# Southern Portugal

Wildlife at Leisure

## **Greentours Trip Report**

19<sup>th</sup> – 26<sup>th</sup> March 2016



Group at Cape Sardão (Photo DLeitão)

## Group:

Alastair Robinson Ruth Robinson Helen Stone Nigel Sawyer Martin Catt

# Led by Domingos Leitão

Daily report & systematic lists by Domingos Leitão, except the plant list by Domingos Leitão & Martin Catt

## Day 1 Saturday 19<sup>th</sup> March Arrival at Faro and transfer to the hotel

Group arrived at the international airport of Faro in two rounds. Alastair, Ruth and Nigel arrived first, Helen and Martin arrived later. By the time of the second arrival we already have sorted all paper work for the van, and went directly for a toast and drinks in Faro beach, in a place with view to the Atlantic Ocean.

After the snack we had time for the first nature walk in the Ria Formosa Nature Park, between the tidal lagoon and the saltpans. We saw our first waders, egrets and flamingos and our first nice flowers in the saltmarshes and mudflats of the area. Then we went for one and half hour driving to our hotel in the hills.

Arrived in the Quinta we were warmly received by Frank and Daniela. Frank show us the place (and what a place!) and the "rules" of the house and Daniela prepared us a delicious supper.

## Day 2 Sunday 20<sup>th</sup> March Corte Brique, Santa Clara and secret valley

Today we stood near the hotel area. After an early breakfast we drove 15 minutes to our first stop the small village of Corte Brique. We walked for a couple of hours in the mosaic of small fields, waterlines and hedgerows. Small birds were plenty and diverse. Highlights were Little Owl, Hoopoe, Lesser-spotted Woodpecker, Azure-winged Magpie and Short-toed Tree-creeper. Larger birds included a pair of Short-toed Eagle, spotted by Helen, and other fauna included a bizarre reptile, called Iberian Worm Lizard, and Spanish Festoon.

Near lunch time, we went to Santa Clara for a picnic by the river Mira. While we were exploring a flower meadow, we were surprised by a heavy shower, which made us have our sandwich near the cover of the van. After the picnic we were able to explore the area, that produced Bonelli's Eagle, Iberian Chiffchaff, a Common Toad and many flowers, including a profusion of the tinny purple toadflax *Linaria amethystea*.

Mid afternoon we went for a coffee in Santa Clara and after to a last place in our way to the hotel. The "Secret Valley", so called by Frank and family due to a left turn in the trail that is difficult to find by newcomers. That was our case, we went in the wrong direction, but manage to find Dartford Warbler, Firecrest, Crested Tit and Chapman's Green Hairstreak. Not bad for a wrong turn in the trail. Dinner and wine were delicious and the talk at the table animated.



Chapman's Green Hairstreak
Calophrys avis
Photo DLeitão

#### Day 3 Monday 21st March Castro Verde dry-grassland

Today we went further east to Castro Verde plain. The day started with a dense fog, that persisted after one hour driving to Castro Verde. After a short stop in a local supermarket, for toilet and extra waters, we changed the dry-grassland for first exploring the river Cobres. By the river in the fog we manage to find Little Owl, Great-spotted Cuckoo, Hoopoe and Red-rumped Swallow. On the flower side, among the Large Gum Cistus, we found Dipcadi and Pink Butterfly Orchid and in the river margins there were two species of narcissus.

When the fog started to dissipate we went to explore the grassland between São Marcos and Guerreiro, a private Nature Reserve known for the bustard populations. Before lunch we already have seen more than 100 Great Bustards, plus Little Bustard and Black Kite. After picnic we carry on seeing nice birds, like Red Kite, Spanish Imperial and Golden eagles, Hen and Montagu's Harrier, Lesser Kestrel and Calandra Lark. When driving back to Castro Verde we saw the first Bee-eaters and Woodchat Shrike. With loads of nice birds in our memory we drive back to the hotel for another Daniela's tasty meals.



Castro Verde plain. Photo DLeitão

### Day 4 Tuesday 22<sup>nd</sup> March Salgados lagoon and Tunes orchid spot

No fog today. After breakfast we drive one hour to the Algarve, to the coastal lagoon called Salgados. This small wetland is normally overloaded with waterbirds of many species. On our arrival we were welcomed by mixed flocks of Common and Alpine swifts. Our morning was filled with Flamingo, Spoonbill, Glossy Ibis, Black-winged Stil, Avocet, Marsh Harrier and many other birds. On the non-bird wildlife, we might refer Sawfly orchid, Iberian Hare, Spanish Marble White and special Yellow Scorpion.

