

Werner Greuter & Giannantonio Domina

Checklist of the vascular plants collected during the 12th “Iter Mediterraneum” in Tunisia, 24 March – 4 April 2014

Abstract

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The vascular plants (plus one alga) collected during Iter Mediterraneum XII of OPTIMA in North Tunisia have been studied. In all, 1374 gatherings were made from 43 localities in the “Cap Bon” region, “Dorsale Tunisienne”, “Tunisie du Nord-Est”, “Vallée de la Medjedah”, “Mogods” and “Kroumirie” areas. They belong to 82 families and 539 species or subspecies. Three taxa are new for the flora of Tunisia (*Cerastium diffusum* subsp. *gussonei*, *Senecio leucanthemifolius* subsp. *mauritanicus*, and *Ulmus minor* subsp. *canescens*), 7 represent new records for the “Kroumirie”, 15 for the “Mogods”, 3 for the “Tunisie du Nord-Est”, 2 for the “Dorsale Tunisienne”, and 8 for “Cap Bon”.

Key words: Flora of Tunisia, Kroumiria, Cape Bon, Itinera Mediterranea, OPTIMA, vascular plants.

Collecting localities

A list of collecting localities, drawn up immediately and daily updated as the excursion progressed, was used as basis for labelling. The locality data were checked and confirmed, as to accuracy of place names and consistency of spelling, by our Tunesian hosts, in particular Ridha El Mokni. The coordinates were ascertained on the spot by means of the global positioning system (GPS) Garmin GPS map CX60. When the collecting area was sizeable, the position of the extreme points visited was measured and translated into ranges of latitude and longitude, as recorded on the labels; however, in order to make it possible to georeference the specimens unambiguously, the ranges were reduced to the average values for databasing purposes, and the values reported below are these average values.

The localities, mapped in Fig. 1, have been numbered chronologically as visited by us. In addition, each locality was plotted on the map of phytogeographical regions defined by Cuénod (1954), also used by Pottier-Alapetitie (1979, 1981). Six of these regions, as shown in Fig. 1, were visited by us: **CB** (“Cap Bon”), **DT** (“Dorsale Tunisienne”), **K** (“Kroumirie”), **M** (“Mogods”), **NE** (“Tunisie du Nord-Est”), and **VM** (“Vallée de la Medjerdah”). In the locality list (Table 1), these abbreviations are prefixed to the locality

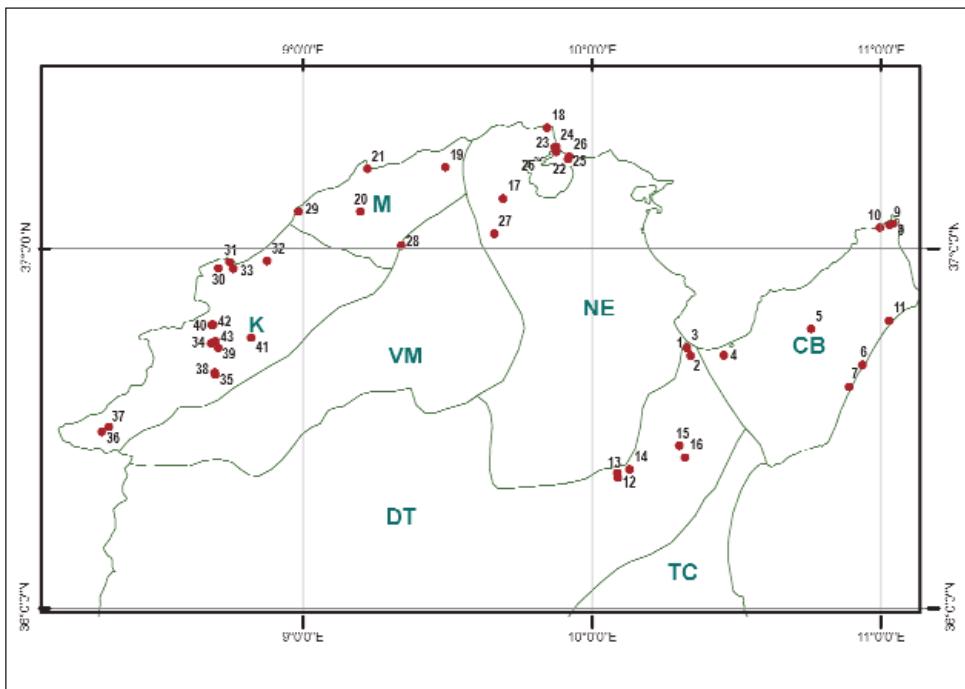


Fig. 1. The visited localities in the phytogeographical regions defined by Cuénod (1954).

numbers. In the species enumeration, the same abbreviations are given in the first place, so as to convey a quick, general impression of the distribution pattern of each taxon that emerges from the collected material.

