## Appendix:

**Table A1:** List of Families, Species recorded, Growth type, Abundance, Habitats and Economic / Medicinal uses.

Family	Species	Growth type	Abundance	Habitat	Economic / Medicinal uses [9, 21, 22, 24, 34, 35]
Asclepiadaceae R.Br.	<i>Asclepias sinaicus</i> (Boiss.) Muschl.	Perennial	Common	Compact sandy soil, rocky places	Laxative
	<i>Borealluma tuberculata</i> (N. E. Brown) Plowes	Perennial	Rare	Among granite rocks	Enriches soil fertility
	<i>Calotropus procera</i> (Aiton) W. T. Aiton	Shrub or small tree	Common	Sand plain, wadies, waste places	Fodder, purgative, digestive, stomachic, tonic, asthma, and catarrh
	<i>Caralluma edulis</i> (Edgew.) Benth. & Hook. F.	Perennial	Rare	Sandy wadis	Fuel, edible
	<i>Desmidorchis retrospiciens</i> Ehrenb.	Perennial	Rare	Mountains rocky slopes	Externally treat animal wounds
	Glossonema boveanum (Decne.) Decne.	Perennial	Rare	Compact sandy soil, rocky hills	Sand accumulator
	<i>G. varians</i> (Stocks) Benth. ex Hook.	Perennial	Rare	Southern rocky mountain	Edible, fodder, fruits cooling and digestible
	<i>Gomphocarpus sinaicus</i> Boiss.	Shrub	Rare	Compact sand, rocky hills	Fodder, sand accumulator
	Huernia saudi-arabica D.V. Field	Perennial	Rare	Rocky hillsides	Ornamental
	Leptadenia pyrotechnica (Forssk.) Decne.	Perennial, succulent	Common	Compact deep sand, sand dunes	Fodder, fuel, diuretic
	<i>Monolluma quadrangula</i> (Forssk.) Plowes	Perennial	Rare	Steep rocky hill sides, south mountain	Ornamental
	Odontanthera radians (Forssk.) D.V. Field	Perennial	Rare	Compact sand	
	Pergularia tomentosa L.	Perennial	Common	Rocky hills, among granite boulders	Fodder, expectorant, purgative for bronchitis, tuberculosis, snake bites, fuel
	Periploca aphylla Decne.	Perennial	Common	Rocky hillsides	Fodder, fuel, cerebral fever, stomachic, purgative

	Rhytidocaulon macrolobum Lavranos.	Perennial	Rare	Coral reefs, rocky sands	Fuel
Compositae Giseke (Asteraceae)	Ambrosia maritima L.	Annual or short- lived perennial	Common	Southern mountains, fallow fields	Fodder – antispasmodic, diuretic rheumatic pain, diabetes, expel renal stones, liver fever.
	Anthemis desertii (Boiss.) Eig.	Annual	Rare	Sandy runnels on southern mountains	Sand accumulator, ornamental
	A. melampodina Delile.	Annual	Common	Among red sand dunes	Ornamental
	A. pseudocotula Boiss.	Annual	Common	Upland meadows	Ornamental
	A. scrobicularis Yavin	Annual	Rare	Red sandy dunes	Ornamental, fodder
	A. yemenensis Podlech.	Annual or perennial	Rare	Mountain wadis among Juniper forests	Fodder, ornamental
	<i>Artemisia scoparia</i> Waldst. & Kit.	Annual	Rare	Waste places, saline sandy soil	Stomachic, Anthelmintic
	<i>Atractylis carduus</i> (Forssk.) C. Chr.	Perennial	Rare	Rocky hills, shallow sand	Fodder, sand accumulator, enriches soil fertility
	Calendula arvensis L.	Annual	Common	Lowland area, gravelly, sandy soil, cultivated lands	Acene, eczema, erysipelas, varicose veins
	<i>Cardus getulus</i> Pomel, Nouv. Mat.	Annual	Rare	Rocky hills, shallow sand	Sand accumulator
	C. pycnocephalus L.	Annual	Common	Roadsides, disturbed habitates	Edible, tonic, anti- colic, diuretic, prevent vomiting, liver disease, wounds
	Centaurea schimperi DC.	Perennial	Common	Rocky hill sides	Fodder
	C. sinaica DC.	Annual	Rare	Volcanic gravel (Al-Madina)	Fodder
	C. solstitialis L.	Annual	Rare	Among rocks on the riverbanks	Fodder, antibiotic against <i>Staphylococcus</i> <i>aureus</i> , stomachic
	<i>Centauren slostitialis</i> L. ssp. Solstitialis L.	Annual	Rare	Among rocks, wadis, stony hill sides, mountains area	Fodder for camels
	Cichorium bottae Defl.	Perennial	Common	Coll rainy places	Fodder, stop erosion, tonic