After picnic we went for another part of the lagoon, mostly covered with mudflats. Mudflats in the Algarve are synonym of Kentish, Ringed and Grey plovers, Sanderling, Redshank, Greenshank, Snipe and Black-tailed Godwit. In an area with reed we saw the exotic Purple Swamp Hen.

In mid-afternoon we decided to change places for an area more interesting for botanists. We drive 20 minutes to Tunes, to explore an limestone area with low *machis*. In a couple of hours we saw 10 species of orchids and many other species, including seven species of *Ophrys*, some quite photogenic. Forest passerines were also abundant and Helen saw the single Booted Eagle of the tour. With the memory cards full of nice flowers we drive back for the hotel and for the seven o'clock dinner.

#### Day 5 Wednesday 23<sup>rd</sup> March

#### **Southwest Coast Nature Park**

Today we went to the rocky coast to the Southwest Coast Nature park. We drive west for 50 minutes and arrive in the coastal machis and meadows near cape Sardão. Interesting birds were White Storks, breeding in the sea clifs, Short-toed Eagle, Peregrine and Gannet, still on migration. But the real stars of the place were flowers. Among the endemic cistus (*Cistus palhinhae*), there were two species of tongue orchid, Common (*Serapias* lingua) and impressive spikes og Heart-flowered (S. *cordigera*), plus Two-leaved Genaria, Iberian Fritilaria, an endemic species of squil (*Scilla vicentina*) and the parasitic *Citinus hipocistis*. We stood a couple of hours looking for nice flowers and basking in the sum and then went south.

We picnic by the sea on Amoreira beach, after spotting an Osprey in a small fish-farm. After lunch we went for a walk in a nature trail taking us by the dunes and cliff top. Flowers were plenty and spectacular, with gorgeous Pink Snapdragon, Malcomnia littorea, Dipcadi and Hoop-peticoat Dafodill. On the butterflies we had Gren Hairstreak and Blackeyed Blue and on the birds only Thekla Lark. We went to the last place, but stopped in the Sweet Potato Museum, for toilet, coffee and sweet potato cake.

Near Odeceixe we stop by the side of the road for *Gladiolus iliricus* and *Simethis mattiazzi* and went to explore the river valley near Vale D'Alho. Here we had mixed flocks of Common, Pallid and Alpine swifts, Iberian Chiffchaff and Firecrest. Other interesting creatures included Large Tortoiseshell and two Moorish Geckos. We drive one hour back to our hotel, Frank's tells and Daniela's cookings.



Moorish Gecko *Taretola mauretanica*.

Photo DLeitão

#### Day 6 Thursday 24<sup>th</sup> March The Algarve Barrocal

Today we drive one hour south to the Algarve huge limestone area, locally known by the name of Barrocal. These are hold fields, surrounded by stone walls, covered by a mixt of Olive, Fig, Carrob and Almond trees and carpeted by many orchid and other bulbs. The first stop, near Castelo de Paderne produced 12 species of orchids, plus Wild Tulip, Algarve's Hyacinth and many other flowers. Birds included Short-toed eagle, Bee-eater, Green Woodpecker and many passerines. Other creatures were Spanish Terrapins, plus nice butterflies, like Spanish Festoon and Brimstone.

We had our picnic in the Benémola valley, among many birds, flowers and butterflies. New species included Yellow Anemone, Sword-leaved Helleborine, Man Orchid, Cleopatra butterfly and Kingfisher. After picnic we went for a coffee and beer in Benafim. After coffee we did a bit of Rocha da Pena nature trail, starting at Penina. We saw Swallowtail, Red Admiral, Violet Limodore and the southern variety of the Early Purple Orchid, called *Orchis olbiensis*. Then one hour driving back, to dinner and wine.

#### Day 7 Friday 25<sup>th</sup> March

#### **Luzianes and Secret Valley**

Today the group choose not to drive for and stay to explore places in 15 minutes range form the hotel. Frank told us about a valley close to Luzianes very good to Cirl Bunting. Has soon as we arrive there we saw and heard several Cirl Buntings. Besides this nice bird, we saw Cuckoo, Kingfisher, Woodlark, Iberian Chiffchaff and Crested Tit. On the butterfly side, we saw Scarce Swallowtail and Bath White. We entered in to an old mine to saw one Lesser Horseshoe Bat. We had picnic by the river Mira in Santa Clara and had Iberian Green Frog, Long-tailed Tit and a large Egyptian Locust.

