



### With South African distribution

Species name: <i>Naja flava</i>	Kingdom: Animalia	
Brief description of species: The Cape cobra is a moderate-sized, highly venomous cobra inhabiting a wide variety of biomes across Southern Africa including arid savanna, fynbos, bushveld, desert and semi-desert regions.		
Distribution: Endemic	No of documents: 1	
US4126676A		
Detail: A modified Naja derived neurotoxin for use as treatment for neurological disease.		

### Of South African origin

Species name: <i>Neosartorya fischeri</i>	Kingdom: Fungi	No Image Available
Brief description of species: A microbial fungus.		
Distribution: Cosmopolitan	No of documents: 1	
WO2009031101A2		
Detail: Used in a process for the improvement of otherwise waste coal.		

### Of South African origin

Species name: <i>Nidorella anomala</i>	Kingdom: Plantae	
Brief description of species: Small flowering plant, member of the Asteraceae family.		
Distribution: Endemic	No of documents: 1	
WO2001023342A		
Detail: Use of medicinal plants for the treatment of tuberculosis.		


### Of South African origin

Species name: <i>Nudaurelia omega virus</i>	Kingdom: Virales	No Image Available
Brief description of species: Small insect virus affecting moth species <i>Nudaurelia capensis</i>		
Distribution: Cosmopolitan	No of documents: 5	
US2006127364A1 US2005268353A1 US2005172357A9 US2003041349A1 WO1994004660A1		
Detail: The use of viruses as a means of protecting plants against infestation of this moth species.		


### With South African distribution

Species name: <i>Ogataea kodamae</i>	Kingdom: Fungi	No Image Available
Brief description of species: A yeast-based expression system for the production of desired polypeptides.		
Distribution: Uncertain	No of documents: 3	
US6645739B2 US2003092099A1 WO2003010288A2		
Detail: A yeast used as a host cell for production of polypeptides and compositions relating to them.		


### With South African distribution

Species name: <i>Ornithogalum multifolium</i>	Kingdom: Plantae	
Brief description of species: A plant usually less than 10 cm. high, found in shallow pockets of soil on rock outcrops in western Cape. New cultivar (developed in US).		
Distribution: Endemic	No of documents: 5	
US2002100090P1 US2002100092P1 USPP13154P3 USPP13298P3 USPP13314P3 (US Plant Patents)		
Detail: New horticultural cultivar of species developed in the USA.		


### Of South African origin

Species name: <i>Parabuthus tranvaalicus</i>	Kingdom: Animalia	
Brief description of species: Very venomous scorpion. Range is across dry areas of southern Africa.		
Distribution: Cosmopolitan	No of documents: 2	
WO2003028666A US2003113892A1		
Detail: venom used to develop antivenom through the isolation of polypeptides.		


### With South African distribution

Species name: <i>Pelargonium graveolens</i>		Kingdom: Plantae	
Brief description of species: The true <i>Pelargonium graveolens</i> is an uncommon species in the <i>Pelargonium</i> genus, which is native to South Africa, Zimbabwe and Mozambique, while the plants cultivated under this name differ from the wild specimens and are of hybrid origin.			
Distribution: Cosmopolitan		No of documents: 1	
WO2006090239A1			
Detail: A treatment pad for soothing skin around the eye. The pad contains extracts of plants including <i>A. betulina</i> .			

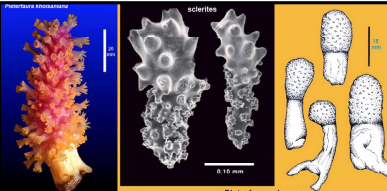
### Of South African origin

Species name: <i>Pelargonium reniforme</i>	Kingdom: Plantae	
Brief description of species: Pelargonium reniforme is a medicinal plant known to Khoi/San and Xhosa traditional healers for its properties in curing stomach ailments, bronchitis and dysentery.		
Distribution: Uncertain	No of documents: 2	
US7611734B2; WO2009011498A1		
Detail: US7611734B2: Use of extract from pelargonium to treat disease related behavioral changes and pathological conditions. WO2009011498A1: A composition for the treatment of acute or chronic infection in respiratory system.		

### Of South African origin

Species name: <i>Pelargonium sidoides</i>	Kingdom: Plantae	
Brief description of species: Common names include Umckaloabo and South African Geranium. Root extract of <i>Pelargonium sidoides</i> is used as cold and flu medicine.		
Distribution: Endemic	No of documents: 2	
US7611734B2 WO2009011498A1		
Detail: US7611734B2: Extracts from <i>Pelargonium</i> species or plant parts thereof, particularly from <i>P. sidoides</i> and <i>P. reniforme</i> for the prophylaxis or treatment of disease-related behavioural changes, WO2009011498A1: <i>Pelargonium sidoides</i> syrup used as a therapeutic agent for acute or chronic infections.		