				stomachic, emmenagoque diuretic ed leaves & roots
Conyza incana (Vahl.) Willd.	Perennial	Rare	Moist sandy soil among rocks in wadis	Leaves insecticide, relieving joint muscle pains
C.stricta Willd.	Perennial	Rare	Southern mountains, fallow fields	
<i>Echinops hystrichoides</i> Kittan	Perennial	Common	Sandy plains, wadis among rocks	Water stor sand accumula fodder, edi fuel
<i>E. spinosissimus</i> Turra	Perennial	Common	Among rocks	Fodder, fuel, a inflammatory abortifacient, diuretic, bl pressure, diabe haemorrhoids, varicose
E. viscosus DC.	Perennial	Common	Among rocks, waste places	Fodder, f neurasthenia
<i>Euryops arabicus</i> Steudel ex Jaub. & Spach.	Perennial	Common	Southern mountains, among granite rocks	Fuel, broc ornamental treating wound
<i>Felicia abyssinica</i> Sch Bip. Ex A. Rich.	Perennial	Rare	Sandy plains, Taif	Ornamental
<i>Filago desertorum</i> pomel, Nouv. Mat.	Annual	Common	Sandy plains, wadis among rocks, roadsides	Fodder, s
<i>Flaveria trinervia</i> (Spreng.) Mohr.	Annual	Common	Wet habitats	Fodder, (Inva species)
Helichrysum glumaceum DC.	Shrub	Rare	Arid hills, rocks	Fodder
<i>Ifloga spicata</i> (Forssk.) Sch. Bip.	Annual	Common	Compact sandy plains and mountains area	Fodder
Lactuca serriola L.	Annual or biennial	Rare	Sandy plains	Sand accumula (weed), calmar decoction antipoison scorpion & sr bites, emoll antispasmodic diuretic
Launaea capitata (Spreng.) Dandy.	Annual	Common	Compact sandy plains, wadis	Fodder, accumulator
<i>L. fragilis</i> ssp asirensis (Asso) Pau.	Perennial	Rare	Granite sandy plains	Fodder, s

<i>L.massauensis</i> (Fresen.) Sch. Bip.	Annual	Rare	Steep rocky hill sides	Fodder
<i>L. mucronata</i> (Forssk.) Muschl.	Short- lived perennial	Rare	Sandy, gravilly soil, limestone (Taif)	Fodder, sand accumulator
L. nudiacaulis (L.) Hook.	Perennial	Common	Sandy plains, sandy stones, coastal sandy areas	Sand accumulator, fodder, edible, cooling drink, fever
<i>L. sonchoides</i> (Jaub. & Spach.) Kuntze	Annual or biennial	Common	Compact sandy plains	Fodder, sand accumulator
Leontodon laciniatus (Bertol) Widder	Annual	Rare	Silty soil, compact sand (Taif)	
Onopordum heteracanthum C. A. Mey	Biennial	Common	Northern areas – limestone plateaus	
<i>O. sibthorpianum</i> Boiss. & Heldbr.	Biennial	Rare	Humid habitats, high mountains, gravelly places	
Osteospermum vaillantii (Decne.) Norf.	Perennial	Very Common	Rocky hill sides in the southern mountains (Taif – Abha)	Fodder, sand accumulator
<i>Phagnalon schweinfurthii</i> Sch. Bip. ex Shweinf.	Perennial	Rare	Granite massif, on stony hill sides	Fodder, fuel
Picris asplenioides L.	Annual	Rare	Compact sandy plains near granite outcrops	Ornamental
P. babylonica Hand Mazz.	Annual	Rare	Rocky wadis, granite out crops	Edible, fodder
P. cyanocarpa Boiss.	Annual	Rare	Compact sand, granite roadsides, waste places	Fodder
P. longirostris Sch. Bip.	Annual	Rare	Coarse sandy vallies, gravelly areas	Fodder
<i>Psidia punctutata</i> (DC.) Vatke	Perennial	Common	Steep rocky hill sides at high altitudes southwestern mountains	Fuel, stem treat pain and broken bones
Pulicaria crispa (Forssk.) Oliv.	Perennial	Common	Sandy plains & wadis	Sand accumulator, fodder, fuel, leaves diuretic
P. inuloides (Poir.) DC.	Perennial	Common	Sandy & flat plains, among rocks	Edible, fodder, fuel

