Annex Table 1. Characteristics of the study areas.

	Etendeka-Barab (ETE)	Spitzkoppe-Twyfelfontein (STL)	Ganab (GAN)	Namibrand (NRL)
n (samples)	8	12	3	12
Approximate centre of geographic position	19°45'S and 13°50'E	21°08'S and 14°33'E	23°11'S and 15°29'E	25°14'S and 15°51'E
Height above surrounding (m)	170-500	50-460	220-300	70-845
Altitude of highest inselberg (m masl)	1457	1500	1290	1832
Inselberg area (km^2)	0.3-2.9	0.1-6.6	2.1-5.4	0.6-139
Distance to "mainland" (km)	1.9-36.4	0-53	11.8-15.7	18-68
Distance to nearest habitat (km)	3.9-17.2	0.2-18.2	4.25-6.24	7.2-43.2
Species richness of inselberg specialists	36-80	3-57	42-53	5-108
Shannon diversity	2.83-3.80	1.10-3.10	1.68-3.95	1.61-4.22
Simpson index	0.81-0.98	0.60-0.91	0.57-0.98	0.25-0.97
Rock types	basalt	dolerite, granite	granite	gneiss
Land use	conservancy	conservancy	state protected area	state protected area and private nature reserve

Annex Table 2. Characteristics of the 'mainland' areas.

	Brandberg	Erongo	Great western escarpment
Approximate centre of geographic position	21° 07'S and 14° 33'E	21° 41'S and 15° 30'E	19° 51'S and 14° 07'E to 25° 30'S and 16° 18'E
Altitude of highest mountain	2579 m	2219 m	-
Rock type	granite	various igneous, sedimentary and metamorphic	various igneous, sedimentary and metamorphic
Land use	conservancy	conservancy	conservancy, livestock farming

Annex Table 2. Inselberg specialists of four Namib inselberg landscapes. Inselberg specialists were determined for each landscape, so could be generalists in another landscape (*= defined as inselberg specialist in the context of Namib sandsea matrix). Unidentified species were clearly different from those listed. Dispersal range: SR= short-range, which includes no specific adaptation, self- and water-dispersed, LR= long-range which includes adaptations for animal- and wind-dispersal. Growth form: dss= dwarf stem-succulent, geo= geophyte, herb. perenn. = herbaceous perennial (Perez et al. 2013), ls= leaf-succulent, ss= stem-succulent).

Plant species	Dispersal range	Growth form
Abutilon dinteri	SR	shrub
Abutilon pycnodon	SR	shrub
Acacia erubescens	LR	tree
Acacia hereroensis	LR	tree
Acacia mellifera	LR	tree
Acacia montis-usti	LR	tree
Acacia robynsiana	LR	tree
Acalypha fruticosa var. sicula	SR	shrub
Acalypha segetalis	SR	herb
Achyranthes aspera	LR	herb
Acrotome fleckii	SR	herb
Acrotome inflata	SR	herb
Acrotome pallescens	SR	herb
Adenia pechuelii	SR	ss
Adenolobus garipensis	SR	shrub
Adenolobus pecheulii subsp. mossamedensis	SR	shrub
Adromischus schuldtianus	SR	ls
Aizoanthemum dinteri	SR	herb
Aizoon virgatum	SR	shrub
Albuca fleckii	SR	geo
Albuca species	SR	geo
Aloidendron dichotomum	SR	ss
Aloe hereroensis	SR	ls
Aloe namibensis	SR	ls
Aloe sladeniana	SR	ls
Aloe striata subsp. karasbergensis	SR	ls
Amaranthus praetermissus	LR	herb
Amphiasma benguellense	SR	shrub
Amphiasma divaricatum	SR	shrub
Amphiasma merenskyanum	SR	shrub
Anthospermum dregei	SR	shrub
Anthephora pubescens	LR	grass
Anticharis ebracteata	SR	herb
Antiphiona fragrans	LR	shrub
Anticharis inflata	SR	herb
Anticharis linearis	SR	herb
Antizoma species	LR	shrub
Aptosimum arenarium	SR	shrub
Aptosimum lineare	SR	shrub
Aptosimum lugardiae	SR	shrub
Aridaria noctiflora subsp. noctiflora	SR	ls
Aristida adscensionis	LR	grass