After a coffee stop we decided to give a second try to the Secret Valley. We saw and photographed a male Woodchat Shrike on the way to the place. Before the valley we saw a pair of Blue Rock Thrushes in the old house that Frank had tipped us before. In the valley we had plenty of Sardinian, Dartford and Subalpine warblers, plus Firecrest, Rock Bunting and the usual Short-toed Eagle. On the butterfly side we had a few new species for tour, Bath White, Western Dappled White and Knapweed Fritillary. When we were driving back to the hotel Ruth spotted a lovely population of Wild Tulip. Last dinner was delicious as usual and we done a revision of the week, with a moment to everybody point out the highlights of the week.



Wild Tulip *Tulipa sylvestris*.

Photo DLeitão

## Day 8 Saturday 26<sup>th</sup> March Quinta do Lago and airport

We had a breakfast earlier than usual. After saying goodbye to Frank and Daniela we leave straight to Faro International airport, were we arrive around 8am. We said goodbye to Helen and Martin who had to catch an early flight and went with the rest of the group to the Ria Formosa nature Park. We had two hours to explore the Quinta do Lago nature trail. The light was very good and birds were plenty. In the mudflats we had Ringed, Kentish and Grey plovers, Dunlin, Sanderling, Turnstone, Redshanks and Whimbrel, among loads of Fiddler Crabs. In the fresh water lagoon we had Little Bittern, Purple Gallinule, Gadwall, Red-crested Pochard and the exotic Black-headed Weaver. On the plant side, we should refer nice numbers of Spring Snowflake and Cistanche. Around half past ten we went back to the airport, to the end of the tour.



#### Highlights of the week

Nigel – Orchids, especially the first place near Tunes.

Helen - Great Bustard.

Martin - Numbers of Great Bustard.

Alastair - Mirror Orchids and Daniela's puddings.

Ruth – Scent of cistus and lavenders.

Mirror Orchid Ophrys speculum. Photo DLeitão

# Systematic List Number 1 – Birds (144 species)

		Day	1	2	3	4	5	6	7	8
Little Grebe	Tachybaptus ruficollis					Χ				Х
Great Crested Grebe	Podiceps cristatus									Х
Black-necked Grebe	Podiceps nigricollis					2				
Gannet	Morus bassanus						Χ			
Cormorant	Phalacrocorax carbo		2	1	1	Χ	Χ		Χ	Х
Little Bittern	Ixobrychus minutus									1
Cattle Egret	Bubulcus ibis			1	Χ	Х	Χ	Χ		
Little Egret	Egretta garzetta		3	1	2	Χ	Χ	1		Χ
Grey Heron	Ardea cinerea		1	1	1	Χ				
White Stork	Ciconia ciconia		Χ		Χ	Χ	Χ	Χ	Χ	Χ
Glossy Ibis	Plegadis falcinellus					60				
Spoonbill	Platalea leucorodia				1	20				
Greater Flamingo	Phoenicopterus ruber	,	15			Χ				
Gadwall	Anas strepera					Χ				Χ
Teal	Anas crecca					Χ				
Mallard	Anas platyrhynchos				Χ	Χ	Χ	Χ		Χ
Pintail	Anas acuta					1				
Shoveler	Anas clypeata					Χ				Χ
Red-crested Pochard	Netta rufina									Χ
Pochard	Aythya ferina					Χ				Χ
Black Kite	Milvus migrans				Χ					
Red Kite	Milvus milvus				2					
Short-toed Eagle	Circaetus gallicus			2	1		1	3	1	
Marsh Harrier	Circus aeruginosus					1				
Hen Harrier	Circus cyaneus				1					
Montagu's Harrier	Circus pygargus				Х					
Common Buzzard	Buteo buteo		1		Χ		Χ	Χ	Χ	Χ
Spanish Imperial Eagle	Aquila adalberti				2					
Golden Eagle	Aquila chrysaetos				1					
Booted Eagle	Hieraaetus pennatus					1				
Bonelli's Eagle	Hieraaetus fasciatus			1	1					
Osprey	Pandion haliaetus						1			
Lesser Kestrel	Falco naumanni				Χ					
Common Kestrel	Falco tinnunculus				Χ	Χ	Χ	1		
Merlin	Falco columbarius				1					
Peregrine	Falco peregrinus						2			
Red-legged Partridge	Alectoris rufa		Χ	Χ	Χ	Χ	Χ		Χ	
Quail	Coturnix coturnix				Χ					
Water Rail	Rallus aquaticus								Χ	
Moorhen	Gallinula chloropus					Χ				Χ
Purple Gallinule	Porphyrio porphyrio					2				Χ
Coot	Fulica atra		20			Χ				Χ
Little Bustard	Tetrax tetrax				3					
Great Bustard	Otis tarda				150					
Black-winged Stilt	Himantopus himantop	ous				Χ				
Avocet	Recurvirostra avosetta	а				Χ				
Little Ringed Plover	Charadrius dubius				2					
Ringed Plover	Charadrius hiaticula		1			Χ				Χ

