Diascia parviflora</i>	B, GBIF
Ericaceae	<i>Erica mira</i>	B	Scrophulariaceae	<i>Diascia sacculata</i>	B
Ericaceae	<i>Erica monsoniana</i>	GBIF	Scrophulariaceae	<i>Freylinia lanceolata</i>	B, GBIF
Ericaceae	<i>Erica monsoniana</i> var. <i>monsoniana</i>	B, GBIF	Scrophulariaceae	<i>Freylinia undulata</i>	B
Ericaceae	<i>Erica nubigena</i>	B	Scrophulariaceae	<i>Hemimeris centrodes</i>	GBIF
Ericaceae	<i>Erica nudiflora</i>	GBIF	Scrophulariaceae	<i>Hemimeris racemosa</i>	B
Ericaceae	<i>Erica orculiflora</i>	B, GBIF	Scrophulariaceae	<i>Jamesbrittenia atropurpurea</i>	GBIF
Ericaceae	<i>Erica oresigena</i>	B	Scrophulariaceae	<i>Lyperia antirrhinoides</i>	B, GBIF
Ericaceae	<i>Erica palliflora</i>	B	Scrophulariaceae	<i>Lyperia formosa</i>	B, GBIF
Ericaceae	<i>Erica parilis</i>	GBIF	Scrophulariaceae	<i>Lyperia tristis</i>	GBIF
Ericaceae	<i>Erica parilis</i> var. <i>parilis</i>	B, GBIF	Scrophulariaceae	<i>Manulea cheiranthus</i>	GBIF
Ericaceae	<i>Erica parilis</i> var. <i>parviflora</i>	B, GBIF	Scrophulariaceae	<i>Manulea minor</i>	B
Ericaceae	<i>Erica penicilliformis</i>	GBIF	Scrophulariaceae	<i>Microdon dubius</i>	B, GBIF





Family	Species	Source	Family	Species	Source
Ericaceae	<i>Erica peziza</i>	GBIF	Scrophulariaceae	<i>Microdon parviflorus</i>	GBIF
Ericaceae	<i>Erica plukenetii</i>	B, GBIF	Scrophulariaceae	<i>Microdon polygaloides</i>	B
Ericaceae	<i>Erica plukenetii</i> subsp. <i>plukenetii</i>	B, GBIF	Scrophulariaceae	<i>Nemesia barbata</i>	GBIF
Ericaceae	<i>Erica polycoma</i>	B	Scrophulariaceae	<i>Nemesia diffusa</i> var. <i>diffusa</i>	B
Ericaceae	<i>Erica pubescens</i>	GBIF	Scrophulariaceae	<i>Nemesia leipoldtii</i>	B
Ericaceae	<i>Erica quadrangularis</i>	B	Scrophulariaceae	<i>Nemesia pageae</i>	B, GBIF
Ericaceae	<i>Erica racemosa</i> var. <i>racemosa</i>	B	Scrophulariaceae	<i>Oftia africana</i>	GBIF
Ericaceae	<i>Erica rigidula</i>	B	Scrophulariaceae	<i>Phyllopodium elegans</i>	GBIF
Ericaceae	<i>Erica setacea</i>	GBIF	Scrophulariaceae	<i>Polycarena aurea</i>	B
Ericaceae	<i>Erica setulosa</i>	B, ST	Scrophulariaceae	<i>Polycarena rariflora</i>	B
Ericaceae	<i>Erica sphaerocephala</i>	B	Scrophulariaceae	<i>Selago albida</i>	B
Ericaceae	<i>Erica steinbergiana</i> var. <i>steinbergiana</i>	B	Scrophulariaceae	<i>Selago corymbosa</i>	GBIF
Ericaceae	<i>Erica tegetiformis</i>	B, GBIF	Scrophulariaceae	<i>Selago dolosa</i>	GBIF
Ericaceae	<i>Erica tenuifolia</i>	B	Scrophulariaceae	<i>Selago eckloniana</i>	B, GBIF
Ericaceae	<i>Erica tenuis</i>	B	Scrophulariaceae	<i>Selago geniculata</i>	B
Ericaceae	<i>Erica terniflora</i>	B	Scrophulariaceae	<i>Selago gloiodes</i>	B
Ericaceae	<i>Erica totta</i>	B, GBIF	Scrophulariaceae	<i>Selago glutinosa</i>	B, GBIF
Ericaceae	<i>Erica transparentis</i>	B	Scrophulariaceae	<i>Selago gracilis</i>	B
Ericaceae	<i>Erica tumida</i> var. <i>minor</i>	B	Scrophulariaceae	<i>Selago hispida</i>	GBIF
Ericaceae	<i>Erica tumida</i> var. <i>tumida</i>	B	Scrophulariaceae	<i>Selago triquetra</i>	B
Ericaceae	<i>Erica verecunda</i>	B	Scrophulariaceae	<i>Sutera foetida</i>	GBIF
Ericaceae	<i>Erica vestita</i>	GBIF	Scrophulariaceae	<i>Sutera glabrata</i>	B
Ericaceae	<i>Erica viscaria</i>	B	Scrophulariaceae	<i>Teedia lucida</i>	B, GBIF
Euphorbiaceae	<i>Euphorbia clandestina</i>	GBIF	Scrophulariaceae	<i>Zaluzianskya capensis</i>	GBIF
Euphorbiaceae	<i>Euphorbia eustacei</i>	B	Scrophulariaceae	<i>Zaluzianskya ovata</i>	B
Euphorbiaceae	<i>Euphorbia genistoides</i>	B, GBIF	Solanaceae	<i>Datura stramonium</i>	GBIF