Aristida effusa	LR	grass
Aristida parvula	LR	grass
Asparagus africanus	LR	geo
Asparagus denudatus	LR	geo
Asparagus pearsonii	LR	geo
Asparagus retrofractus	LR	geo
Aspilia eenii	LR	shrub
Barleria damarensis	SR	shrub
Barleria lancifolia	SR	shrub
Barleria meeuseana	SR	shrub
Barleria merxmuelleri	SR	shrub
Barleria papillosa	SR	shrub
Barleria rigida	SR	shrub
Berkheya chamaepeuce	LR	shrub
Berkheya spinosissima	LR	shrub
Bidens biternata	LR	herb
Blepharis bossii	SR	shrub
Blepharis gigantea	SR	shrub
Blepharis grossa	SR	herb
Blepharis mitrata	SR	shrub
Blepharis obmitrata	SR	shrub
Blepharis pruinosa	SR	shrub
Boerhavia coccinea	LR	shrub
Boerhavia hereroensis	SR	shrub
Boerhavia species	SR	herb
Boophone disticha	LR	geo
Boscia albitrunca	LR	tree
Brachiaria deflexa	SR	grass
Brachiaria grossa	SR	grass
Bulbostylis hispidula	SR	grass
Cadaba aphylla	LR	shrub
Cadaba schroepellii	LR	tree
Caesalpinia rubra	SR	shrub
*Calicorema capitata**	LR	shrub
Calicorema squarrosa	LR	shrub
Calostephane divaricata	LR	herb
Calostephane marlothiana	LR	herb
Cardiospermum pechuelii	LR	shrub
Catophractes alexandri	LR	shrub
Centropodia glauca	LR	grass
Ceterach cordatum	LR	fern
*Chascanum garipense**	SR	shrub
Cheilanthes capensis	LR	shrub
Cheilanthes dinteri	LR	fern
Cheilanthes marlothii	LR	fern
Cheilanthes multifida	LR	fern
Chenopodium schraderianum	SR	herb
Chloris virgata	LR	grass
Chrysocoma ciliata	LR	shrub
Cissampelos capensis	LR	shrub
Citrullus lanatus	LR	herb
Cleome angustifolia subsp. diandra	SR	herb
Cleome foliosa var. namibensis	SR	herb

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Cleome species 1	SR	herb
Cleome oxyphylla	SR	herb
Cleome species 2	SR	herb
Coccinia rehmanii	LR	herb. perenn.
Codon royenii	SR	shrub
Codon schenkii	SR	shrub
Combretum apiculatum	LR	tree
Combretum imberbe	LR	tree
Combretum wattii	LR	shrub
Commiphora anacardifolia	LR	tree
Commelina diffusa	SR	herb. perenn
Commiphora giessii	LR	ss
Commiphora glaucescens	LR	tree
Commiphora mollis	LR	tree
Commiphora multijuga	LR	tree
Commiphora pyracanthoides	LR	ss
Commiphora saxicola	LR	ss
Commicarpus squarrosus	LR	shrub
Commiphora tenuipetiolata	LR	tree
Commiphora virgata	LR	ss
Commiphora wildii	LR	ss
Corallocarpus welwitschii	LR	herb. perenn
Corbichonia decumbens	SR	shrub
Corchorus species	SR	herb
Cordia sinensis	LR	tree
Crassula sericea var. sericea	SR	dss
Crotalaria argyrea	SR	herb
Croton gratissimus var. gratissimus	SR	tree
Cryptolepis decidua	LR	shrub
Cucumis africanus	LR	herb. perenn
Cucumella aspera	LR	herb. perenn
Cucumella cinerea	LR	herb. perenn
Cucumis meeusei	LR	herb. perenn
Cucumis rigidus	LR	herb. perenn
Cucumis sagittatus	LR	herb. perenn
Cullen obtusifolia	SR	herb
Cuscuta planiflora var. planiflora	SR	herb
Cyanella amboensis	SR	geo
Cymbopogon pospischilii	LR	grass
Cyperus fulgens	SR	grass
Cyperus schinzii	SR	grass
Cyperus species	SR	grass
Cyphostemma bainesii	LR	ss
Cyphostemma currori	LR	ss
Cyphostemma omburense	LR	shrub
Cyphostemma ruacanense	LR	shrub
Cyphostemma uter	LR	ss
Dactyliandra welwitschii	LR	herb. perenn
Dalechampia scandens var. scandens	SR	herb
Danthoniopsis dinteri	LR	grass
Danthoniopsis ramosa	LR	grass
Deverra denudata subsp. aphylla	SR	shrub
Dianthus namaensis	SR	shrub