### With South African distribution

Species name: <i>Pieterfaurea unilobata</i>		Kingdom: Animalia	
Brief description of species: A marine coral.			
Distribution: Endemic		No of documents: 2	
US2009075964A1 WO2009039103A2			
Detail: A fragrant mood enhancing compound using pregenene extract from corals.			


### Of South African origin

Species name: <i>PK1RS4 virus in buffalo</i>		Kingdom: Virales	No Image Available
Brief description of species: Virus strain associated with foot and mouth infection in cattle.			
Distribution: Cosmopolitan		No of documents: 1	
US2011014232A1			
Detail: New variant of foot and mouth disease virus which can be used as vaccine antigens.			


### Of South African origin

Species name: <i>Plectranthus hadiensis</i>	Kingdom: Plantae	
Brief description of species: Medicinal herb from which extracts are taken for treatment of bacterial infections.		
Distribution: Cosmopolitan	No of documents: 1	
WO2008001278A		
Details: Preparations for the treatment of bacterial and fungal infections, to pharmaceutical compositions comprising the biologically active compounds from Plectranthus.		

### With South African distribution


Species name: <i>Plectranthus hilliardiae</i>	Kingdom: Plantae	
Brief description of species: New cultivar of plant. Horticulture. Also known as the Candle Plant or Spur Flower.		
Distribution: Cosmopolitan	No of documents: 6	
US2005114972P1 USPP13858P2 USPP15542P2 USPP15543P2 USPP15563P2 USPP16002P3 (US Plant Patents)		
Detail: A new cultivar of Plectranthus, one parent of which is P.hilliardiae. The records are exclusively for US Plant Patents.		

### With South African distribution


Plant Kingdom distribution		
Species name: <i>Plectranthus myrianthus</i>	Kingdom: Plantae	
Brief description of species: Tall annual or weakly perennial herb, found on woody or rocky hillsides.		
Distribution: Cosmopolitan		No of documents: 1
WO2008001278A2		
Detail: Extract from plant as anti-microbial compound.		



**With South African distribution**

Species name: <i>Priestleya tomentosa</i>	Kingdom: Plantae	
Brief description of species: A shrub which is endemic to South Africa.		
Distribution: Endemic	No of documents: 3	
US6534527B2 US2002025300A1 US2004013752A1		
Detail: Used in a herbal mix of an anti smoking compound.		

**With South African distribution**

Species name: <i>Protea pulchra</i>	Kingdom: Plantae	
Brief description of species: Synonym for Protea burchellii, a medium-sized, winter-flowering shrub.		
Distribution: Endemic	No of documents: 4	
EP0877756B1 US6909032B2 US2002108144A1 WO1997028185A1		
Detail: Protea used in the development of an anti microbial protein.		


**Of South African origin**

Species name: <i>Rhodosporidium toruloides</i>	Kingdom: Fungi	No Image Available
Brief description of species: Rhodospiridium toruloides is an oleaginous yeast. It is a red basidiomycetous isolated from wood pulp from conifers. Rhodospiridium toruloides has been linked to bovine mastitis.		
Distribution: Cosmopolitan	No of documents: 1	
WO2005100569A2		
A process for obtaining an optically active epoxide , the polypeptide being a polypeptide encoded by a gene of a yeast cell.		


### Of South African origin

Species name: <i>S. cerevisiae strain PPRI3338</i>	Kingdom: Fungi	No Image Available
Brief description of species: Species of yeast used in wine making and bread baking.		
Distribution: Cosmopolitan	No of documents: 1	
WO2006051387A1		
Detail: The invention discloses a method of producing a micro-organism that can biosynthesise carnitine from a non-carnitine synthesising micro-organism.		


### With South African distribution

North South American distribution:		
Species name: <i>Scabiosa anthemifolia</i>	Kingdom: Plantae	
Brief description of species: Scabiosa is a genus in the teasel Family Dipsacaceae of flowering plants.		
Distribution: Cosmopolitan	No of documents: 3	
US2006137054P1 USPP19260P2 USPP12167P2 (US Plant Patents)		
Detail: Patents for new cultivars.		


### With South African distribution

Species name: <i>Sceletium expansum</i>		Kingdom: Plantae	
Brief description of species: Traditional knowledge. All patents refer to Hottentot (actually Khoi, Khoikhoi or Khoekhoe) indigenous use of S. expansum.			
Distribution: Endemic		No of documents: 6	
US2005192339A1 US2005239841A1 US2007149600A1 WO2005051380A1 WO2005051381A1 WO2006114402A1			
Detail: Reference to hottentot (actually Khoi, Khoikhoi or Khoekhoe) use of plant. Patents refer to indigenous use but does not use the plant.			