Habitat indications for each locality have been generalised, but the particular habitat of individual species was also noted and is rendered below by means of lower-case Latin letters added to the locality number.

Enumeration of the collected material

Within each of the principal groups (algae, pteridophytes, gymnosperms, dicotyledons, monocotyledons) the arrangement is alphabetical by families, then genera, then species. The delimitation of families follows NCU-3 (Greuter & al. 1993), the nomenclature of species and subspecies follows Med-Checklist (Greuter & al. 1984, 1986, 1989; Greuter 2008), as updated, when appropriate, to conform with Euro+Med Plantbase (Euro+Med 2006-) and/or the N African *Index synonymique* of Dobignard & Chatelain (2010-2013) and/or the Catalogue of Life dynamic checklist (Roskov & al. 2015), or any other relevant publications cited specifically. Infra-subspecific taxa are not recognised.

The name of the taxon is followed, on the same line, by the natural territorial units defined by Cuénod (**CB**, **DT**, **K**, **M**, **NE**, **VM**: see above and Fig. 1). On a new line, the

Table 1. A list of the collecting localities of *Iter Mediterraneum XII* to Tunisia, 2014

Nº	Gouvernement	Locality	alt. (m)	lat. N	long. E	Habitat	Date	coll. N°s
DT-1	Ben Arous	Massif of Bou Kornine, c. 3-4 km SSE of Hammam-Lif	120-300	36°42'15" 10°20'31"	Maquis and garrigue with <i>Tetradymia</i> , and ruderal places around parking; 1b , Ruderal	24/03/2014	1-75	
DT-2	Ben Arous	Massif of Bou Kornine, c. 0.8 km SSW of Hammam-Lif, at the parking area of the Ecomusee	110	36°43'34" 10°19'47"	Ruderal roadside	24/03/2014	76-88	
DT-3	Ben Arous	Massif of Bou Kornine, c. 0.8 km SSW of Hammam-Lif, along the road below the parking area of the Ecomusee	90	36°43'35" 10°19'44"	Garrigue	24/03/2014	89-96	
CB-4	Nabeul	C. 3 km WNW Soliman, along the road to Ejehmi beach	1	36°42'20" 10°27'24"	Salt marsh; 4b , In water	24/03/2014	97-133	
CB-5	Nabeul	Massif of Jebel Sidi Abderrahmane, c. 9 km NW Al Middah, NW of small village Littoral belt of Qurba, c. 13 km NNE of Qurba, 2.8 km SSW of Lebna	200-280	36°46'45" 10°45'31"	Garrigue, grazed meadows and rocks; 5b , Ruderal	25/03/2014	134-213, 262-263	
CB-6	Nabeul	Littoral belt of Qurba, c. 5 km NNE of Qurba, shore of lagoon Around top of Cape Bon	0-5	36°40'45" 10°56'11"	Dunes; 6b , Inner dunes; 6c , Ruderal; 6d , Sand dunes and ruderal salt marshes; 6e , Wetland	25/03/2014	214-260	
CB-7	Nabeul	Littoral belt of Qurba, c. 5 km NNE of Qurba, shore of lagoon	0-2	36°37'5" 10°53'24"	Ruderal and salt marshes; 7b , Ruderal	25/03/2014	264-284	
CB-8	Nabeul	Around top of Cape Bon	350-400	37°04'12" 11°02'33"	Garrigue, wind blown meadows and rocks; 8b , Foot of rocks; 8c , Rock ledges; 8d , Rockface; 8e , Rocks	26/03/2014	285-333	
CB-9	Nabeul	Road to Cape Bon c. 2.3 km NE of El Haouaria	180	37°03'55" 11°01'47"	Forest and maquis	26/03/2014	334	
CB-10	Nabeul	C. 1.6 km NW of El Haouaria, coast near the Phoenician-Roman caves	5-70	37°03'28" 10°59'46"	Rocky cliffs, sand dunes and <i>Pinus</i> forest on sand; 10b , Dunes	26/03/2014	335-360	
CB-11	Nabeul	Road from Kelibia to Manzil Tamim, c. 4.6 km NE Manzil Tamim, S of bridge across a small river	5-15	36°48'6" 11°01'40"	Ruderal; 11b , Dry pasture; 11c , Dry slope; 11d , Maquis; 11e , River bank; 11f , Riverside; 11g , Roadside, ruderal, segert and besides river; 11h , Ruderal in shade; 11i , Sandstone rocks; 11j , Segert; 11k , Shady places	26/03/2014	361-429	
DT-12	Zaghouan	Massif of Jebel Zaghouan, road to Jebel Zaghouan from the NW side	500-630	36°21'53" 10°05'25"	Maquis, rocks and roadside; 12b , Rocks	27/03/2014	430-497	