	Day	y 1	2	3	4	5	6	7	8
Kentish Plover	Charadrius alexandrinus	Х			Х				Х
Grey Plover	Pluvialis squatarola	Х			Χ				Χ
Sanderling	Calidris alba	Х			Χ				Χ
Dunlin	Calidris alpina	50			Χ				Χ
Common Snipe	Gallinago gallinago			2	2				
Black-tailed Godwit	Limosa limosa				2				
Whimbrel	Numenius phaeopus	1							Χ
Common Redshank	Tringa totanus	Х			Χ				Χ
Greenshank	Tringa nebularia	Х			1				
Green Sandpiper	Tringa ochropus			2					1
Common Sandpiper	Actitis hypoleucos	2			Χ				
Turnstone	Arenaria interpres	X							Χ
Mediterranean Gull	Larus melanocephalus				Χ				
Black-headed Gull	Larus ridibundus	Х			Χ				Χ
Les. Black-backed Gull	Larus fuscus	Х			Χ	Χ			
Grt. Black Backed Gull					1				
Yellow-legged Gull	Larus michaelis	Х			Χ	Χ			Χ
Caspian Tern	Sterna caspia	3							
Sandwich Tern	Sterna sandvicensis	Χ			Χ				1
Black-bel. Sandgrouse	Pterocles orientalis			15					
Stock Dove	Columba oenas				Χ				
Woodpigeon	Columba palumbus	Χ	1			Χ	Χ	Χ	Χ
Collared Dove	Streptopelia decaocto	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
Great Spotted Cuckoo	Clamator glandarius			4					
Cuckoo	Cuculus canorus	1	2		Χ		Χ	Χ	
Little Owl	Athene noctua		1	2	1	1	1		Χ
Common Swift	Apus apus				Χ	Χ			
Pallid Swift	Apus pallidus					Χ			
Alpine Swift	Apus melba				Χ	Χ			
Common Kingfisher	Alcedo atthis		2	1			1	Χ	
European Bee-eater	Merops apiaster			4			Χ	Χ	
Hoopoe	Upupa epops		Χ	Χ	Χ	2	2	Χ	Χ
Wryneck	Jynx torquilla								1
Green Woodpecker	Picus viridus	Χ	Χ		Χ	Χ	Χ	Χ	
Gt. Spotted Woodpecker	Dendrocopos major	Χ	Χ			Χ	Χ	Χ	
Ls. Spotted Woodpecker	Dendrocopos minor		3						
Calandra Lark	Melanocorypha calandra			Χ					
Crested Lark	Galerida cristata	X	Χ	Χ	Χ	Χ			
Thekla Lark	Galerida theklae			Χ	Χ	Χ			Χ
Woodlark	Lullula arborea		Χ	Χ		3	1	Χ	
Skylark	Alauda arvensis			Χ					
Crag Martin	Ptyonopragne rupestris		Χ						
Swallow	Hirundo rustica	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ
Red-rumped Swallow	Hirundo daurica		X	Χ	Χ	Χ	Χ	Χ	Χ
House Martin	Delichon urbica		Χ	Χ	Χ	Χ	Χ	Χ	Χ
Meadow Pipit	Anthus pratensis		Χ	Χ	Χ			Χ	
Water Pipit	Anthus spinoletta				2				
Blue-headed Wagtail	Motacilla flava	Χ			X				X
Grey Wagtail	Motacilla cinerea						1	X	
White Wagtail	Motacilla alba		1	1	X	X	1	X	
Wren	Troglodytes troglodytes	X	Х		X	Х	X	Χ	