### With South African distribution


Species name: <i>Sceletium tortuosum</i>	Kingdom: Plantae	
Brief description of species: Sceletium tortuosum is a succulent herb commonly found in South Africa, which is also known as Kanna, Channa, Kougoed. Pharmaceutical extracts - traditional knowledge.		
Distribution: Uncertain	No of documents: 20	
US6288104B1 US2005192339A1 US2005239841A1 US2007149600A1 US2009105281A1 US2009197823A1 US2009239884A1 WO1997046234A1 WO2005051380A1 WO2005051381A1 WO2010106494A1 WO2010106495A1 WO2010111136A2		
Detail: US6288104B1: Compounds containing mesembrine for use as serotonin inhibitors. US2009105281A1: Treatment for the immune system contains mesembrine. WO1997046234A1: Antidepressant including mesembrine.		

### Of South African origin


Species name: <i>Sclerochiton ilicifolius</i>	Kingdom: Plantae	
Brief description of species: Plant growing in the Transvaal region of South Africa.		
Distribution: Endemic		
WO2010105014A; WO2008085575A; WO2007140195A; WO2007133184A; WO2007133183A; WO2007103989A; WO2006113897A; WO2005020721A; WO2005016022A; WO2005014839A; WO2010323411A1; US2010261234A1; US2010095390A1; US2009130285A1; US2005170041A1; US2005112260A1; EP2090173A1; EP1653810B1; US2008020434A1; US2008015361A1; EP2194042A2; WO2007103389A2		
Detail: The plant is the source of monatin, a ‘super-sweetener’.		



**With South African distribution**

Species name: <i>Siphonochilus natalensis</i>	Kingdom: Plantae	
Brief description of species: Wild ginger is a forest floor plant with aromatic rhizomatous roots. Extracts from plant has medical uses		
Distribution: Endemic	No of documents: 3	
WO2007113698A2 US2010168227A1 US2009082433A1		
Detail: Plant extract used for an anti-allergy compound.		


**Of South African origin**

Species name: <i>Smelophyllum capense</i>		Kingdom: Plantae	
Brief description of species: The genus Smelophyllum is in the family Sapindaceae and contains just one Species. Extracts used for skin treatments.			
Distribution: Uncertain		No of documents: 1	
US5807555A			
Detail: A method and composition for topically administering a Smelophyllum capense extract as a cosmetic, dermatologic, or pharmaceutical composition to promote collagen synthesis.			

**Of South African origin**

Species name: <i>Sorangium cellulosum</i>	Kingdom: Bacteria	No Image Available
Brief description of species: Sorangium cellulosum is a soil-dwelling Gram-negative bacterium of the group myxobacteria.		
Distribution: Cosmopolitan	No of documents: 6	
WO2001064650A WO2001054689A US7435754B2 US2007122891A1 US2002198256A1 WO2000071563A2		
Detail: Used to extract epothilones for use in cancer treatments.		


**With South African distribution**

Species name: <i>Spiloxene schlechteri</i>	Kingdom: Plantae	
Brief description of species: Spiloxene is a genus of about 25 plant species belonging to the Hypoxidaceae family. Most Spiloxene species are native to South Africa.		
Distribution: Endemic	No of documents: 4	
US5609874A US4652636A EP0587396A1 EP0092226A2		
Detail: Extract from Spiloxene is used in anti cancer and anti viral treatments.		


**Of South African origin**

Species name: <i>Streptomyces platensis</i>	Kingdom: Bacteria	No Image Available
Brief description of species: A bacterium that produces platensimycin as one of numerous secondary metabolites. This molecule is an inhibitor of many dangerous bacteria.		
Distribution: Cosmopolitan	No of documents: 1	
US7745644B2		
Detail: Fermentation of a nutrient medium with a eubacterium Streptomyces sp. yields a novel antibacterial (antibiotic) compound.		


**With South African distribution**

Species name: <i>Sutherlandia tomentosa</i>	Kingdom: Plantae	
Brief description of species: It has a strong reputation as a cure for cancer and now increasingly as an immune booster in the treatment of HIV/AIDS.		
Distribution: Uncertain	No of documents: 1	
WO2008065473A1		
Detail: An anti-diabetic compound using extracts from Sutherlandia.		


### With South African distribution

Species name: <i>Tapinanthus kraussianus</i>	Kingdom: Plantae	
Brief description of species: Tapinanthus is a genus of plant in family Loranthaceae. It contains some 33 species. Methods and cuttings for mass propagation of plant parasites.		
Distribution: Uncertain	No of documents: 4	
EP1418800B1 US6792715B2 US2003029078A1 WO2003005804A1		
Detail: Method of plant propagation where parent plant has a parasite. Note that this plant is not the focus of the invention.		