	P. schimperi DC.	Perennial	Common	Sandy & flat plains, among rocks	Edible, fodder, sand accumulator, fuel
	<i>Reichardia tingitana</i> (L.) Roth.	Annual	Common	Low rocky hill sides, sandy & silty wadis	Fodder, treat colic, inflamed eyes, and conjunctives
	Scrozonera musilii Vel.	Perennial	Rare	Crevices among sandstone buttes	Fodder, sand accumulator ornamental, fuel
	S. schweinfurthii Boiss.	Perennial	Rare	Rocky hill, sandy flat plains	Sand accumulator, fodder, ornamental, fuel
	S. tortuosissima Boiss.	Perennial	Rare	Compact sand, fallow fields	Sand accumulator, edible, fodder, fuel, ornamental
	Tagetes minuta L.	Annual	Rare	Waste places	
	Verbesina encelioides (Cav.) Benth. & Hook. F. ex A. Gray	Annual	Very common	Every where	(invasive), toxic weed, indicator of over grazing
	Vernonia schimperi DC.	Perennial	Common	Compact sand, southern mountains	
	Xanthium strumarium L.	Annual	Rare	Scattered humid places in south, granite, sand	Sedative, emollient, a stringent, diuretic, diaphoretic, root used in cancer
Cruciferae A. Juss. (Brassicaceae)	Anastatica hierochantica L.	Annual	Rare	Coarse sand, compact gravelly soil	Fuel, uterine haemorrhage, purgative, parturifacient & emmenagogue
	Brassica tournefortii Gouan	Annual	Common	Dunes, roadsides, fields	Edible, foddors, sand accumulator – appetizer
	Diplotaxis acris (Forssk.) Boiss.	Annual	Common	Sand & rocky desert	Fodder
	D. erucoides (L.) DC.	Annual	Common	Compact sand, clay	Fodder
	D. harra (Forssk.) Boiss.	Perennial	Common	Sandy plains, rocky hills, wet habitats	Sand accumulator, sunstoke, bacteri, fungal and nematocidal
	<i>Eremobium aegyptiacum</i> (Spreng.) Asch. & Schweinf: ex Boiss.	Annual	Rare	Compact red sand	Fodder
	<i>E. aegyptiacum</i> var. lineare (Delile) Zohary	Annual	Common	Red sand among sandstone buttes	Fodder
	Eruca sativa Mill.	Annual	Common	Cultivated	Edible, fodder, production of oil,

				places	stimulant, stomachic, duretic, antiscorbutic, aphrodisiac
	<i>Farsetia longisiliqua</i> Decne.	Perennial	Common	Lowlands, compact sand, roadsides	Fodder
	F. ramosissima Hochst. ex Fourn.	Annual or perennial	Rare	Compact sandy soil	Fodder
	F. stylosa R.Br. in Denham & Clapp.	Annual or short- lived perennial	Common	Wadis, rocky hills, compact sand	Fodder
	Lepidium sativum L.	Annual	Rare	Cultivated beds among rocks	Edible, fodder, production of oil, diuretic, tonic, demulscent, aphrodisiac, carminative, skin diseases, rheumatic pains
	<i>Morettia canescens</i> Boiss.	Perennial	Rare	Sandy plains, silt pan, rocky plateaus	Fodder, sand accumulator, enriches soil fertility
	Morettia parviflora Boiss.	Perennial	Common	Rocky hills, compact sand	Fodder, sand accumulator enriches soil fertility
	Nasturtium officinale R. Br.	Perennial	Common	Stream margins, ponds, south mountain streams	Fodder, sand accumulator edible, antiscorbutic, stimulant, diuretic, depurative, appetizer, anticatarhal, expectorant, pyorrhea.
	Raphanus sativus L.	Annual	Common	Cultivated beds as weed	Fodder, edible, green manure, insect repellent, oil production, heart & cancer diseases, haemorrhoids
	Zilla spinosa (L.) Prantl	Perennial	Common	Shallow soil, wadis	Fodder, sand accumulato, kidney stones, fuel
Chenopodiaceae Vent.	Atriplex leucoclada var. inamonoea Boiss.	Perennial	Common	Saline sand, roadside	Fodder, brushes
	Bassia eripophora (Schrad.) Asch.	Annual	Rare	North in disturbed habitats, salt flats	

