

1 Appendix 2

2 **Table A1: List of species and relative Climatic Niche Group (CNG) found in each treatment (i.e.**
 3 **community origin - climate combination). CNG boundaries were set following the classification**
 4 **proposed by Bilton et al (2016). CNG1: 100-230 mm rainfall; CNG2: 230-360 mm; CNG3: 360-**
 5 **490 mm; CNG4: 490-620 mm.**

Species	Family	Average rainfall (mm/year)	CNG	M-M	SA-M	M-SA	SA-SA
<i>Reichardia tingitana</i>	Asteraceae	179.3	1	x			x
<i>Stipa capensis</i>	Poaceae	221.7	1	x	x	x	x
<i>Adonis dentata</i>	Ranunculaceae	227.0	1			x	x
<i>Carrichtera annua</i>	Brassicaceae	203.2	1		x	x	x
<i>Plantago coronopus</i>	Plantaginaceae	185.5	1				x
<i>Schismus arabicus</i>	Geraniaceae	146.9	1			x	x
<i>Cuscuta campestris</i>	Convolvulaceae	488.1	1	x	x		
<i>Picris damascena</i>	Asteraceae	165.7	1	x	x	x	
<i>Astragalus tribuloides</i>	Fabaceae	115.0	1		x		
<i>Erucaria rostrata</i>	Brassicaceae	168.5	1		x		
<i>Filago desertorum</i>	Brassicaceae	122.5	1				
<i>Gagea reticulata</i>	Liliaceae	143.7	1			x	
<i>Pteranthus dichotomus</i>	Caryophyllaceae	120.3	1		x		
<i>Atractylis cancellata</i>	Asteraceae	361.1	2	x	x	x	x
<i>Bromus fasciculatus</i>	Poaceae	302.9	2	x	x	x	x
<i>Hippocrepis unisiliquosa</i>	Fabaceae	341.3	2	x	x	x	x
<i>Onobrychis crista-galli</i>	Fabaceae	279.3	2	x	x	x	x
<i>Trisetaria macrochaeta</i>	Poaceae	244.5	2	x	x		x
<i>Crithopsis delileana</i>	Poaceae	302.1	2			x	x
<i>Filago contracta</i>	Brassicaceae	342.9	2		x	x	x
<i>Filago palaestina</i>	Brassicaceae	344.4	2				x
<i>Helianthemum aegytiacum</i>	Cistaceae	360.2	2	x			
<i>Helianthemum salicifolium</i>	Cistaceae	347.9	2	x	x	x	
<i>Malva parviflora</i>	Malvaceae	235.0	2	x		x	
<i>Astragalus asterias</i>	Fabaceae	278.2	2		x		
<i>Calendula sp.</i>	Asteraceae	349.1	2			x	
<i>Hedysarum spinosissimum</i>	Fabaceae	347.6	2		x		
<i>Aegilops peregrina</i>	Poaceae	478.9	3	x	x	x	x
<i>Anagallis arvensis</i>	Primulaceae	429.5	3	x	x	x	x
<i>Biscutella didyma</i>	Brassicaceae	449.4	3	x	x	x	x
<i>Brachypodium distachyon</i>	Poaceae	413.1	3	x	x	x	x
<i>Hymenocarpos circinnatus</i>	Fabaceae	443.6	3	x	x	x	x
<i>Plantago afra</i>	Plantaginaceae	403.7	3	x	x	x	x

