

Table S1. Life forms and common services offered by the plant species in the Saint Katherine (South Sinai, Egypt). Life forms are: PH: Phanerophytes, CH: Chamaephytes, CR: Cryptophytes, HC: Hemicryptophytes, TH: Therophytes. Common services are: GR: Grazing, ME: Medicine, FU: Fuel, ED: Edible.

Species	Life form	Services			
		GR	ME	FU	ED
a) Inside and outside the enclosure					
<i>Achillea fragrantissima</i> (Forssk.) Sch. Bip.	HC	*	*		
<i>Alkanna orientalis</i> (L.) Boiss.	CH	*	*		
<i>Anarrhinum pubescens</i> Fresen.	CH	*			
<i>Andrachne aspera</i> Spreng.	CH	*	*		
<i>Seriphidium herba-alba</i> (Asso) Soják, Cas. Nár. Muz.	CH	*	*		
<i>Artemisia judaica</i> L.	CH		*		
<i>Astragalus asterias</i> Steven	CH	*			
<i>Atraphaxis spinosa</i> L. var. <i>sinaica</i> (Jaub & Spach.) Boiss.	CH	*			
<i>Ballota undulata</i> (Fresen.) Benth.	CH	*			
<i>Bituminaria bituminosa</i> (Nabelek.) Greuter	HC	*			
<i>Chiliadenus montanus</i> (Vahl) Brullo	CH				
<i>Crataegus x sinaica</i> Boiss.	CH	*		*	
<i>Dianthus sinaicus</i> Boiss.	CH	*			
<i>Echinops macrochaetus</i> Fresen.	HC				
<i>Echinops spinosus</i> L.	HC	*	*	*	*
<i>Equisetum ramosissimum</i> Desf.	GE	*			
<i>Fagonia arabica</i> L.	CH	*	*	*	
<i>Fagonia mollis</i> Delile	CH	*			
<i>Globularia arabica</i> Jaub. & Spach	CH		*		
<i>Juncus acutus</i> L.	HC	*	*		
<i>Juncus rigidus</i> Desf.	HC	*	*		
<i>Launaea nudicaulis</i> (L.) Hook.f.	HC	*			
<i>Lavandula coronopifolia</i> Poir.	CH		*	*	
<i>Matthiola arabica</i> Boiss.	HC				
<i>Mentha longifolia</i> (L.) Huds.	TH		*		*
<i>Minuartia meyeri</i> (Boiss.) Bornm.	TH	*			
<i>Nepeta septemcrenata</i> Benth.	HC	*	*		
<i>Origanum syriacum</i> subsp. <i>sinaicum</i> (Boiss.) Greuter & Burdet	CH		*		
<i>Phlomis aurea</i> Decne.	HC				

<i>Plantago sinaica</i> (Barn.) Decne.	CH				
<i>Pterocephalus sanctus</i> Decne.	CH	*			
<i>Reseda arabica</i> Boiss.	TH	*	*		
<i>Spergularia diandra</i> (Guss.) Boiss.	TH	*			
<i>Stachys aegyptiaca</i> Pers.	CH	*			
<i>Stipagrostis ciliata</i> (Desf.) De Winter	HC	*			
<i>Tanacetum sinaicum</i> (Fresen.) Delile ex Bremer & Humphries	CH		*		
<i>Teucrium polium</i> L.	CH		*		
<i>Thymus decussatus</i> Benth.	CH				
<i>Verbascum sinaiticum</i> Benth.	HC		*		
<i>Zilla spinosa</i> (L.) Prantl	CH	*	*	*	*
<i>Zilla spinosa</i> subsp. <i>spinosa</i> (L.) Prantl in Engl. & Prant.	CH	*	*	*	*
Total		27	20	6	4
%		65.9	48.8	14.6	4.1

b) Inside the enclosure

<i>Adiantum capillus-veneris</i> L.	HC				
<i>Alyssum homalocarpum</i> (Fisch. & C. A. Mey.) Boiss.	TH				
<i>Asparagus aphyllus</i> L.	CR	*	*	*	
<i>Astragalus tribuloides</i> Delile	TH	*			
<i>Avena barbata</i> Pott ex Link	TH	*			
<i>Ballota damascena</i> Boiss.	CH	*			
<i>Ballota saxatilis</i> C. Presl	HC	*			
<i>Bufonia multiceps</i> Decne.	HC				
<i>Centaurea aegyptiaca</i> L.	CH	*	*		
<i>Cotoneaster orbicularis</i> Schltld.	PH	*	*		
<i>Cotula cinerea</i> Delile	CH				
<i>Crotalaria thebaica</i> (Delile) DC.	CH				
<i>Crucianella aegyptiaca</i> L.	TH	*			
<i>Cutandia dichotoma</i> (Forssk.) Batt. & Trab.	TH	*			
<i>Cynodon dactylon</i> (L.) Pers.	CR	*	*	*	*
<i>Ficus palmata</i> Forssk.	PH	*	*		
<i>Gymnocarpos decander</i> Forssk.	CH	*			
<i>Gypsophila capillaris</i> (Forssk.) C. Chr.	CH				
<i>Helianthemum lippii</i> (L.) Dum. Cours.	CH	*	*	*	
<i>Helianthemum sancti-antonii</i> Schweinf. ex Boiss.	CH	*			