B. muricana (L.) Ssch.AnnualCommonSandy plains, waalFodder, stes, sonp, cacumulator fuelChenopodium album L.AnnualCommonSandy plains, waals, jusce, anthelimitic, intrice yee diseases, biolise. intrice yee diseases, biolise.Fodder, dise, sonp, canabies, herpain distantied placesFodder, dise, sonp, canabies, herpain distantied placesC. murale L.AnnualCommonWaste placesFodderC. murale L.PerennialCommonWaste placesFodderC. arabica Botsch.PerennialVery rareSandy dunes & Sandy dunes, e dirars and sistand)Fodder, dire, sond accumulator, fuelHalopoplisperfoliataSubshrubCommonAlong coast, we sistand)HalopoplisperfoliataSubshrubCommonSandy plains & diresFodder, dires, sond border, rand gravelly wasteHalopoplisperfoliataSubshrubCommonSandy dunes & accumulator, fuelHalopoplisperfoliataSubshrubCommonSandy plains & dires, sond proteskerHalopoplisperfoliataSubshrubCommonSandy plains & dires, sond proteskerHalopoplisperfoliataSubshrubCommon <th></th> <th></th> <th></th> <th></th> <th></th>					
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Image: Second	Chenopodium album L.	Annual	Common	wadis, waste	edible, anthelmintic, laxative, diuretic, tonic eye diseases, blood, heart, spleen, hepatic
C.arbitrationPerennialVery (endangered)Sandy dunes & plainsSand accumulator, fuelC.ehrenbergii Asch.ShrubRareShallow dunes bordering the sea (Farasan)HalopeplisperfoliataSubshrubCommonAlong coast, wet saline habitatHalopationperfoliataSubshrubCommonAlong coast, wet saline habitatHalothamns bottae Jaub. & Spach.PerennialVery rareRocky outcropsHaloxylon persicum Bunge ex Boiss.Shrub or small treeCommonSandy plains & dunes bottaes, gravelly wadisFodder, sand accumulator, wind breakerH.salicornicum sugar in the bloodShrub or 	C. murale L.	Annual	Common	habitats especially	Fodder
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Image: Salsola arabica Botsch.PerennialRare (endemic)Flats & sandy plainsFodder, fuel, sand accumulatorSalsola arabica Botsch.PerennialRare (endemic)Flats & sandy plainsFodder, fuel, sand accumulatorS. botae (Jaub. & Spach.) 	H. scoparium Pomel	Shrub	Common	Saline habitats	Fodder, fuel
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S. kali L. Annual Common Waste places Anthelmintic, diuretic, emmenagogic &		Perennial	Common	Rocky out crops	Fodder, fuel
diuretic, emmenagogic &	S. imbricata Forssk.	Shrub	Rare	Compact sand	Fodder, fuel
	S. kali L.	Annual	Common	Waste places	diuretic, emmenagogic &

	S. spinescens Moq.	Perennial	Common	Shallow sandy ditchs	
	Suaeda aegyptiaca (Hasselq.) Zohary	Annual or short- lived perennial	Rare	Sandy or gravelly coastal areas (Farasan island)	For tooth & gum infections, headache, hysteria, nausea, calming the nervous system, improving vision
	S. monoica Forssk.	Shrub or small tree	Rare	Waste ground near the sea, southern lowlands	Leaves emetic, used as poultice in ophthalmia
	S. vermiculata Forssk.	Shrub	Rare	Low sand dunes near the sea	Fodder, relieve difficult breathing
Euphorbiaceae A. Juss.	Andrachne aspera Spreng.	Perennial	Rare	Shaded, rocky habitats	Fodder, root treating eye inflammation, edible
	Chrozophora tinctoria (L.) Raf.	Annual	Common	Deep sandy soil, sandy clay loam & disturbed habitats	Edible, sand accumulator, fodder, fuel, cathartic & emetic
	Euphorbia cactus Ehrenb. ex Boiss.	Perennial	Very rare (endangered)	Southern rocky hillside, ravine	Fodder, treating skin, teeth, toxic causing diarrhea
	<i>E. fractiflexa</i> S. Carter & J.R.I.Wood	Perennial	Rare	Scattered locations in Farasan island, sandy plains, coastal wadis	Fodder, ornamental, toxic causing diarrhea
	<i>E. glomerifera</i> (Mill.) Wheeler.	Annual	Very common	Compact sand	Fodder, water storage, toxic causing diarrhea
	E. granulate Forssk.	Annual or perennial	Common	Sandy soil, plains & wadis	Sand accumulator, milky juice abortifacient & an emmenagogue, purify blood toxic causing diarrhea
	E. inaequilatera Sond.	Annual	Rare	Compact sand	Fodder, toxic causing diarrhea
	E. inarticulata Schweinf.	Perennial	Rare	Southern rocky hillsides	Fuel, toxic, causing diarrhea, bees feds on their flowers for honey production
	<i>E. pirottae</i> Terracciano	Annual	Rare	Compact sand in southwestern areas	Water storage, toxic, causing diarrhea
	E. schimperi Presl.	Perennial	Rare	Barren rock hillside	Fodder, toxic, causing diarrhea