DT-	Zaghouan 13	Massif of Jebel Zaghouan, road to Jebel Zaghouan from the NW side	300-310	36°22'43" 10°05'18" Maquis, rocks, roadside; 13b , Ruderal	27/03/2014 498-505
DT-	Zaghouan 14	Zaghouan, near the Roman fountain	275	36°23'19" 10°07'50" Rock	27/03/2014 506-507
DT-	Zaghouan 15	4 km N of Oued Ezzi, S side of the mountain	195-210	36°27'13" 10°18'11" Grazed meadow and maquis/forest	27/03/2014 508-550
DT-	Ben Arous 16	Jebel Ressas, c. 3.5 km SW of Dawwar at Talib 'Ali	80-200	36°36'24" 10°19'20" Maquis and garigue with rocks and gravel field; 16b , Rock	28/03/2014 551-634
NE-	Bizerte 17	Jebel Ichkeul, S of Lake Ichkeul, c. 8 km W of Menzel Bouriba, peninsula N and hill W of the mineral well	0-100	37°08'20" 09°41'32" Maquis with rocks and grazed meadows; 17b , Brackish lake, submerged; 17c , Lake shore (brackish); 17d , Rock base; 17e , Rocks; 17f , Ruderal	29/03/2014 635-755
NE-	Bizerte 18	Coast c. 6.5 km NNW Bizerte, near the Roman grottoes	0-60	37°19'59" 09°50'43" Dune; 18b , Dunes and rocks; 18c , Grassland on clay; 18d , Rock; 18e , Sand; 18f , Wet clayey slope	29/03/2014 756-806
M-	Bizerte 19	Area NW of Lake Ichkeul, along the road c. 5.6 km WNW of Teskraia	100-240	37°13'29" 09°29'38" Burned (one year ago) forest and garigue with meadows between; 19b , Moist depressions; 19c , Rivulet; 19d , Roadside ditch	30/03/2014 807-875
M-	Bizerte 20	c. 14 km S Cap Serrat, plain between Tamra and Dawwar M'rât	125-130	37°06'12" 09°11'56" Meadows, humid and segetal places; 20b , Roadside ditch	30/03/2014 876-913,
M-	Bizerte 21	Cap Serrat, E slope and around houses on the beach	0-50	37°13'13" 09°13'24" Garigue, rocks and ruderal places at beach; 21b , Maritime sand; 21c , Ruderal; 21d , Seaside wetland; 21e , Wet places at foot of rock	30/03/2014 914-945
NE-	Bizerte 22	City of Bizerte, walls of the Medina	8	37°16'43" 09°52'29" Wall	31/03/2014 947
NE-	Bizerte 23	City of Bizerte, in the Spanish fort	30	37°16'49" 09°52'19" Semiruderal meadow	31/03/2014 948-949
NE-	Bizerte 24	City of Bizerte, promenade by the beach hotels	10	37°16'51" 09°52'38" Meadow under planted palms	31/03/2014 950
NE-	Bizerte 25	C. 5 km SW of Bizerta, N Habib Arifa, along the road in parallel to the highway	20-25	37°14'53" 09°55'03" <i>Pinus</i> forest on sand dunes	31/03/2014 951-
NE-	Bizerte 26	C. 5 km SW of Bizerta, sandy coast N of Habib Arifa	0-5	37°15'16" 09°55'20" Dune; 26b , Behind the dunes; 26c , <i>Pinus</i> pinea wood behind the dunes; 26d , Sand dunes and ruderal	31/03/2014 1001-1002-1014,
NE-	Bizerte 26 ^{bis}	Bizerta, by the drawbridge	5	37°16'00" 09°52'36" Roadside	31/03/2014 1015-
NE-	Bizerte 27	Mateur, park in the city	20	37°02'30" 09°39'42" Weed	01/04/2014 1016-1017-1018