<i>Kickxia macilenta</i> (Decne.) Danin	CH				
<i>Lycium shawii</i> Roem. & Schult.	PH			*	
<i>Minuartia picta</i> (Boiss.) Bornm.	TH				
<i>Oxalis corniculata</i> L.	CR				
<i>Panicum repens</i> L.	CR	*	*		*
<i>Panicum turgidum</i> Forssk.	CH	*	*	*	*
<i>Paronychia sinaica</i> Fresen.	TH	*			
<i>Phagnalon nitidum</i> Fresen.	CH				
<i>Plantago albicans</i> L.	HC	*			
<i>Primula boveana</i> Decne. ex Duby	CR	*			
<i>Reichardia tingitana</i> (L.) Roth	TH	*	*		
<i>Rosa arabica</i> Crep.	PH			*	
<i>Scandix stellata</i> Banks & Sol.	TH				
<i>Scorzonera schweinfurthii</i> Boiss.	HC		*		
<i>Scrophularia deserti</i> Delile	CH				
<i>Scrophularia libanotica</i> Boiss.	HC	*			
<i>Silene linearis</i> Decne.	TH	*			
<i>Silene villosa</i> Forssk.	TH	*			
<i>Stipa arabica</i> Trin. & Rupr.	HC				
<i>Umbilicus horizontalis</i> (Guss.) DC.	CR				
<i>Veronica anagallis-aquatica</i> L.	CR				
Total		23	10	6	3
%		56.1	24.4	14.6	7.3
c) Outside the enclosure					
<i>Althaea ludwigii</i> L.	TH				
<i>Asclepias sinaica</i> (Boiss.) Muschl.	CH		*		
<i>Astragalus caprinus</i> L.	HC				
<i>Astragalus hispidulus</i> DC.	TH				
<i>Astragalus spinosus</i> (Forssk.) Muschl.	CH	*	*	*	*
<i>Calligonum polygonoides</i> L.	PH	*	*	*	
<i>Ephedra pachyclada</i> Boiss.	PH		*		
<i>Erodium ciconium</i> (L.) L'Hér.	TH				
<i>Heliotropium digynum</i> (Forssk.) C. Chr.	CH				
<i>Kickxia aegyptiaca</i> (L.) Nābelek	CH	*			
<i>Lavandula pubescens</i> Decne.	CH	*			

<i>Malva parviflora</i> L.	TH	*	*		*
<i>Peganum harmala</i> L.	HC	*	*		
<i>Pulicaria incisa</i> (Lam.) DC.	CH		*		
<i>Pulicaria undulata</i> (Poir.) DC.	CH				
<i>Schismus barbatus</i> (L.) Thell.	TH	*	*		*
<i>Sisymbrium erysimoides</i> Desf.	TH				
<i>Solenostemma argel</i> (Delile) Hayne	CH		*	*	
<i>Teucrium decaisnei</i> C. Presl	HC	*	*		
<i>Trichodesma ehrenbergii</i> Schweinf.	TH	*	*		
Total		9	10	3	3
%		45.0	50.0	15.0	15.0

Table S2. Density and cover of species found only inside the enclosures, with the number of enclosures in which the species were recorded.