	E. schimperiana Scheele.	Annual	Common (endemic)	Southern mountains, rocky hillsides	Sand accumulator, treat constilation, removing thorns from skin, toxic
	E. ammak Schweinf.	Perennial	Rare	Rocky hillsides	Ornamental, toxic, causing diarrhea
	E.consobrina N.E.Br.	Perennial	Common	Different habitats especially mountains and rocky hillside	Toxic causing diarrhea
	Ricinus communis L.	Annual or perennial	Very common	Disturbed habitats, cultivated areas	Insecticide, fuel, oil production, fodder, purgative, toxic, treat many diseases (rheumatism, liver troubles, lumbago, paralysis, inflammations).
Gramineae A. Juss. (Poaceae)	<i>Aeluropus lagopoides</i> (L.) Trin. ex Thwaites	Perennial	Common	Saline coastal soil	Fodder, sand accumulator
	<i>Aristida ferrilateris</i> S.P. Philips	Perennial	Common	Compact sandy habitats among stones	Fodder
	Avena ventricosa Bal. ex Coss. & Dur.	Annual	Common	Cultivated lands	Fodder, edible especially for diabetes & dyspepsia
	Cenchrus biflorus Roxb.	Annual	Common	Hard rocks & drifited sand	Fodder, fuel, sand accumulator
	C. ciliaris L.	Perennial	Common	Sand, gravelly, flat plains & hard rock	Fodder, fuel, sand accumulator
	C. pennisetiformis Hochst. & Steud.	Perennial	Common	Edge of fields among southwestern low hills	Fodder
	<i>Centropodia fragilis</i> (P. Guinet & Sauvage) Cope	Perennial	Common	Large sandy dunes, in AlRub Al-Kaly	Fodder, indicator for deep sand with many medicinal uses for bones & abdomine
	Dactyloctenium aegyptium (L.) Willd.	Annual	Rare	Cultivated lands, saline wadis	Fodder, water storage, treat nervous disorders, inflammations of kidney, ulcers, dystentery, amenorrhoea
	<i>Digitaria ciliaris</i> (Retz.) Koeler	Annual	Common	Waste ground, cultivated fields & among granite rocks near the	Edible, fodder

			stream	
<i>Eragrostis papposa</i> (Roemer & shultes) Steudel	Perennial	Common	Steep rocky hill sides, in the southern mountains	Fodder
Eremopyrum bonaepartis (Spreng.) Nevski	Annual	Common	Sandy runnel on limestone plateau	Fodder, water storage
<i>Hordeum spontaneum</i> K. Koch	Annual	Common	Different localities on rocky hillside among juniperus forests	Fodder, edible and many uses
Hyparrhenia hirta (L.) Stapf	Perennial	Common	Mountains, gravels, desert borders at the south	Fodder
Ochthochloa compressa (Forssk.) Hilu	Perennial	Common	Moist places, compact sand among limestone	Fodder, water storage
Panicum turgidum Forssk.	Perennial	Common	Sandy plains, deep soil & sand dunes	Fodder, edible, sand accumulator, fuel, use as vulnary agent, removing white spots of the eye
Pennisetum orientale Rich.	Perennial	Common	Granite mountains, hanging vallies in the north & southwestern areas	Fodder
<i>Phragmites australis</i> (Cav.) Trin ex steud.	Perennial	Rare	Western coastal low land	Fodder, used as broom, cork & fiber production, fuel, paper, and many medicinal uses (acute arthritis, jaundice, pulmonary abscesses)
<i>Poa shimperiana</i> Hochst. ex A. Rich.	Perennial	Common	In Juiper zone among the summit crags	Fodder, water storage, sand accumulator
Polypogon monospelinsis (L.) Desf.	Annual	Common	Sandy plains, wadis, dampsand & granite	Fodder
<i>Stipagrostis plumose</i> (L.) Munro ex T. Anderson	Perennial	Very common	Everywhere, in the crevices of limestone outcrops	Fodder
Tetrapogon villosus Desf.	Perennial	Common	Southern	Fodder

				cervices of granite outcrops	
	Themeda triandra Forssk.	Perennial	Common	High southern mountains & cervices of granite outcrops	Fodder
Labiatae A. Juss. (Lamiaceae)	<i>Ajuga arabica</i> P. H. Davis	Perennial	Rare (endangered)	Rocky plains, shallow soil	Fodder, accumulate sand, ornamental
	<i>Lavandula coronopifolia</i> Poir.	Perennial	Common	Rocky habitats, shallow ravaines, mountains slopes	Fodder, stop bleeding of wounds, carminative, headaches, insect repellent
	L. dentata L.	Perennial	Rare	Rocky plateaus, southern mountains	Fodder, sand accumulator, remove kidney stones, carminative, insect repellent
	L. pubescens Decne.	Perennial	Rare	Southwestern mountains	Edible, carminative, headaches & insect repellent
	<i>Leucas glabrata</i> (Vahl) R. Br.	Perennial	Rare	Rocky hills, southern mountains	Fodder, fuel
	<i>L. urticifolia</i> (Vahl) R. Br.	Annual	Rare	Hills, mountains, southern low land	Fodder, ornamental, used as a remedy for fever
	Marrubium vulgare L.	Perennial	Rare	Downs, waste places, roadsides, cultivated beds	Fodder, sand accumulator, edible, ornamental, fuel, stimulant, expectorant, resolvent, anthelmintic, coughs, dyspepsia, hepatitis, amenorrhoea
	Menthe microphylla Cav.	Perennial	Rare	Southern mountains	Fodder, edible, carminative, antiseptic, stimulant
	Micromeria biflora (Buch. – Ham. ex D. Don.) Benth.	Perennial	Rare	Rocky places	Fodder, edible, fuel
	Nepeta deflersiana Schweinf. ex Hadge	Perennial	Very rare	In the shade of juniper trees, among rocks	Fodder, fuel, treating stomach problems & burns
	Ocimum basilicum L.	Shrub	Common	Southern cold mountains	Edible, fodder, fuel, ornamental, carminative,