	1	Day	1	2	3	4	5	6	7	8
Dunnock	Prunella modularis			Χ						
Robin	Erithacus rubecula			Χ			Χ	Χ	Χ	
Nightingale	Luscinia megarhyncho	S	1				.,			
Stonechat	Saxicola torquata			Χ	Χ	Χ	Χ		X	
Blue Rock Thrush	Monticola solitarius		V	V	V	V	V	V	2	V
Blackbird Song Thrush	Turdus merula Turdus philomelos		Χ	X 1	Χ	X X	X 1	X X	X X	Χ
Cetti's Warbler	Cettia cetti			X		X	ı	^	X	Χ
Fan-tailed Warbler	Cisticola juncidis		Χ	X	Х	X	Χ	Х	X	^
Dartford Warbler	Sylvia undata		^	X	^	^	^	X	X	
Subalpine Warbler	Sylvia cantillans								Χ	
Sardinian Warbler	Sylvia melanocephala		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
Blackcap	Sylvia atricapilla		Χ	Χ	Χ	Χ	Χ	Χ	Χ	
Chiffchaff	Phylloscopus collybita		1	Χ	Χ	Χ	Χ		Χ	Χ
Iberian Chiffchaff				1			1	Χ	Χ	
Firecrest	Regulus ignicapillus			3			Χ	Χ	Χ	
Long-tailed Tit	Aegithalos caudatus			Χ			Χ	Χ	Χ	
Crested Tit	Parus cristatus			2					Χ	
Blue Tit	Parus caeruleus			Χ	Χ	Χ	Χ	Χ	Χ	
Great Tit	Parus major			Χ		Χ	Χ	Χ	Χ	
Nuthatch	Sitta europaea			Χ				Χ	Χ	
Short-toed Treecreeper	Certhia brachydactyla			Χ		Χ		Χ	Χ	
Southern Grey Shrike	Lanius meridionalis		1		Χ		Χ	1		
Woodchat Shrike	Lanius senator				2				1	
Jay	Garrulus glandarius			Χ	Χ	Χ		Χ	Χ	
Azure-winged Magpie	Cyanopica cyana		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
Magpie	Pica pica		3	Χ		Χ				Χ
Jackdaw	Corvus monedula				Χ					
Carrion Crow	Corvus corone			Χ	Χ		Χ		Χ	
Raven	Corvus corax				Χ					
Spotless Starling	Sturnus unicolor			Χ	Χ		Χ	Χ	Χ	Χ
House Sparrow	Passer domesticus		Χ	Χ	Χ	Х	Χ	Χ	Χ	Χ
Spanish Sparrow	Passer hispaniolensis				Χ	Χ				
Black-headed Weaver	Ploceus cucculatus									Χ
Common Waxbill	Estrilda astrild			40						
Chaffinch	Fringilla coelebs			Χ				Χ	Χ	
Serin	Serinus serinus			Х	X	Х	X	Х	Х	Χ
Greenfinch	Carduelis chloris			Х	Х	X	Х	Х	X	
Goldfinch	Carduelis carduelis		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
Siskin	Carduelis spinus			Х				Х	Χ	
Linnet	Carduelis cannabina			Х	Χ	Х	Χ	Χ		
Bullfinch	Pyrrhula pyrrhula			Х						
Cirl Bunting	Emberiza cirlus								Χ	
Rock Bunting	Emberiza cia			Χ					Χ	
Corn Bunting	Miliaria calandra			Χ	Χ	Χ	Χ	Χ	Χ	
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# Systematic List Number 2 – Other vertebrates (12 species)

	Day	1	2	3	4	5	6	7	8
Amphibians									
Common Toad	Bufo bufo		1						
Iberian Water Frog	Rana perezi		Χ	Χ	Χ		Χ	Χ	
Stripless Tree Frog	Hyla meridionalis	1			1				
Reptiles									
Large Psamodromus	Psammodromus algirus					Χ	Χ	Χ	
Moorish Gecko	Tarentola mauretanica					2			
Western Tree-toed Skink	Chalcides striatus					1			
Iberian Worm Lizard	Blanus cinereus		1	1				1	
Spanish Terrapin	Mauremys leprosa						5		
Mammals									
Iberian Hare	Lepus granatensis				Χ				
Rabit	Oryctolagus cuniculus				Χ				
Short-toed Vole	Microtus agrestis				1				
Lesser Horseshoe Bat	Rhinolophus hipposideros							1	