Family	Species	Source	Family	Species	Source
Euphorbiaceae	<i>Euphorbia hamata</i>	B	Solanaceae	<i>Solanum guineense</i>	GBIF
Euphorbiaceae	<i>Euphorbia heptagona</i>	GBIF	Solanaceae	<i>Solanum linnaeanum</i>	GBIF
Euphorbiaceae	<i>Euphorbia mauritanica</i>	GBIF	Solanaceae	<i>Solanum mauritanium</i>	GBIF
Euphorbiaceae	<i>Euphorbia nesemannii</i>	GBIF	Solanaceae	<i>Solanum nigrum</i>	GBIF
Euphorbiaceae	<i>Euphorbia rhombifolia</i>	GBIF	Solanaceae	<i>Solanum retroflexum</i>	GBIF
Euphorbiaceae	<i>Euphorbia silenifolia</i>	GBIF	Solanaceae	<i>Solanum tomentosum</i>	GBIF
Euphorbiaceae	<i>Euphorbia stolonifera</i>	GBIF	Stilbaceae	<i>Halleria elliptica</i>	GBIF
Euphorbiaceae	<i>Euphorbia tenax</i>	GBIF	Stilbaceae	<i>Halleria lucida</i>	GBIF
Euphorbiaceae	<i>Euphorbia tuberosa</i>	B, GBIF	Stilbaceae	<i>Halleria ovata</i>	B
Euphorbiaceae	<i>Ricinus communis</i>	GBIF	Stilbaceae	<i>Ixianthes retzioides</i>	B
Fabaceae	<i>Acacia mearnsii</i>	GBIF	Targioniaceae	<i>Targionia hypophylla</i>	B
Fabaceae	<i>Acacia saligna</i>	GBIF	Tecophilaeaceae	<i>Cyanella hyacinthoides</i>	GBIF
Fabaceae	<i>Amphithalea ciliaris</i>	B	Tecophilaeaceae	<i>Cyanella lutea</i>	GBIF
Fabaceae	<i>Amphithalea dahlgrenii</i>	ST	Tecophilaeaceae	<i>Cyanella lutea subsp. lutea</i>	GBIF
Fabaceae	<i>Amphithalea muraltioides</i>	B	Thesiaceae	<i>Lacomucinaea lineata</i>	GBIF
Fabaceae	<i>Amphithalea pageae</i>	GBIF, ST	Thesiaceae	<i>Thesium funale</i>	GBIF
Fabaceae	<i>Amphithalea spinosa</i>	B, GBIF, ST	Thesiaceae	<i>Thesium strictum</i>	GBIF
Fabaceae	<i>Amphithalea villosa</i>	B, GBIF	Thurniaceae	<i>Pronium serratum</i>	GBIF
Fabaceae	<i>Amphithalea violacea</i>	GBIF	Thymelaeaceae	<i>Gnidia anomala</i>	B
Fabaceae	<i>Argyrolobium argenteum</i>	GBIF	Thymelaeaceae	<i>Gnidia clavata</i>	B
Fabaceae	<i>Aspalathus acuminata subsp. acuminata</i>	B, GBIF	Thymelaeaceae	<i>Gnidia geminiflora</i>	B
Fabaceae	<i>Aspalathus aemula</i>	B	Thymelaeaceae	<i>Gnidia juniperifolia</i>	GBIF
Fabaceae	<i>Aspalathus alpestris</i>	B, GBIF	Thymelaeaceae	<i>Gnidia laxa</i>	GBIF
Fabaceae	<i>Aspalathus angustifolia subsp. angustifolia</i>	B	Thymelaeaceae	<i>Gnidia nitida</i>	B
Fabaceae	<i>Aspalathus angustifolia subsp. robusta</i>	B	Thymelaeaceae	<i>Gnidia oppositifolia</i>	B, GBIF