					expectorant, stimulant, headache, cure from ring worm and different medicinal uses
	O. forsskaolii Benth.	Shrub	Rare	Granite ravine & cultivated beds	Fodder, edible, water storage, repellent, fuel
	<i>Otostegia fruticosa</i> (Forssk.) Penz. ssp. Schimperi (Benth.) Sebald	Shrub	Common	Southern rocky hillsides	Sand accumulator, fuel wind breaker, used as good remedy for sunstroke
	Salvia aegyptiaca L.	Perennial	Common	Compact sandy & silty plains	Sand accumulator, fodder, fuel, seeds mucilage used to remove a foreign body from the eye. Plant antiseptic, cicatrizant, antispasmodic & stomachic
	S. merjamie Forssk.	Perennial	Rare	Southern rocky out-crops, fallow fields	Fodder, fuel, sand accumulator
	Stachys aegyptiaca Pers.	Perennial	Common	Damp sand among rocks	Fodder
	S. schimperi Vatke	Perennial	Rare	Sandy, gravelly soil on roky hillsides	
	Teucrium polium L.	Shrub	Rare	Sandstone rocks	Tonic, vulneary, curing fever
Leguminosae A. Juss. (Fabaceae)	<i>Acacia asak</i> (Forssk.) Willd.	Shrub	Common	Rocky hillsides	Fodder, fuel, carpentary, honey production
	A. ehrenberrigiana Hayne	Shrub	Common	Sandy stone places	Fodder, fuel, carpentory, dysentery & paralysis
	A. elatior Brenan	Tree	Common	Wadis	Fodder, shaded plant, fuel, carpentary
	A. etabaica Schweinf.	Shrub	Common	Southern mountains, sandy banks of shallow wadis	Fodder, shaded plant, fuel, carpentary
	<i>A. gerrardii</i> Benth. Var. najdensis Chaudhary	Tree	Common	Sandy areas over limestone	Shaded plant, fodder fuel, carpentary. Resin treating sore gums, loose teeth, burns & fever

	A. mellifera (Vahl) Benth.	Shrub	Common	Compact sand, southwestern mountains	Fodder, fuel, carpentary, shaded plant
	A. nilotica (L.) Delile	Tree	Rare	Sandy plains, low southern mountains, cultivations	Fodder, ornamental, shaded plant, fuel, gums, tanins, carpentary, treat tuberculosis, stimulant, diarrhoea, coughs, cancer and with high medicinal value
	A. origena Asfaw	Perennial	Common	Southe western area, on rocky hills	Fodder, shaded plant, fuel and carpentary
	A. seyal Delile	Tree	Common	Southern steep rocky hillsides	Fodder, fuel, carpentary, gums used as emollient, cold, ophthalmia, diarrhea, haemorrhage, remedy for leprosy
	A. tortilis (Forssk.) Hayne.	Tree	Common	Low altitudes area	Fuel, gums used as demulcent, anti- diarrhea, diabetes, cataracts, toothache – wood used for building cattle folds
	<i>Acacia tortilis</i> sub sp. Raddiana (Savi) Brenan	Tree	Very common	Widespread every where	Fodder, shaded plant fuel, in textile industry, confectionery & pastes, tannins, diarrhea, skin infections
	Argyrolobium arabicum (Decne.) Jaub. & Spach	Annual or short- lived perennial	Rare	Gravelly sand	Fodder, ornamental
	Astragalus abyssinicus Steud.	Annual	Common	Silty soil	Fodder, fuel
	A. eremophilus Boiss.	Annual	Rare	Compact sand, silty & scattered localities, coastal sandy plains	Fodder, enriches soil fertility, fuel
	A. schimperi Boiss.	Annual	Rare	Sandy plains, silty soil	Fodder, enriches soil fertility, fuel
	A. sieberi DC.	Subshrub	Rare	Compact sand, wadis, silty soil	Fodder, enriches soil fertility, fuel
	A. spinosus (Forssk.)	Shrub	Common	Compact sand, rocky hills, silty	Fodder, wind breaker, fuel, gum