### Of South African origin

Species name: <i>Tarchonanthus camphoratus</i>	Kingdom: Plantae	
Brief description of species: Tarchonanthus camphoratus, is a shrub or small tree, widespread in Africa south of the Sahel		
Distribution: Cosmopolitan	No of documents: 1	
WO1994009631A1		
Detail: Use of Tarchonanthus camphoratus parts and its derivatives in insect-repelling, anti-irritating, soothing, anti-oedema, decongesting formulations and compositions.		


### Of South African origin

Species name: <i>Tulbaghia violacea</i>	Kingdom: Plantae	
Brief description of species: Tulbaghia violacea is a plant species indigenous to southern Africa and is used locally as a herbal remedy/medicine to treat several ailments. Recently it was demonstrated to have androgenic and anti-cancer properties in vitro.		
Distribution: Endemic	No of documents: 2	
WO2007003287A; US2009275472A1		
Detail: Extracts from plants used as anti microbial preparation as plant protection agents.		


### With South African distribution

Species name: <i>Turnera capensis</i>	Kingdom: Plantae	
Brief description of species: A synonym for Piriqueta capensis. Herb growing in southern Africa.		
Distribution: Cosmopolitan	No of documents: 2	
WO2008071684A2 EP1932531A1		
Detail: Extract from any species of turnera which can be used in a treatment for sexual dysfunction.		

### With South African distribution


Species name: <i>Umtiza listeriana</i>	Kingdom: Plantae	
Brief description of species: Umtiza is a monotypic genus in the legume family containing the single species Umtiza listeriana. This tree is endemic to South Africa. In long lists of species that can be utilised for cosmetic or pharmaceutical formulation		
Distribution: Endemic	No of documents: 2	
US2009208432A1 WO2007128725A1		
Detail: Bark from tree used in UV skin treatment. Listed in claim as one of a number of species that can be used in the invention.		

### With South African distribution


Species name: <i>Vernonia kraussii</i>	Kingdom: Plantae	
Brief description of species: Synonym of Vernonia oligocephala, a widely distributed plant in South Africa, it occurs in wooded rocky grassland.		
Distribution: Cosmopolitan	No of documents: 1	
WO2000043025A1		
Detail: A pharmaceutical preparation for treating viral infections including powder derived from Vernonia Oligocephalus plant species.		




### With South African distribution

Plant South African distribution		
Species name: <i>Wahlenbergia procumbens</i>	Kingdom: Plantae	
Brief description of species: Also known as the wild violet.		
Distribution: Cosmopolitan	No of documents: 1	
US2008184425P1 (US Plant Patent)		
Detail: A new horticultural cultivar of the species.		

### Of South African origin

Species name: <i>Withania species</i>		Kingdom: Plantae	
Brief description of species: Withania is a genus of flowering plants in the nightshade family. Two of the species, <i>W. somnifera</i> (Ashwagandha) and <i>W. coagulans</i> (Ashutosh booti), are economically significant, and are cultivated in several regions for their medicinal uses.			
Distribution: Cosmopolitan		No of documents: 1	
EP1208845A1			
Detail: A treatment for sexual dysfunction using extracts of Withania.			

### With South African distribution

Species name: <i>Zantedeschia sprengeri</i>	Kingdom: Plantae	
Brief description of species: Synonym for <i>Zantedeschia pentlandii</i> . New cultivars in horticulture. Also mentioned as a possible moisturizer in cosmetic composition.		
Distribution: Cosmopolitan		No of documents: 23
US2002184689P1 US2004055064P1 US2004216199P1 US2004216200P1 US2007039082P1 US2007186323P1 US2010223703P1 US2010223704P1 USPP11001A USPP13393P2 USPP14063P3 USPP14844P3 USPP14849P2 USPP14850P2 USPP15282P2 USPP15642P3 USPP15664P3 USPP18110P3 USPP18281P3 USPP18833P2 USPP21244P2 USPP21245P2 US2006070148A1		
Detail: New horticultural cultivars of the species developed in various locations across the world. Note that these are US Plant Patents and not utility patents.		





**With South African distribution**


Species name: <i>Zygozoma oligophaga</i>	Kingdom: Fungi	No Image Available
Brief description of species: Zygozoma is a genus of fungi in the family Dipodascaceae.		
Distribution: Uncertain		No of documents: 5
EP0505567A1 EP0769557A1 US5336619A US5508461A US5512465A		
Detail: A species which is used in the production of butanediol.		