Common Toad Bufo bufo. Photo DLeitão

# Systematic List Number 3 – Butterflies (27 species)

<b>.</b>		Day	1	2	3	4	5	6	7	8
Papilionidae Swallowtail	Papilio machaon							1		
Scarce Swallowtail	Iphiclides podalirius								1	
Spanish Festoon	Zerynthia rumina			Χ		Χ		Χ	Χ	
Pieridae										
Large White	Pieris brassicae			Χ	Χ	Χ	Χ	Χ	Χ	
Small White	Artogeia rapae			Χ	Χ	Χ	Χ	Χ	Χ	
Bath White	Pontia daplidice								Χ	
Western Dappled White	Euchloe crameri								Χ	
Green-striped White	Euchloe belemia				Χ					
Clouded Yellow	Colias crocea			Χ	Χ	Χ	Χ	Χ	Χ	
Brimstone	Gonepteryx rhamni							Χ	Χ	
Cleopatra	Gonepteryx cleopatra	<del>3</del>						Χ	Χ	
Lycaenidae										
Green Hairstreak	Callophrys rubi						Χ	Χ	Χ	
Chapman's Gr Hairstreak	Callophrys avis			1						
Small Copper	Lycaena phlaeas			Χ	Χ			Χ	Χ	
Long-tailed Blue	Lampides boeticus							Χ		
Holly Blue	Celastrina argiolus								Χ	
Black-eyed Blue	Glaucopsyche melan	ops					Χ	Χ	Χ	
Iberian Brown Argus	Aricia crameri				Χ		Χ			
Common Blue	Polyommatus icarus					Χ				
Nymphalidae										
Large Tortoiseshell	Nymphalis polychloro	os					1	1	Χ	
Peacock	Inachis io							V	V	
Red Admiral Painted Lady	Vanessa atalanta Cynthia cardui				Χ	1	1	X	Χ	
•	Melitaea phoebe				^	ı	ı	^	Х	
Knapweed Fritillary	мешаеа рпоеве								^	
Satyridae										
Spanish Marbled White	Melanargia ines					X		,		
Small Heath	Coenonympha pamp	hilus		X	Χ			1	X	
Speckled Wood	Pararge aegeria			Х			Χ	Χ	Х	

# Systematic List Number 4 – Other notable invertebrates (5 species)

	Day	1	2	3	4	5	6	7	8
Fiddler Crab	Uca tangeri								Χ
Yellow Scorpion	Buthus occitanus			Χ	Χ	Χ			
Med. Banded Centipede	Scolopendra cingulata		2						
Red-veined Darter	Sympetrum fonscolombii			Χ					
Egyptian Locust	Anacridium aegyptium							Χ	

# Systematic List Number 5 - Plants (240 species)

	Day	1	2	3	4	5	6	7	8
Cupressaceae									
Juniperus phoenicea						Χ			
Pinaceae									
Pinus pinaster			Χ		Χ	Χ			
Pinus pinea		Χ	Χ	Χ	Χ	Χ			
Aizoaceae									
Carpobrotus edulis		Χ			Χ	Χ			
Anacardiaceae									
Pistacia lentiscus		Χ			Χ	Χ	Χ		Χ
Apiaceae									
Daucus halophilus						Χ			
Eryngium maritimum						Χ			
Apocynaceae									
Nerium oleander			Χ				Χ		
Vinca difformis		Χ	Χ			Χ	Χ		
Aristolochiaceae									
Aristolochia paucinervis			Χ						
Aristolochia baetica					Χ		Χ		
Asteraceae									
Arctotheca calendula						Χ			
Bellis annua				Χ					
Bellis syvestris				Χ					
Calendula arvensis				Χ					
Calendula suffruticosa				Χ					
Centaurea pullata			Χ			Χ			
Chrysanthemum coronarium				Χ					
Cotula coronopifolia				Χ					
Dittrichia viscosa			Χ			Χ			
Galactites tomentosa		Χ							
Reichardia gaditana									
Silybum marianum				Χ					
Sonchus oleraceus				Χ					
Boraginaceae									
Anchusa azurea				Χ					
Anchusa undulata			Х						
Borago officinalis			Χ						
Echium plantagineum		Х	Х	Χ					
Brassicaceae									
Cakile maritima						X			
Malcolmia littorea						Χ			
Sinapis arvensis			X	Χ					
Cleome violacea			Χ						
Cactaceae									
Opuntia ficus-indica		Χ							
Caprifoliaceae									
Lonicera implexa			X		Χ		Χ		
Viburnum tinus			Χ						
Caryophyllaceae									
Paronychia argentea			Χ	.,					
Silene colorata				Χ	Χ	Χ			
Silene latifolia			Χ			v		Χ	
Silene nutans						X			
Silene galica						X			
Silene cretica						X			
Silene littorea						Χ			