Dicoma anomala subsp. anomala	LR	herb
Dicoma capensis	LR	herb
Dicoma tomentosa	LR	herb
Digitaria eriantha	SR	grass
Diospyros ramulosa	LR	shrub
Dipcadi brevifolium	SR	geo
Dipcadi crispum	SR	geo
Dipcadi glaucum	SR	geo
Dipcadi longifolium	SR	geo
Dipcadi species	SR	geo
Dombeya rotundifolia	SR	tree
Drimia platyphylla	SR	geo
Drosanthemum subcompressum	SR	ls
Dyerophytum africanum	LR	shrub
Eberlanzia sedoides	SR	ls
Ectadium virgatum	LR	shrub
Ehretia alba	LR	shrub
Elephantorrhiza suffruticosa	LR	tree
Emilia marlothiana	LR	herb
Enneapogon cenchroides	LR	grass
*Enneapogon desvauxii**	LR	grass
Enneapogon scaber	LR	grass
Enneapogon scoparius	LR	grass
Eragrostis bicolor	SR	grass
Eragrostis nindensis	SR	grass
Eragrostis porosa	SR	grass
Eragrostis rotifer	SR	grass
Eragrostis trichophora	SR	grass
Eriocephalus dinteri	LR	shrub
Eriocephalus kingesii	LR	ls
Eriocephalus pinnatus	LR	shrub
Eriospermum rautanenii	SR	geo
Eriocephalus scariosus	LR	shrub
Eriospermum species	SR	geo
Euclea pseudebenus	LR	tree
Euclea undulata	LR	shrub
Euphorbia cibdela	SR	ss
Euphorbia decussata	SR	ss
*Euphorbia glanduligera**	SR	herb
Euphorbia guerichiana	SR	tree
Euphorbia gummifera	SR	ss
Euphorbia inaequilatera	SR	herb
Euphorbia lignosa	SR	dss
Euphorbia mauritanica	SR	ss
Euphorbia namaquensis	SR	ss
Euphorbia phylloclade	SR	herb
Euphorbia virosa	SR	ss
Euryops namibensis	LR	shrub
Euryops subcarnosus	LR	shrub
Felicia clavipilosa subsp. clavipilosa	LR	herb
Felicia filifolia	LR	shrub
Felicia hirsute	LR	herb
Felicia species	LR	herb