## Other Species

The following species appear in patents and are relevant to South Africa. However, they are excluded from the analysis because they are not the focus of the claimed invention or for similar reasons. They are therefore included in this section for the sake of completeness and in case the information is of interest to others in future research.


Species name: <i>Aloe pretoriensis</i>	Kingdom: Plantae	
Brief description of species: Smaller single stem blue-green aloe from S Africa, Zimbabwe and Swaziland. Like other aloes, this species is used medicinally		
Distribution: Cosmopolitan	No of documents: 2	
EP0519758A1 US5477000A		
Detail: Literature reference regarding callus formation.		

Species name: <i>Anas smithi</i>	Kingdom: Animalia	
Brief description of species: Cape Shoveller Duck. Included in long list of bird species illustrating potential for patented method.		
Distribution: Cosmopolitan	No of documents: 1	
US2005079491A1		
Detail: Long list of avian species, invention is to identify presence of biological substances from bird s in a sample.		

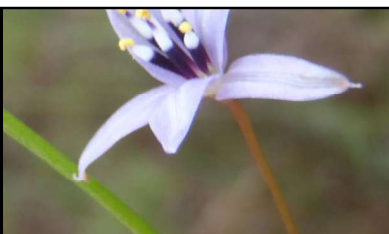
Species name: <i>Aspalathus capitata</i>	Kingdom: Plantae	
Brief description of species: Legume of the same genus as that which produces Rooibos tea.		
Distribution: Endemic	No of documents: 1	
US5693361A		
Detail: Decorative foliage preservative that can be used on A. capitata.		


Species name: <i>Bambusa balcooa</i>	Kingdom: Plantae	
Brief description of species: Bambusa balcooa or the Balcooa Bamboo is a clumping bamboo of Indian origin. It is popular with the Vietnamese as food, and can be used as a short life timber for temporary constructions.		
Distribution: Cosmopolitan	No of documents: 1	
Detail: WO2010113020A1: Bambusa used to provide xylan to evaluate enzymatic substrate in isolation of polypeptide for pulping industry.		

Species name: <i>Barbus andrewi</i>	Kingdom: Animalia	
Brief description of species: The Cape whitefish or Berg-breede River whitefish is a ray-finned fish species in the family Cyprinidae.		
Distribution: Endemic	No of documents: 2	
US2009238930A1 WO2009102781A1		
Detail: The invention relates to powdered, protein-rich comestibles and methods for production using fish. Whitefish is listed as one possible source of proteins to be use in the invention.		


Species name: <i>Bunolagus monticularis</i>	Kingdom: Animalae	
Brief description of species: A genetically modified rabbit comprising at least one edited chromosomal sequence. Long list of rabbit spp features this animal.		
Distribution: Uncertain	No of documents: 1	
US2011023140A1		
Detail: Genetically modified rabbits for research into mammalian diseases. The claims lists all rabbit species.		


Species name: <i>Burkholderia tuberum</i>	Kingdom: Bacteria	No Image Available
Brief description of species: Burkholderia tuberum is a species of proteobacteria that is capable of symbiotic nitrogen fixation with the legume Aspalathus carnosa.		
Distribution: Uncertain		No of documents: 3
WO2010139957A1 WO2010139958A1 WO2010139959A2		
Detail. Alginate polymers for overcoming drug resistance in bacteria. Not the focus of the invention.		

Species name: <i>Caesia contorta</i>	Kingdom: Plantae	
Brief description of species: Hybridised maize plant based on research into nucleic acid molecules associated with oil in plants.		
Distribution: Uncertain	No of documents: 1	
US2007039069A1		
Detail: Not the focus of the invention.		


Species name: <i>Calanus brevicornis</i>	Kingdom: Animalia	
Brief description of species: Calanus is a genus of marine copepod in the family Calanidae. Anti microbial agent from Calanus spp.		
Distribution: Uncertain	No of documents: 1	
WO2010049454A2		
Detail: Appears in a long list of species, not the species used in the invention.		


Species name: <i>Candida albicans</i> strain ATCC PTA-5316 (MA7327)	Kingdom: Fungi	No Image Available
Brief description of species: Candida albicans is a diploid fungus that grows both as yeast and filamentous cells and a causal agent of opportunistic oral and genital infections in humans.		
Distribution: Cosmopolitan	No of documents: 2	
WO2005009391A2 EP1651628B1		
Detail: C. albicans used as a control during production of an antibiotic compound.		

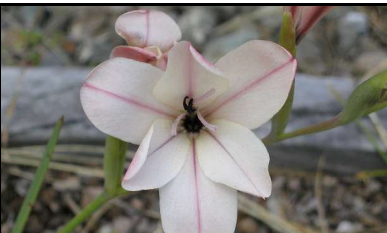
Species name: <i>Ceratotherium simum simum</i>	Kingdom: Animalia	
Brief description of species: White rhino - Listed in gene amplification research. Nucleotide sequences encoding CD44 proteins.		
Distribution: Cosmopolitan	No of documents: 2	
WO2005034984A1 US7141364B1		
Detail: Not the focus of the invention.		