	Muschl.			soil	used in medicines, food, treat inflamed membranes, laxative & diuretic milk
	<i>Crotalaria emarginella</i> Vatke	Perennial	Common	Wet places & mountains	Fodder, fuel, enriches soil fertility
	C. incana L.	Annual	Rare	Roadsides, among rocks	Sand accumulator, fuel, enriches soil fertility
	<i>C. leptocarpa</i> Balf. f.	Perennial or Annual	Rare	Compact sand	Fodder, fuel
	<i>C. persica</i> (Burm. f.)	Perennial	Rare (Endangered)	Salty waste lands, wadis and gravelly soil	Fodder, fuel, sand accumulator, enriches soil fertility
	<i>Faidherbia albida</i> (Delile) A. Chev.	Tree	Rare	(Sudera) in rocky ground rear water masses	Wind breaker, ornamental, shaded plant, fuel, used against leprosy, diarrhea
	Hippocrepis constricta Kunze	Annual	Rare	Sandy plains, wadis among sandstone	Fodder, enriches soil fertility
	<i>Indigofera Arabica</i> Jaub. & Spach	Perennial	Common	Southern Asir area, granite sand	Fuel, fodder
	<i>I. arrecta</i> Hochst. ex A. Rich.	Perennial	Common	Among dense vegetation in different localities	Fuel
	I. hochstetteri Baker	Annual	Rare	Southern foothills, shady places	Fodder, fuel, sand accumulator
	I. linifolia (L.f.) Retz.	Annual	Rare	Compact sand, southern mountains, shady places	Fodder, sand accumulator, fuel, used in febrile eruption & amenorrhoea
	I. oblongifolia Forssk.	Shrub	Rare	Sandy, stony plains, wadis & southern low land	Fodder, fuel, analgestic, anti- inflammatory, antisyphilitic, antiphlogistic, purgative, as gargle in mercurial salivation
	I. spinosa Forssk.	Subshrub	Common	Sandy plains, rocky hills	Root used as chewing sticks for tooth pain

	<i>Lotononis platy</i> carpa (Viv.) Pic. Serm.	Annual or short- lived perennial	Common	Small sandy gullies, rocky habitats	Fodder
	<i>Lotus halophilus</i> Boiss. & Spruner.	Annual	Common	Sandy plains	Fodder
	L. quinatus (Forssk.) Gillett	Perennial	Rare	Mountains hills, drifted sand	Sand accumulator, enriches soil fertility
	<i>Microcharis tritoides</i> (Baker) Schrire	Perennial	Rare	Shady places, compact sand, rocky hills	Fodder, enriches soil fertility
	Parkinsonia acueota L.	Perennial	Common	Sandy plains, wadi beds	Used in carpentary, remedy for fevers, phthisis, antiseptic
	Senna alexandrina Mill.	Perennial	Common	Sandy plains, southern mountains	Fodder, fuel, leaves used for constipation & stomach cramps
	S. italica	Perennial	Very common	Sandy plains, wadi beds, gravely or stony soils & cultivated lands	Medicinal herb, for elephantiasis, purgative, ophthalmic diseases, strong laxative, fodder, fuel, poisonous in large quantities
	<i>Tephrosia nubica</i> (Boiss.) Baker	Perennial	Very rare	Rocky ravine	Fodder
	Terminalia caddaba	Perennial	Rare	Southern mountains & cultivated areas	Edible, fodder, fuel, produce oil with medicinal value
	Trigonella anguina Delile	Annual	Rare	Damp sand	Fodder
	T. stellata Forssk.	Annual	Common	Red sandy & gravelly habitats	Fodder, treat scalp irritations & dandruff, abdominal pain, diarrhea, kidney
Solanaceae A. Juss.	Datura innoxia Mill.	Annual	Common	Sandy or gravelly dry open places, cultivated beds, roadsides as weeds	Toxic, ornamental, fuel, hallucinogenic drug
	D. stramonium L.	Annual	Common	Southern mountains near the sewage out fall as weed	Ornamental, fuel, Antispasmodic, anodyne, narocotic, used for dandruff and hairfall, antirheumatism, gout, a sthma & bronchitis. Leaves