	Day	1	2	3	4	5	6	7	8
Coordinate with the	_					V			
Spergularia rubra			V			Χ			
Spergularia marina			X						
Spergularia media			Χ			V			
Polycarpon tetraphyllum			V			Χ			
Illecebrum verticillatum			Χ			V			
Herniaria maritima						Χ			
Chenopodiaceae		V							
Beta vulgaris		X							
Halimus halimus		Χ							
Cistaceae			V		V		V		
Cistus albidus			X		X		X		
Cistus crispus			X				X		
Cistus populifolius		.,	X	.,			Χ		
Cistus ladanifer		Χ	X	Χ		X			
Cistus palhinhae		.,				Χ			
Cistus monspeliensis		X				V	X		
Cistus salvifolius		Χ	Χ			X	Χ		
Halimium halimifolium						X			
Tuberaria guttata						Χ			
Convolvulaceae						.,			
Convolvulus althaeoides						Χ			
Crassulaceae						.,	.,		
Sedum sediforme						Χ	Χ		
Umbilicus rupestris				Χ					
Dipsacaceae									
Scabiosa crenata			Х						
Ericaceae							.,		
Arbutus unedo		Χ	Х			.,	Χ		
Calluna vulgaris						Х			
Erica arborea			Х			Χ			
Erica umbellata			Х						
Euphorbiaceae									
Euphorbia helioscopia			Х						
Euphorbia peplus			Χ						
Euphorbia exigua						Χ			
Mercurialis annua			Χ						
Fabaceae									
Anthyllis tetraphylla				Χ	Χ				
Anthyllis vulnararia			X						
Ceratonia siliqua			Χ						
Cercis siliquastrum		Χ							
Coronilla juncea					Χ				
Astragalus stella				Х					
Vicia hirsuta				X					
Vicia sativa				Χ					
Vicia lutea		Χ							
Vicia villosa				Χ		.,			
Lotus ornithopodioides						Χ			
Lathyrus clymenum			X						
Lathyrus cicera			X						
Lathyrus ochrus			X						
Lupinus angustifolius			X						
Lupinus luteus			Χ						
Lupinus micranthus		Χ			.,				
Retama monosperma			V		Χ				
Medicago minima			X						
Medicago orbicularis			X						
Medicago polymorpha			Χ			.,			
Medicago marina						Х			

	Day	1	2	3	4	5	6	7	8
Medicago littoralis						Χ			
Onobrychis humilis			Χ			^			
Ononis natrix			•				Χ		
Psoralea bituminosa						Χ			
Genista hirsuta		Х			Χ	Χ	Χ		
Ulex parviflorus			Χ						
Scorpiurus muricatus				Χ					
Spartium junceum				Χ					
Stauracanthus genistoides						Χ			
Trifolium resupinatum					Χ				
Trifolium stellatum					Χ				
Saxifragaceae									
Saxifraga granulata								Χ	
Cynomoriaceae									
Cynomorium coccineum		Χ							
Fagaceae									
Quercus rotundifolia			X	Χ		v	X		
Quercus coccifera			X			X	Χ		
Quercus suber		Х	Χ			Х		V	
Quercus faginea Frankeniaceae								X	
Frankenia laevis		Х							
Gentianaceae		^							
Centaurium erythraea					Χ	Х	Χ		
Geraniaceae					^	^	^		
Erodium cicutarium		Χ							
Erodium aethiopicum		,,	Χ						
Erodium ciconium			•	Χ					
Erodium malacoides			Χ						
Erodium moschatum			Χ						
Geranium dissectum			Χ						
Geranium molle			Χ						
Geranium purpureum			Χ						
Geranium rotundifolium			Χ						
Geranium lucidum						Χ			
Lamiaceae									
Lavandula stoechas			Χ	Χ		Χ			
Lavandula viridis			X						
Marrubium vulgare			X				.,		
Phlomis purpurea			X	V		v	X		
Rosmarinus officinalis			V	X		X	X		
Salvia verbenaca			Χ	Χ		v	Χ		
Thymus camphoratus				Χ	Х	Х			
Thymus capitatus <b>Linaceae</b>				^	^				
Linum bienne			Χ			Χ			
Linum maritimum			^			X			
Linum strictum						X			
Malvaceae						^			
Malva parviflora									
Malva sylvestris			Χ						
Malva creticae		Χ							
Cytinaceae									
Cytinus hypocistis						Χ			
Cytinus ruber							Χ		
Moraceae									
Ficus carica			Χ		Χ		Χ		
Myrtaceae									