Species name: <i>Craterostigma wilmsii</i>	Kingdom: Plantae	
Brief description of species: A resurrection species that is thought to rely primarily on the protection of cellular components during drying to survive desiccation.		
Distribution: Uncertain	No of documents: 2	
WO2005030965A2 US2008010698A1		
Detail: Not the focus of the invention.		





Species name: <i>Culex tigripes</i>	Kingdom: Animalia	
Brief description of species: Culex is a genus of mosquitoes, and is important in that several species serve as vectors of important diseases. Patent for insecticide compound.		
Distribution: Cosmopolitan	No of documents: 3	
EP1845781B1 US2008269252A1 WO2006097588A1		
Detail: An insecticide product which can target C. tigripes.		


Species name: <i>Delosperma ecklonis</i>	Kingdom: Plantae	
Brief description of species: Delosperma is a genus of around 100 species of succulent plants. Method for the cryopreservation and long term storage of one or several types of cells.		
Distribution: Cosmopolitan	No of documents: 2	
WO2010094747A1 EP2221362A1		
Detail: Methods Patent for cryopreservation of cells method.		

Species name: <i>Gladiolus grandiflorus</i>	Kingdom: Plantae	
Brief description of species: Genetic control of ethylene biosynthesis in plants. G grandiflorus listed as plant that could be applicable		
Distribution: Uncertain	No of documents: 5	
Detail: Not focus of inventions. Appears in a long list of plants.		

Species name: <i>Helicoverpa armigera</i>	Kingdom: Animalia	
Brief description of species: The cotton bollworm, corn earworm or Old World bollworm, <i>Helicoverpa armigera</i> , is a moth, the larvae of which feed on a wide range of plants, including many important cultivated crops.		
Distribution: Cosmopolitan	No of documents: 1	
US6180098B2		

Species name: <i>Lampranthus sociorum</i>	Kingdom: Plantae	
Brief description of species: Lampranthus sociorum is a species of plants in the family Aizoaceae. Patent for novel Aromatic Acyltransferase Genes.		
Distribution: Uncertain	No of documents: 1	
US2009288225A1		
Detail: Literature reference.		


Species name: <i>Leonotis dysophylla</i>	Kingdom: Plantae	
Brief description of species: Leonotis is a genus of flowering plants in the family Lamiaceae. Breath freshener, solvent for which comes from plant extract.		
Distribution: Endemic	No of documents: 1	
EP0321180A1		
Detail: One of a large range of solvent producing species given as examples.		

Species name: <i>Lolium rigidum</i>	Kingdom: Plantae	
Brief description of species: Lolium is also known as ryegrass, an important feed crop.		
Distribution: Cosmopolitan	No of documents: 1	
WO2007031735A2		
Detail: Used as a control for controlling herbicide resistant plants.		


Species name: <i>Mycosphaerella africana</i>	Kingdom: Fungi	No Image Available
Brief description of species: This genus contains over 10,000 species. The patent involves the detection of mycosphaerella using the polymerase chain reaction.		
Distribution: Uncertain	No of documents: 1	
US2002115084A1		

Species name: <i>Myxozyma kluyveri</i>	Kingdom: Fungi	No Image Available
Brief description of species: A soil-borne species of the genus Myxozyma. A mention in a long list of yeast species in patent for a non-conventional yeast arabinose transporter.		
Distribution: Endemic	No of documents: 1	
WO2007143247A2		
Detail: Species comes up in long lists.		


Species name: <i>Myxozyma lipomycoides</i>	Kingdom: Fungi	No Image Available
Brief description of species: A method for producing geranylgeraniol and/or farnesol from cells belonging to a number of genera.		
Distribution: Endemic	No of documents: 2	
EP1219704A2 EP1219714A2		
Detail: Species appears in long lists.		

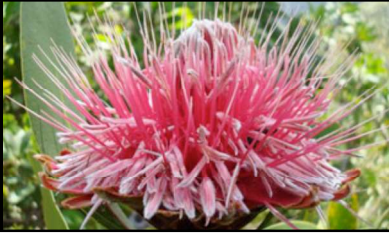
Species name: <i>Oldenburgia grandis</i>	Kingdom: Plantae	
Brief description of species: Oldenburgia grandis is a shrub or small, gnarled tree in the family Asteraceae. It occurs in the mountains around Grahamstown in South Africa.		
Distribution: Endemic	No of documents: 1	
US2002132021A1		
Detail: The species appears in a long list of species from which extracts elicited with acetic acid.		