Species	Enclosure number	Density (Individual/100 m ²)		Cover (%)	
		Mean	Standard deviation	Mean	Standard deviation
<i>Lycium shawii</i>	1	60.0	0.0	45.9	0.0
<i>Ficus palmata</i>	3	3.3	1.2	38.5	48.1
<i>Cotoneaster orbicularis</i>	2	5.0	4.2	37.1	0.0
<i>Adiantum capillus-veneris</i>	1	19.0	0.0	28.6	0.0
<i>Rosa arabica</i>	3	4.3	3.1	27.9	10.4
<i>Primula boveana</i>	2	320.5	382.5	13.5	1.2
<i>Helianthemum lippii</i>	1	10.0	0.0	5.3	0.0
<i>Ballota saxatilis</i>	1	1.0	0.0	4.4	0.0
<i>Scrophularia libanotica</i>	3	12.0	4.2	3.6	4.2
<i>Panicum turgidum</i>	1	3.0	0.0	3.4	0.0
<i>Ballota damascena</i>	2	6.0	0.0	2.7	1.8
<i>Helianthemum sancti-antonii</i>	2	5.5	0.7	2.2	0.0
<i>Phagnalon nitidum</i>	3	3.0	1.0	2.2	2.0
<i>Avena barbata</i>	1	2.0	0.0	1.7	0.0
<i>Panicum repens</i>	1	1.0	0.0	1.7	0.0
<i>Silene linearis</i>	2	3.0	0.0	1.5	0.0
<i>Silene villosa</i>	1	2.0	0.0	1.1	0.0
<i>Scorzonera schweinfurthii</i>	1	2.0	0.0	1.0	0.0
<i>Umbilicus horizontalis</i>	2	6.5	3.5	1.0	0.0
<i>Veronica anagallis-aquatica</i>	1	44.0	0.0	0.8	0.0
<i>Oxalis corniculata</i>	2	4.0	0.0	0.5	0.0
<i>Scandix stellata</i>	2	9.0	7.1	0.4	0.0
<i>Alyssum homalocarpum</i>	1	2.0	0.0	<0.1	0.0
<i>Asparagus aphylla</i>	1	0.6	0.0	<0.1	0.0
<i>Astragalus tribuloides</i>	1	4.0	0.0	<0.1	0.0
<i>Bufonia multiceps</i>	2	14.0	0.0	<0.1	0.0
<i>Centaurea aegyptiaca</i>	1	20.0	0.0	<0.1	0.0

<i>Cotula cinerea</i>	1	1.0	0.0	<0.1	0.0
<i>Crotalaria thebaica</i>	1	8.0	0.0	<0.1	0.0
<i>Crucianella aegyptiaca</i>	2	2.0	0.0	<0.1	0.0
<i>Cutandia dichotoma</i>	1	2.0	0.0	<0.1	0.0
<i>Cynodon dactylon</i>	1	7.0	0.0	<0.1	0.0
<i>Gymnocarpos decander</i>	1	11.0	0.0	<0.1	0.0
<i>Gypsophylla capillaris</i>	1	8.0	0.0	<0.1	0.0
<i>Kickxia macilenta</i>	1	3.0	0.0	<0.1	0.0
<i>Minuartia picta</i>	1	7.0	0.0	<0.1	0.0
<i>Paronychia sinaica</i>	1	8.0	0.0	<0.1	0.0
<i>Plantago albicans</i>	1	4.0	0.0	<0.1	0.0
<i>Reichardia tingitana</i>	1	11.0	0.0	<0.1	0.0
<i>Scrophularia deserti</i>	1	2.0	0.0	<0.1	0.0
<i>Stipa arabica</i>	1	3.0	0.0	<0.1	0.0

Table S3. Density and cover of species found only outside the enclosures, with the number of enclosures in which the species were recorded.

Species	Enclosure number	Density (Individual/100 m ²)		Cover (%)	
		Mean	Standard deviation	Mean	Standard deviation
<i>Solenostemma argel</i>	1	3.0	0.0	4.4	0.0
<i>Malva parviflora</i>	1	4.0	0.0	3.3	0.0
<i>Calligonum polygonoides</i>	2	5.0	2.8	2.8	0.0
<i>Pulicaria undulata</i>	1	49.0	0.0	2.2	0.0
<i>Lavandula pubescens</i>	1	5.0	0.0	1.9	0.0
<i>Peganum harmala</i>	1	1.0	0.0	1.8	0.0
<i>Erodium ciconium</i>	1	2.0	0.0	1.2	0.0
<i>Asclepias sinaica</i>	1	1.0	0.0	1.0	0.0
<i>Schismus barbatus</i>	1	3.0	0.0	0.9	0.0
<i>Astragalus spinosa</i>	1	12.0	0.0	0.5	0.0
<i>Althaea ludwigii</i>	2	3.0	0.0	<0.1	0.0
<i>Astragalus caprinus</i>	1	1.0	0.0	<0.1	0.0
<i>Astragalus hispidulus</i>	1	3.0	0.0	<0.1	0.0
<i>Ephedra pachyclada</i>	1	1.0	0.0	<0.1	0.0
<i>Heliotropium digynum</i>	1	4.0	0.0	<0.1	0.0
<i>Kickxia aegyptiaca</i>	1	3.0	0.0	<0.1	0.0
<i>Pulicaria incisa</i>	1	2.0	0.0	<0.1	0.0
<i>Sisymbrium erysimoides</i>	1	12.0	0.0	<0.1	0.0
<i>Teucrium decaisnei</i>	1	1.0	0.0	<0.1	0.0
<i>Trichodesma ehrenbergii</i>	1	5.0	0.0	<0.1	0.0