	Day	1	2	3	4	5	6	7	8
Myrtus communis						Χ			
Oleaceae						^			
Olea europaea			Х	Χ		Χ			
Orobanchaceae			^	,,		,,			
Cistanche phelypaea		Χ							Χ
Orobanche ramosa								Χ	
Orobanche foetida					Χ				
Oxalidaceae									
Oxalis pes-caprae		Χ	Χ	Χ		Χ			
Paeoniacea									
Paeonia broteri			Χ						
Papaveraceae									
Fumaria capreolata			Χ						
Fumaria officinalis			Χ						
Fumatia muralis			X						
Papaver rhoeas			Χ	Χ					
Plantaginaceae				.,					
Plantago coronopus				Χ					
Plumbaginaceae						V			
Armeria pungens						X			V
Limoniastrum monopetalum		Х							Χ
Pumov hugopholophorus			Χ	Х	Х				
Rumex bucephalophorus <b>Primulaceae</b>			^	^	^				
Anagallis arvensis			Χ						
Anagallis monelli			X						
Ranunculaceae			^						
Anemone palmata							Χ		
Ranunculus ficaria			Χ				^		
Ranunculus macrophyllus			, ,	Χ					
Resedaceae									
Reseda media		Х	Х	Χ					
Rosaceae									
Pyrus amygdaliformis								Χ	
Sanguisorba minor			Х						
Rubiaceae									
Rubia peregrina					Χ	Χ			
Sherardia arvensis			Χ						
Valantia hispida			Χ						
Santalaceae									
Osyris quadripartita			Χ				Χ		
Scrophulariaceae									
Antirrhinum majus						X			
Bellardia trixago				V	X	Χ			
Linaria viscosa			v	X					
Linaria amethystea			Χ			V			
Linaria bipunctata					Χ	X			
Linaria algarviana			Χ		^				
Misopates orontium Scrophularia sambucifolia			^					Х	
Verbascum sinuatum			Χ					^	
Tamaricaceae			^						
Tamarix africana		Х							Χ
Thymelaeaceae		^							^
Daphne gnidium			Χ				Χ	Χ	
Urticaceae			, ,					, ,	
Parietaria judaica			Χ						
Urtica dioica			X						

	Day	1	2	3	4	5	6	7	8
Valerianaceae									
Fedia cornucopiae					Χ		Χ		
Agavaceae									
Agave americana		Χ					Χ		
Amaryllidaceae									
Leucojum tricophyllum					Χ				Χ
Narcissus bulbocodium				Χ		Χ			
Narcissus jonquilla				Χ					
Narcissus papyraceus							Χ		
Pancratium maritimum					Χ	Χ			
Dioscoreaceae									
Tamis communis			Х						
Araceae									
Arum italicum			Х	V					
Arisarum vulgare			Х	Χ					
Iridaceae					V				
Gladiolus italicus			Х		X				
Galdiolus iliricus		v	Χ	Х	Χ	X X	Х		
Gynandriris sisyrnchium Isis pseudacorus		Х	^	^	^	X	^		
Romulea bulbocodium				Х		X			
Liliaceae				^		^			
Allium roseu			Χ				Χ		
Allium subvillosum			^				X		Χ
Asphodelus fistulosus		Х	Χ				X		X
Asphodelus ramosus		X	X	Χ	Χ		,,		,,
Asparagus albus		X	, ,		X		Χ		
Fritillaria lusitanica						Χ			
Hyacinthoides hispanica			Χ				Χ	Χ	
Dipcadi serotinus				Χ		Χ		Χ	
Muscari neglectum					Χ				Χ
Muscari comosum		Х	Χ		Χ				Χ
Belvallia hackelii							Χ		
Ornithogalum umbellatum				Χ			Χ	Χ	
Ruscus aculeatus							Χ	Χ	
Scilla vincentina						Χ			
Scilla monophyllos			Χ				.,	Χ	
Scilla peruviana					Χ		Χ		
Simethis mattiazzi						X			
Smilax aspera			Χ		Χ		X	X	
Tulipa sylvestris		.,				V	X	X	
Urginea maritima		Х				Χ	X		
Orchidaceae					Χ		Х		
Anacamptis pyramidalis Cephalanthera longifolia					^		X		
Epipactis Iusitanica			Χ				X		
Limodorum abortivum			^				X		
Neotinea maculata							X		
Aceras anthropophorum							X		
Gennaria diphylla						Χ	^		
Ophrys bombyliflora					Χ	•	Χ		
Ophrys speculum					Χ		Χ		Χ
Ophrys vernixia					Χ		Χ		
Ophrys picta					Χ		Χ		
Ophrys tenthredinifera					Χ				
Ophrys fusca					Χ		Χ		
Ophrys dyris					Χ		Χ		
Ophrys sícula/quarteirae							X		
Ophrys lutea					X		Χ		

	Day	1	2	3	4	5	6	7	8
Hybrid O.speculum X O.lutea							Χ		
Orchis olbiensis							Χ		
Orchis morio		Χ	Χ			Χ		Χ	
Orchis papilionácea				Χ					
Orchis italica					Χ		Χ		
Serapias língua						Χ			
Serapias cordigera						Χ			
Serapias parviflora					Χ	Χ			
Poaceae									
Arundo donax			Χ						
Phragmites australis			Χ						
Palmae									
Chamaerops humilis							Χ		



Heart-flowered Orchid Serapias cordigera. Photo DLeitão.

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