					are skin irritant
	Hyoscyamus muticus L.	Perennial or shrub	Rare	Compact sandy places, roadsides, near sewage overflow	Fuel, antispasmodic, administered prevent griping, relieve asthma, poisonous, causes dryness & constriction of the throat
	<i>Lycium shawii</i> Roem. & Schult.	Shrub	Common	Rocky hills, gravelly, sandy areas, coastal hills, wadis	Fodder, water storage, edible fruits, fuel, diuretic, laxative, tonic
	<i>Nicotiana glauca</i> R. C. Graham	Shrub or small tree	Rare	Waste & disturbed habits	Smoking industry, insecticide, anticapillary fragility with vitamin C. poisonous to cattle
	<i>Nitraria retusa</i> (Forssk.) Asch.	Shrub	Rare	Scattered localities on seashores, saline habitats	Sand accumulator, wind breaker, edible fruits, fuel, lower the high blood pressure, diuretic, treat unanry tracts
	Solanum cordatum Forssk.	Perennial	Rare	Open wood land, silty, sandy, stony soils, wadis	Fodder
	S. forsskaolii Dunal	Shrub	Rare	Rocky hills	Fodder, fuel
	S. glabratum Dun.	Shrub	Common	Rocky hillsides & open sandy areas	Fodder
	S. incanum L.	Shrub	Common	Dry rocky & gravelly hillsides	Fodder, sand accumulator, fuel, used for bruised fingers, dyspepsia, earche, haemorrhoids, tooth ache, green roots for snake bites
	S. schimperianum Hochst. ex A. Rich.	Shrub	Common	Southern mountains	
	S. surratense Burm.	Perennial	Common	Roadsides	Fodder, digestive, expectorant, diuretic, anthelmintic, toothache, cough, rheumatism
	S. villosum Mill.	Annual	Rare	Slopes, vallies & shady places among juiper	Fodder

				forest	
	S. villosum ssp. Puniceum (Kirschleger) Edmonds	Annual	Common	Slope of southern mountains near fields	Fodder
	Withania somnifera (L.) Dunal in DC.	Perennial or subshrub	Common	Sandy, flate plains, waste places	Fuel, tonic, stimulant, alterative, narcotic, diuretic, cough, antimicrobial activity, treat burnes, scorpion stings & of wide medicinal uses
Zygophyllaceae R. Br.	<i>Fagonia boveana</i> (Hadidi) Hadidi & Garf.	Perennial	Common	Compact sandy & gravelly soil	Fodder
	F. bruguieri DC.	Subshrub, perennial	Common	Compact sands	Fodder, tonic, febrifuge, used as prophylactic against smallpox, dropsy, antibiotic, carminative, digestive, emmenagogue, expectorant, stimulant, stomatic, remedy for anemia, chicken pox, colds and many other medicinal uses
	F. gluthinosa Delile	Perennial	Common	Sandy plains, wadis, roads & shallow soil	Fodder, sand accumulator
	F. indica Burm. F.	Subshrub, perennial	Rare	Flat plain, gravelly, rocky hills & crevices of sand stones plateau	Fodder, edible, treat abdominal colic, dyspepsia, fever & venereal diseases
	F. ovalifolia Hadidi	Annual or perennial	Rare	Compact sand	Fodder
	<i>F. paulayana</i> Wagner & Vierh.	Annual or short perennial	Rare	Compact sand in rocky hills	Sand accumulator, fuel
	<i>F.schweinfurthii</i> (Hadidi) Hadidi	Annual or perennial	Rare	Shallow gullies behind limestone scarpes, sandy & gravelly places	Treat infections, sand accumulator
	Peganum harmala L.	Perennial	Common	Sandy plains & rocky hills	Toxic, increase flow of milk, alterative, antiperiodic, stimulant emmenagogue & abortifacient,

					anthgeiminti, narcotic, emetic, shows broad spectrum antimicrobial
	<i>Seetzenia lanata</i> (Willd.) Bullock	Perennial	Rare	Compact gravelly sand	Fodder, enriches soil fertility
	Tribulus arabicus H. Hosni	Perennial	Rare	Sand dunes & Al-Rub al-Khali	Fodder, sand accumulator, shaded plant
	T. bimucronatus Viv.	Annual	Common	Compact sand & sandy ditchs	Fodder
	T. macropterus Boiss.	Annual	Common	Sandy & flat plains	Fodder, sand accumulator
	T. parvispinus Presl	Annual	Rare	Among sandstone	Fodder
	T. pentandrus Forssk.	Annual or short- lived perennial	Rare	Compact sandy habitats	Sand accumulator, fuel
	Zygophyllum album L. f.	Shrub	Common	Shallow saline soil	Fodder
	Z. coccineum L.	Shrub	Rare	Red sandy habitats	Fodder, fuel, used as a remedy for rheumatism, gout, cough, asthma, hypertension, flatulent colic, diuretic, skin diseases
	Z. migahidii	Shrub	Rare	Saline habitats	Fodder, sand accumulator
	Z. simplex L.	Annual or short- lived perennial	Common	Compact sandy, gravelly plains	Used as antibiotic and laxative, applied to the eyes in opthalmia, treat diabetes & for asthma, cough, diuretic, treating painful joints