Family	Species	Source	Family	Species	Source
Fabaceae	<i>Aspalathus arida</i> subsp. <i>arida</i>	B	Thymelaeaceae	<i>Lachnaea eriocephala</i>	B
Fabaceae	<i>Aspalathus bracteata</i>	B	Thymelaeaceae	<i>Lachnaea oliverorum</i>	B, GBIF
Fabaceae	<i>Aspalathus candicans</i>	GBIF	Thymelaeaceae	<i>Passerina comosa</i>	B
Fabaceae	<i>Aspalathus cliffortioides</i>	B	Thymelaeaceae	<i>Passerina filiformis</i> subsp. <i>filiformis</i>	B
Fabaceae	<i>Aspalathus corrudifolia</i>	B	Thymelaeaceae	<i>Passerina obtusifolia</i>	GBIF
Fabaceae	<i>Aspalathus costulata</i>	B	Thymelaeaceae	<i>Passerina truncata</i> subsp. <i>truncata</i>	B
Fabaceae	<i>Aspalathus cymbiformis</i>	B	Thymelaeaceae	<i>Struthiola ciliata</i>	GBIF
Fabaceae	<i>Aspalathus divaricata</i> subsp. <i>divaricata</i>	B	Thymelaeaceae	<i>Struthiola eckloniana</i>	GBIF
Fabaceae	<i>Aspalathus filicaulis</i>	B	Thymelaeaceae	<i>Struthiola leptantha</i>	B
Fabaceae	<i>Aspalathus grandiflora</i>	B	Urticaceae	<i>Urtica lobulata</i>	B
Fabaceae	<i>Aspalathus hirta</i> subsp. <i>hirta</i>	B, GBIF	Viscaceae	<i>Viscum capense</i>	GBIF
Fabaceae	<i>Aspalathus hispida</i>	GBIF	Viscaceae	<i>Viscum rotundifolium</i>	GBIF
Fabaceae	<i>Aspalathus intricata</i> subsp. <i>oxyclada</i>	ST	Vitaceae	<i>Cyphostemma sandersonii</i>	B
Fabaceae	<i>Aspalathus nigra</i>	B, GBIF	Withheld	Sensitive Species 1209	ST
Fabaceae	<i>Aspalathus nudiflora</i>	B	Withheld	Sensitive Species 142	ST
Fabaceae	<i>Aspalathus pachyloba</i> subsp. <i>pachyloba</i>	B, GBIF	Withheld	Sensitive Species 207	B, ST
Fabaceae	<i>Aspalathus pedicellata</i>	GBIF	Withheld	Sensitive Species 654	ST
Fabaceae	<i>Aspalathus perfoliata</i> subsp. <i>phillipsii</i>	B	Withheld	Sensitive Species 692	ST
Fabaceae	<i>Aspalathus perforata</i>	B, GBIF	Withheld	Sensitive Species 871	B, ST
Fabaceae	<i>Aspalathus pigmentosa</i>	B	Withheld	Sensitive Species 521	GBIF, ST
Fabaceae	<i>Aspalathus rigidifolia</i>	GBIF	Zygophyllaceae	<i>Roepera flexuosa</i>	B
Fabaceae	<i>Aspalathus rostrata</i>	B, GBIF, ST	Zygophyllaceae	<i>Roepera foetida</i>	GBIF
Fabaceae	<i>Aspalathus rugosa</i>	B	Zygophyllaceae	<i>Roepera fulva</i>	B, GBIF
Fabaceae	<i>Aspalathus shawii</i>	B, GBIF	Zygophyllaceae	<i>Roepera pygmaea</i>	B



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Family	Species	Source	Family	Species	Source
Fabaceae	<i>Aspalathus shawii</i> <i>subsp. glabripetala</i>	GBIF	Zygophyllaceae	<i>Tribulus terrestris</i>	GBIF
Fabaceae	<i>Aspalathus shawii</i> <i>subsp. longispica</i>	GBIF, ST			



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ERM's Cape Town Office  
1<sup>st</sup> Floor  
Great Westerford  
240 Main Road, Rondebosch  
Cape Town, 7700

T: +27 21 681 5400

F: +27 21 686 0736

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