Species name: <i>Pachytichospora transvaalensis</i>	Kingdom: Fungi	No Image Available
Brief description of species: Production of a product in a microbial fuel cell. Also used to test anti-cholesterol component for comestibles.		
Distribution: Uncertain		No of documents: 6
WO2009070022A1 EP1206939B1 US7413740B2 US7754204B2 US2008260709A1 US2005244426A1		
Detail: Not the focus of invention in any case. Just listed as a yeast with certain properties.		


Species name: <i>Pelea capreolus</i>	Kingdom: Animalia	
Brief description of species: The Grey Rhebok inhabit grassy, montane habitats, and carry a woolly grey coat to insulate them from the cold across southern Africa. Used in patent to test gene amplifier.		
Distribution: Cosmopolitan	No of documents: 4	
US7141364B1 US2008003595A1 US2010075310A1 WO2006119466A2		
Detail: Appears in references or as a test species for a primer.		


Species name: <i>Pichia euphorbiiphila</i>	Kingdom: Fungi	No Image Available
Brief description of species: Pharmaceutical preparations. Genus listed in claims as having suitable properties.		
Distribution: Uncertain	No of documents: 3	
EP1486493A1 US7659409B2 US2005107621A1		
Detail: Appears in very long lists of fungi with specific properties, but not directly associated with invention.		


Species name: <i>Pinus patula</i>	Kingdom: Plantae	
Brief description of species: Pine tree from central America, grown extensively across the world as a commercial crop.		
Distribution: Cosmopolitan	No of documents: 1	
WO2010113020A		
Detail: Feedstock for deveolpment of polypeptide with $\alpha$ -glucuronidase activity that can degrade glucuronoxylan molecules. Pinus is not the focus of the invention.		


Species name: <i>Protea rubropilosa</i>	Kingdom: Plantae	
Brief description of species: Production of allite and its use as a sweetener. extracts from Transvaal sugarbush.		
Distribution: Endemic	No of documents: 1	
WO1997042339A1		
Detail: Literature reference.		





Species name: <i>Putterlickia retrospinosa</i>	Kingdom: Plantae	
Brief description of species: Unresolved species name. Listed in patent as plant with antibiotic properties.		
Distribution: Uncertain		No of documents: 11
US2006269485A1 US2007292355A1 US2007292461A1 US2008063607A1 US2008206161A1 US2008292560A1 US2008299220A1 US2010159035A1 WO2007099396A2 WO2007113830A2 WO2008075207A2		
Detail: List of plants with antibiotic properties. Not the focus of the invention.		

Species name: <i>Rhodocoma arida</i>	Kingdom: Plantae	
Brief description of species: The Restionaceae is a family of rush like plants largely from the southern hemisphere.		
Distribution: Uncertain	No of documents: 3	
US7576213B2 US2007105721A1 WO2005061515A1		
Detail: Vinylogous 4-Hpyrones and their use in promoting plant growth. Plant listed in claim but not focus of the invention.		

Species name: <i>Ruschia indurata</i>	Kingdom: Plantae	
Brief description of species: Plant forming caespitose rounded clumps with grey-green leaves. A method of producing a plant secondary metabolite. Plus several patents with long lists of species.		
Distribution: Endemic	No of documents: 1	
WO2005012507A1		
Detail: A method of producing a plant secondary metabolite. The species appears in several other patents in long lists of species.		

Species name: <i>Secale africanum</i>	Kingdom: Plantae	
Brief description of species: A single species of wild rye found only in South Africa and endemic to that country. Long lists of species included in patents for agricultural plant genetics.		
Distribution: Endemic	No of documents: 11	
EP1953235A2 EP2080769A2 EP2096177A2 EP2199304A1 US5332408A US2008318790A1 WO1990006375A1 WO2005014828A2 WO2005014828A2 WO2007087815A2 WO2010037402A1		
Detail: Crop plant used to test methods for analysing DNA identification methodology.		

Species name: <i>Senecio citrifolius</i>	Kingdom: Plantae	
Brief description of species: Native to southern Africa, this slow-growing shrub-like plant has blue-green tear-shaped leaves and clustering tiny yellowish flowers. Long lists of species included as suitable targets in patents for agricultural plant genetics.		
Distribution: Endemic	No of documents: 2	
WO2006133970A2 US2009307801A1		
Detail: Crop plants listed as targets for invention.		

Species name: <i>Spodoptera trituratora</i>	Kingdom: Animalia	
Brief description of species: The Lawn worm ( <i>Spodoptera trituratora</i> ) is an Afrotropical moth of the Noctuidae family.		
Distribution: Cosmopolitan	No of documents: 4	
WO2003074716A2 WO2003074715A2 US2006078973A1 US7700833B2		
Detail: Listed as an insect from which nucleic acid can be extracted.		