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Ficus cordata	LR	tree
Fingerhuthia africana	SR	grass
Forsskaolea candida	LR	herb
Foveolina schinziana	LR	herb
Galenia africana	SR	shrub
Galenia papulosa	SR	herb
Galenia pruinosa	SR	shrub
Galenia species	SR	shrub
Garuleum schinzii subsp. schinzii	LR	herb
Geigeria alata	LR	herb
Geigeria ornativa	SR	herb
Gladiolus saccatus	SR	geo
Gossypium anomalum	LR	shrub
Grewia bicolor	LR	shrub
Grewia flavescens	LR	shrub
Grewia tenax	LR	shrub
Grewia villosa	LR	shrub
*Grielum sinuatum**	LR	herb
Gymnosporia heterophylla	LR	shrub
Gymnosporia linearis	LR	shrub
Helichrysum candolleanum	LR	shrub
Heliophila carnosa	SR	shrub
Heliophila deserticola	SR	herb
Helichrysum gariepinum	LR	herb
Heliotropium hereroense	SR	shrub
Heliotropium lineare	SR	shrub
Helichrysum obtusum	LR	shrub
Heliotropium ovalifolium	SR	herb
Helichrysum roseo-niveum	LR	herb
Helinus spartioides	SR	shrub
Heliotropium steudneri	SR	shrub
Heliotropium supinum	SR	herb
Helichrysum tomentosulum subsp. aromaticum	LR	shrub
Helichrysum tomentosulum subsp. tomentosulum	LR	shrub
Heliophila trifurca	SR	herb
Hemizygia floccosa	SR	shrub
Hereroa puttkamerana	SR	ls
Hermannia affinis	SR	shrub
Hermannia amabilis	SR	herb
Hermannia comosa	SR	shrub
Hermannia glanduligera	SR	shrub
Hermannia merxmuelleri	SR	shrub
Hermannia minimifolia	LR	shrub
Hermannia minutiflora	SR	shrub
Hermbstaedtia spathulifolia	SR	herb
Hermannia tigrensis	SR	herb
Heteromorpha trifoliata	SR	shrub
Hibiscus castroi	LR	shrub
Hibiscus elliottiae	LR	shrub
Hibiscus engleri	SR	herb
Hibiscus fleckii	SR	shrub
Hibiscus palmatus	SR	shrub
Hibiscus species	SR	shrub

Hirpicium echinus	LR	herb
Hirpicium gazanioides	LR	herb
Hoodia currorii	LR	dss
Hoodia parviflora	LR	ss
Hoodia ruschii	LR	ss
Hoodia species	LR	dss
Hypertelis salsoloides	SR	herb
Indigofera adenocarpa	SR	shrub
Indigastrum argyroides	SR	herb
Indigofera auricoma	SR	herb
Indigastrum candissimum	SR	shrub
Indigofera heterotricha	SR	shrub
Indigofera rautanenii	SR	shrub
Indigofera schimperi	SR	shrub
Indigofera species 1	SR	herb
Indigofera species 2	SR	herb
Ipomoea bolusiana	SR	herb. perenn
Ipomoea obscura	SR	herb. perenn
Ipomoea verbascoidea	SR	shrub
Jamesbrittenia atropurpurea	SR	herb
Jamesbrittenia chenopodioides	SR	shrub
Jamesbrittenia glutinosa	SR	herb
Jamesbrittenia hereroensis	SR	herb
Jamesbrittenia lyperioides	SR	shrub
Jamesbrittenia maxii	SR	shrub
Jamesbrittenia primuliflora	SR	herb
Jamesbrittenia sessilifolia	SR	herb
Justicia guerkeana	SR	shrub
Justicia platysepala	SR	shrub
Kalanchoe brachyloba	SR	ls
Kedrostis hirtella	LR	herb. perenn
Kirkia acuminata	SR	tree
Kleinia longiflora	LR	shrub
Kohautia angolensis	SR	shrub
*Kohautia caespitosa**	SR	herb
Kohautia cynanchica	SR	shrub
Kohautia ramosissima	SR	shrub
Kyllinga welwitschii	SR	grass
Lantana dinteri	LR	shrub
Launaea intybacea	LR	herb
Lavrania marlothii	LR	dss
Ledebouria undulata	SR	geo
Lepidium africanum	SR	herb
Lessertia acanthorachis	SR	shrub
Lessertia falciformis	SR	shrub
Lessertia macrostachya	LR	shrub
Leucosphaera bainesii	LR	shrub
Leucas pechuelii	SR	shrub
Limeum aethiopicum	SR	shrub
Limeum argute-carinatum	SR	herb
Limeum dinteri	SR	shrub
Limeum fenestratum	LR	herb
Limeum viscosum	SR	herb