<i>Plantago cretica</i>	Plantaginaceae	468.2	3	x	x		x
<i>Rhagadiolus stellatus</i>	Asteraceae	446.7	3	x	x	x	x
<i>Rostraria cristata</i>	Poaceae	469.5	3	x	x	x	x
<i>Sedum pallidum</i>	Rubiaceae	438.8	3	x	x	x	x
<i>Medicago truncatula</i>	Fabaceae	484.1	3		x		x
<i>Medicago tuberculata</i>	Fabaceae	484.6	3		x		x
<i>Trigonella monspeliaca</i>	Fabaceae	438.5	3				x
<i>Vulpia ciliata</i>	Poaceae	445.2	3				x
<i>Avena sterilis</i>	Poaceae	460.9	3	x	x	x	
<i>Cichorium pumilum</i>	Asteraceae	471.9	3	x			
<i>Clypeola jonthlaspi</i>	Brassicaceae	391.2	3	x		x	
<i>Convolvulus siculus</i>	Convolvulaceae	428.4	3	x	x	x	
<i>Coronilla scorpioides</i>	Fabaceae	473.6	3	x		x	
<i>Crepis sancta</i>	Asteraceae	466.1	3	x		x	
<i>Erodium malacoides</i>	Geraniaceae	472.2	3	x		x	
<i>Galium judaicum</i>	Rubiaceae	485.7	3	x	x	x	
<i>Hedypnois rhagadioloides</i>	Asteraceae	405.0	3	x	x	x	
<i>Helianthemum stipulatum</i>	Cistaceae	373.7	3	x			
<i>Linum strictum</i>	Linaceae	464.0	3	x	x	x	
<i>Lolium rigidum</i>	Poaceae	481.4	3	x	x	x	
<i>Medicago coronata</i>	Fabaceae	458.7	3	x	x		
<i>Onobrychis caput galli</i>	Fabaceae	479.5	3	x	x		
<i>Scorpiurus muricatus</i>	Fabaceae	447.8	3	x	x	x	
<i>Torilis tenella</i>	Apiaceae	474.0	3	x	x	x	
<i>Urospermum picroides</i>	Asteraceae	457.6	3	x	x	x	
<i>Valantia hispida</i>	Rubiaceae	448.0	3	x	x	x	
<i>Gynandriris sisyrrhinchium</i>	Iridaceae	399.4	3			x	
<i>Plantago lagopus</i>	Plantaginaceae	474.6	3		x		
<i>Ranunculus asiaticus</i>	Ranunculaceae	437.9	3			x	
<i>Cephalaria joppensis</i>	Dipsacaceae	574.0	4	x	x	x	x
<i>Hordeum bulbosum</i>	Poaceae	540.3	4	x	x	x	x
<i>Medicago rotata</i>	Fabaceae	506.4	4	x	x		x
<i>Sarcopoterium spinosum</i>	Rosaceae	511.3	4	x	x	x	x
<i>Trisetaria michelii</i>	Poaceae	556.7	4			x	x
<i>Althaea hirsuta</i>	Malvaceae	602.2	4	x	x		
<i>Convolvulus pentapetaloides</i>	Convolvulaceae	498.3	4	x	x	x	
<i>Crupina crupinastrum</i>	Asteraceae	535.6	4	x	x		
<i>Geranium rotundifolia</i>	Geraniaceae	544.9	4	x			
<i>Geropogon hybridus</i>	Asteraceae	520.8	4	x			
<i>Linum corymbosum</i>	Linaceae	569.2	4	x		x	
<i>Linum pubescens</i>	Linaceae	557.9	4	x	x		
<i>Lotus peregrinus</i>	Fabaceae	508.5	4	x	x	x	

<i>Mentha longifolia</i>	Lamiaceae	547.4	4	x		x	
<i>Mercurialis annua</i>	Euphorbiaceae	504.1	4	x			
<i>Onobrychis squarrosa</i>	Fabaceae	509.7	4	x			
<i>Scabiosa palaestina</i>	Dipsacaceae	515.2	4	x			
<i>Scandix iberica</i>	Apiaceae	604.9	4	x			
<i>Stachys neurocalycina</i>	Lamiaceae	576.9	4	x			
<i>Theligonum cynocrambe</i>	Theligonaceae	515.6	4	x	x		
<i>Trifolium campestre</i>	Fabaceae	502.2	4	x			x
<i>Trifolium pilulare</i>	Fabaceae	575.2	4	x	x		x
<i>Trifolium purpureum</i>	Fabaceae	526.7	4	x	x		x
<i>Trifolium scabrum</i>	Fabaceae	545.2	4	x	x		x
<i>Trifolium stellatum</i>	Fabaceae	533.0	4	x	x		x
<i>Tripodion tetraphyllum</i>	Fabaceae	536.7	4	x			
<i>Vicia palaestina</i>	Fabaceae	561.1	4	x	x		
<i>Bromus japonicus</i>	Poaceae	503.8	4				x
<i>Crucianella macrostachya</i>	Rubiaceae	494.3	4				x
<i>Nigella ciliaris</i>	Ranunculaceae	547.5	4		x		
<i>Pallenis spinosa</i>	Asteraceae	572.5	4		x		
<i>Senecio vernalis</i>	Asteraceae	526.9	4				x
<i>Erodium sp.</i>	Geraniaceae	NA	NA	x		x	x
<i>Allium sp.</i>	Liliaceae	NA	NA		x	x	x
<i>Asphodelus sp.</i>	Liliaceae		NA		x		

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20 **Table A2: Mean number \pm SE of individuals across Climatic Niche Groups (CNG) emerging in**
 21 **each combination of community origin - climate**

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semi-arid community origin				
	CNG1	CNG2	CNG3	CNG4
SA (home site)	3.55 \pm 0.48	5.5 \pm 0.98	5.35 \pm 0.73	0.30 \pm 0.20
M (away-from-home site)	1.57 \pm 0.39	2.42 \pm 0.47	8.26 \pm 1.41	1.94 \pm 1.08
Mediterranean community origin				
	CNG1	CNG2	CNG3	CNG4
M (home site)	4.0 \pm 1.3	5.5 \pm 0.55	39.90 \pm 2.21	13.55 \pm 1.07
SA (away-from-home site)	5.0 \pm 0.92	5.6 \pm 1.06	39.55 \pm 3.14	6.65 \pm 0.89

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