Species name: <i>Sporobolomyces kluyverinii</i>	Kingdom: Fungi	No Image Available
Brief description of species: A basidiomycetous yeast from Southern Africa.		
Distribution: Endemic	No of documents: 3	
WO2006034811A2 WO2005026269A1 US2004175407A1		
In long lists of patents for biological cell coatings and reporter genes.		


Species name: <i>Taxeobacter ocellatus</i>	Kingdom: Bacteria	No Image Available
Brief description of species: Proteins taken from species. Long list of species showing ID methods in patents.		
Distribution: Uncertain	No of documents: 4	
WO2005086794A2 US2010267012A1 US2009068641A1 US2005250135A1		
Detail: Methodology for identifying microbes - not focus of invention		

Species name: <i>Tilletia transvaalensis</i>	Kingdom: Fungi	No Image Available
Brief description of species: Tilletia is a genus of smut fungi in the Tilletiaceae family. Species in this genus are plant pathogens that affect various grasses. Long list of yeast species in relation to fungicides and plant health formulations.		
Distribution: Uncertain	No of documents: 8	
US2010035753A1 US2010197741A1 US2010209410A1 WO2005122770A2 WO2008095890A2 WO2009037242A2 WO2009040397A1 WO2009060012A2		
Detail: Plant pathogen listed as species which is a potential target species but not focus of invention.		


Species name: <i>Tobrilus diversipapillatus</i>	Kingdom: animalia	No Image Available
Brief description of species: Nematode worm. Patent for study of nematode life strategy in soil.		
Distribution: Cosmopolitan	No of documents: 2	
EP1613772B1 WO2004090164A2		
Detail: Methodology for examination of soil health by studying nematodes.		

Species name: <i>Trichoderma reesei</i>	Kingdom: Fungi	No Image Available
Brief description of species: Trichoderma reesei is a mesophilic and filamentous fungus. It is an anamorph of the fungus Hypocrea jecorina. T. reesei has the capacity to secrete large amounts of cellulolytic enzymes.		
Distribution: Cosmopolitan	No of documents: 1	
US2010015660A1		
Detail: Literature references.		


Species name: <i>Trichosporon terrestre</i>	Kingdom: Fungi	No Image Available
Brief description of species: Trichosporon is a genus of anamorphic fungi in the family Trichosporonaceae. All species of Trichosporon are yeasts with no known teleomorphs. Patent for the production of heterocyclic compounds from bacteria		
Distribution: Unknown	No of documents: 1	
WO1997031912A1		
Detail: Species listed in experimental data for use of Sporangium sp as the focus of the invention.		

Species name: <i>Urginea rubella</i>	Kingdom: Plantae	
Brief description of species: Synonym for <i>Drimia calcarata</i> . Used in medicinal compounds.		
Distribution: Cosmopolitan	No of documents: 4	
US2004082521A1 US2005026849A1 US2006205679A1 WO2004087121A2		
Detail: Listed as a plant containing glycosides. Not the focus of the invention.		

Species name: <i>Vanderwaltozyma polyspora</i>	Kingdom: Fungi	No Image Available
Brief description of species: A yeast used in a method for producing a transgenic plant cell,		
Distribution: Unknown		No of documents: 14
US2010037350A1 US2010081179A1 US2010081183A1 US2010037350A1 US2010129886A1 US2010203211A1 US2010317072A1 US2010317735A1 US2010317882A1 US2010333234A1 WO2008043849A2 WO2008135931A2 WO2009009836A1 WO2010059539A2		
Detail: Appears in long lists to test methodologies for various processes. Not the focus of the invention.		

Species name: <i>Helichrysum crispum</i>	Kingdom: Plantae	
Brief description of species: Helichrysum (in the sunflower family) occurs in Africa (with 244 species in South Africa), Madagascar, Australasia and Eurasia.		
Distribution: Uncertain	No of documents: 8	
WO2008033112A1		
Detail: Cited in long lists as a species which may be a source of phytochemicals.		



Species name: <i>Cercopithecus pygerythrus</i>	Kingdom: Animalia	
Brief description of species: Vervet monkey - widely ranging monkey. Pharmaceutical research.		
Distribution: Cosmopolitan		No of documents: 14
EP0557876A1 EP1133558B1 EP1721979B1 US6469150B1 US6489445B1 US6495736B1 US6803453B1 US7041463B2 US7393634B1 US2005278798A1 US2003082660A1 US2010021888A1 WO2001090134A1 WO2005103702A2		

## Appendix 1.

Distribution map of GBIF records in South Africa by kingdom.