Lithops schwantesii	SR	ls
Lopholaena cneorifolia	LR	shrub
Lotononis platycarpa	SR	herb
Lotononis strigillosa	SR	herb
Lotononis species 1	SR	herb
Lotononis species 2	SR	herb
Lycium bosciifolium	LR	shrub
Lycium cinereum	LR	shrub
Lycium eenii	LR	shrub
Lycium oxycarpum	LR	shrub
Maerua schinzii	LR	tree
Manuleopsis dinteri	SR	shrub
Marcelliopsis splendens	LR	shrub
Megalochlamys marlothii	SR	shrub
Melhania damarana	SR	shrub
Melianthus pectinatus	SR	shrub
Melinis repens subsp. grandiflora	LR	grass
Melinis repens subsp. repens	LR	grass
Merremia palmata	SR	herb
Mesembryanthemum guerichianum	SR	ls
Microloma calycinum	LR	shrub
Microloma incanum	LR	shrub
Mollugo cerviana	SR	herb
Momordica humilis	LR	herb
Monandrus squarrosus	SR	grass
Monechma cleomoides	SR	shrub
Monechma desertorum*	SR	herb
Monechma divaricatum	SR	shrub
Monechma genistifolium subsp. genistifolium	SR	shrub
Monechma leucoderme	SR	shrub
Monsonia deserticola	LR	herb
Monsonia glauca	LR	shrub
Monsonia ignorata	LR	herb. perenn
Monsonia senegalensis	LR	shrub
Monsonia umbellata*	LR	herb. perenn
Montinia caryophyllacea	SR	shrub
Moraea polystachya	SR	geo
Moringa ovalifolia	SR	ss
Myrothamnus flabellifolius	SR	shrub
Myxopappus hereroensis	LR	herb
Nelsia quadrangula	LR	herb
Neorautanenia mitis	SR	shrub
Nicotiana africana	SR	shrub
Nolletia gariepina	LR	shrub
Obetia carruthersiana	SR	tree
Ocimum americanum	SR	herb
Olea europaea subsp. africana	LR	tree
Ornithoglossum parviflorum	SR	geo
Ornithoglossum vulgare	SR	geo
Ornithogalum species	SR	geo
Oropetium capense	SR	grass
Orthanthera albida*	LR	shrub
Othonna brandbergensis	LR	ss

Othonna furcata	LR	ss
Othonna lasiocarpa	LR	ss
Otoptera burchellii	SR	shrub
Oxalis purpurascens	SR	geo
Oxalis species	SR	geo
Ozoroa crassinervia	LR	tree
Parkinsonia africana	LR	tree
Pavonia burchellii	SR	herb
Pavonia rehmanii	SR	shrub
Pegolettia gariepina	LR	shrub
Pegolettia oxyodonta	LR	herb
Pegolettia plumosa	LR	shrub
Pegolettia senegalensis	LR	herb
Pelargonium crassicaule	LR	shrub
Pelargonium desertorum	LR	shrub
Pelargonium otaviense	LR	shrub
Peliostomum leucorrhizum	SR	herb
Peliostomum viscosum	SR	herb
Pennisetum foermeranum	LR	grass
Pentarrhinum insipidum	LR	shrub
Pentatrichia petrosa	LR	shrub
Pentzia pinnatisecta	LR	herb
Pentzia species	LR	herb
Pergularia daemia leiocarpa	LR	shrub
Petalidium halimoides	SR	shrub
Petalidium variabile	SR	shrub
Phyllanthus maderaspatensis	SR	shrub
Phyllanthus pentandrus	SR	herb
Plectranthus hereroensis	SR	shrub
Plumbago pearsonii	SR	shrub
Pogonarthria fleckii	LR	grass
Polygala viride	SR	shrub
Polygala guerichiana	SR	shrub
Polygala pallida	SR	herb
Portulaca oleracea	SR	herb
Psilocaulon salicornioides	SR	ls
Psilocaulon subnodosum	SR	ls
Pteronia lucilioides	LR	shrub
Pterodiscus ngamicus	LR	herb. perenn
Pteronia polygalifolia	LR	shrub
Ptycholobium biflorum	LR	shrub
Rhus burchellii	LR	shrub
Rhus marlothii	LR	shrub
Rhynchosia candida	SR	shrub
Rhynchosia totta	SR	shrub
Rogeria adenophylla	SR	shrub
Rotheca myricoides	LR	shrub
Ruellia currori	SR	shrub
Ruellia diversifolia	SR	shrub
Ruellia sp. nov. 1	SR	shrub
Salsola aphylla	LR	shrub
Salsola garubica	LR	shrub
Salsola species	LR	shrub

Salsola tuberculata	LR	shrub
Salvia garipensis	SR	shrub
Salvadora persica	LR	shrub
Sarcocaulon marlothii	LR	shrub
Sarcostemma viminale	LR	shrub
Scirpus dioecus	SR	grass
Seddera schizantha	SR	shrub
Senecio alliarifolius	LR	shrub
Senecio eenii	LR	herb
Senecio flavus	LR	herb
Senecio sarcoides	LR	ss
Sericocoma heterochiton	LR	shrub
Sericorema sericea	LR	herb
Sesamum abbreviatum	SR	herb
Sesamum rigidum	SR	shrub
Sesuvium sesuvioides	SR	herb
Setaria appendiculata	SR	grass
Setaria verticillata	LR	grass
Sida cordifolia	SR	shrub
Sida ovata	SR	shrub
Solanum burchellii	LR	shrub
Solanum capense	LR	shrub
Solanum catombelense	LR	shrub
Solanum dinteri	LR	shrub
Solanum incanum	LR	herb
Solanum kwebense	LR	shrub
Solanum namaquense	LR	shrub
Solanum rigescentoides	LR	shrub
Stachys dinteri	SR	shrub
Stapelia longipedicellata	LR	dss
Stapelia similis	LR	dss
Steganotaenia araliacea	SR	tree
Sterculia africana	SR	tree
Sterculia quinqueloba	SR	tree
Stipagrostis anomala	LR	grass
Stipagrostis damarensis	LR	grass
Stipagrostis garubensis	LR	grass
Stipagrostis hirtigluma subsp. hirtigluma	LR	grass
Stipagrostis hochstetteriana var. hochstetteriana	LR	grass
Stipagrostis hochstetteriana var. secalina	LR	grass
Stipagrostis hirtigluma subsp. patula	LR	grass
Stipagrostis hirtigluma subsp. pearsonii	LR	grass
Stipagrostis subacaulis*	LR	grass
Stipagrostis uniplumis var. uniplumis	LR	grass
Talinum caffrum	SR	herb. perenn
Tapinanthus oleifolius	LR	shrub
Tephrosia dregeana	SR	herb
Tephrosia griseola	SR	shrub
Tephrosia oxygona subsp. lactea	SR	shrub
Tephrosia oxygona subsp. oxygona	SR	shrub
Terminalia prunioides	LR	tree
Tetragonia arbuscula	LR	ls
Tetragonia reduplicata	LR	ls

Thamnosma africana	SR	shrub
Thesium lacinulatum	LR	shrub
Thesium lineatum	LR	shrub
Trachyandra laxa var rigida	SR	geo
Tragus berteronianus	LR	grass
Trianthema parvifolia	SR	herb
Trichodesma africanum	SR	herb
Tricholaena capensis subsp. arenaria	LR	grass
Tricholaena capensis subsp capensis	LR	grass
Tricholaena monachne	LR	grass
Tripteris angolensis	LR	herb
Tripteris crassifolia	LR	herb
Tripteris microcarpum subsp. microcarpum	LR	herb
Tripteris microcarpum subsp. septentrionalis	LR	herb
Tripteris nervosa	LR	herb
Triraphis ramosissima	LR	grass
Ursinia frutescens	LR	shrub
Ursinia nana	LR	herb
Vangueria infausta	LR	tree
Vernonia obionifolia subsp. dentata	LR	shrub
Vernonia obionifolia subsp. obionifolia	LR	shrub
Wahlenbergia patula	SR	herb
Welwitschia mirabilis	LR	tree
Xerophyta humilis	LR	shrub
Xerophyta viscosa	LR	shrub
Zehneria marlothii	LR	herb. perenn.
Ziziphus mucronata	LR	tree
Zygophyllum cylindrifolium	LR	ls
Zygophyllum meyeri	LR	ls
Zygophyllum pubescens	LR	ls
Zygophyllum simplex*	SR	herb