VM-28	Bizerte	S of the road Mateur-Tabarca, 2-3.5 km SW of Sidi Abdallah Ben Saïden	235-450	37°01'13" 09°19'32"	Garrigue, rocky slope, semi-ruderal besides track; 28b , Along brook; 28c , Cultivated as hedge; 28d , Field margin; 28e , Rocks; 28f , Segetal	01/04/2014	1019-1088
M-29	Jendouba	Coast c. 26 km NE of Tabarca, Cap Negro	0-30	37°06'13" 08°59'4"	Maquis and garrigue; 29b , Littoral rocks; 29c , Maquis; 29d , Ruderal; 29e , Sandy coastal flats	01/04/2014	1089-1122
K-30	Jendouba	Along the road to the Algerian frontier, 4 km WSW Tabarca, above Malloula	170-185	36°56'45" 08°42'26"	Pinus plantation; 30b , On sand	02/04/2014	1123-1138
K-31	Jendouba	Tabarca, rocky coast in the N part of the city	0-50	36°57'47" 08°44'51"	Cliffs at coast; 31b , Locally escaped from cultivation; 31c , Straggling through shrubs; 31d , Submersed marine	02/04/2014	1139-1163
K-32	Jendouba	Tabarca, along the road to Tabarca Airport	25-30	36°57'58" 08°52'37"	Sand dunes distant from sea and pond; 32b , Aquatic; 32c , In water; 32d , Sandy soil	02/04/2014	1164-1194
K-33	Jendouba	S part of the city of Tabarca	5	36°56'42" 08°45'32"	Ruderal	02/04/2014	1229
K-34	Jendouba	1 km N of Ain Drahem	770-780	36°47'24" 08°41'3"	<i>Quercus</i> forest; 34b , High above the ground on Quercus suber trunks and branches; 34c , On rocks and soil; 34d , Roadside ditch; 34e , Rocks	02/04/2014	1195-1228
K-35	Jendouba	13.5 km S of Ain Draham, in Al Firmanah El Feidja National Park, between the Park Centre and the watch tower, on rocks	270	36°39'06" 08°41'53"		03/04/2014	1230
K-36	Jendouba	El Feidja National Park, track to a small forest house ENE of the Park Centre	710-770	36°29'34" 08°18'19"	<i>Quercus</i> forest and rocks	03/04/2014	1231-1271
K-37	Jendouba	El Feidja National Park, track to a small forest house ENE of the Park Centre	850-865	36°30'25" 08°19'47"	<i>Quercus</i> forest and maquis	03/04/2014	1272-1292
K-38	Jendouba	13.5 km S of Ain Draham, in Al Firmanah	285	36°39'27" 08°41'41	Ruderal	03/04/2014	1293-1310
K-39	Jendouba	4.5 km S of Ain Draham, roadside	680-700	36°44'20" 08°40'57"	Humid <i>Quercus</i> forest	03/04/2014	1311-1332
K-40	Jendouba	N end of Ain Draham	730	36°47'23" 08°41'22"	Humid <i>Quercus</i> forest	03/04/2014	1333
K-41	Jendouba	2.8 km S of Ain Draham, c. 1 km NE of the sport training centre	660-670	36°45'16" 08°49'17"	Bog with <i>Sphagnum</i> and surrounding <i>Quercus</i> forest; 41b , Along rivulet; 41c , Rocks	04/04/2014	1334-1346
K-42	Jendouba	4 km S of Ain Draham, 1.2-1.6 km E of the sport training centre	600-670	36°44'42" 08°41'51"	<i>Quercus</i> forest; 42b , Rocks	04/04/2014	1347-1361
K-43	Jendouba	C. 6 km S of Ain Draham, 3 km WSW of Beni m Tir, river valley below the road and track to a small pond above the road	580-615	36°43'36" 08°42'25"	<i>Quercus</i> forest, pond and rivulet; 43b , In the water	04/04/2014	1362-1374

individual specimens are enumerated in the format **N**: XXXX [Y], where N stands for the locality number (1 to 53, as detailed above), XXXX for the specimen number (1 to 1374), and Y for the number of duplicates collected, which can vary from 0 to 22. This may be followed in parentheses by the qualification “sterile”, “buds”, “fruit remains”, when no fully developed fertile plants were collected; and sometimes “fruits”, when no flowering individuals were found.

Many features concerning the individual gatherings (life form, overall size, and colour, in particular) were noted when the plants were being pressed, and these notes appear on the labels. As reporting these texts for individual gatherings would be largely repetitive, they have been synthesised into short statements given for the taxon as a whole. Other comments, if and when appropriate, are added in the form of Notes.

The senior author (WG) is responsible for plant identification and takes the blame for any errors, except for *Festuca* and *Poa*, named by Nicola Ardenghi, Pavia; *Limonium*, *Orobanche* and *Romulea*, revised by Giannantonio Domina; *Myoporum* and *Salvia microphylla*, named by Francesco Maria Raimondo; and *Isoetes*, studied by Angelo Troia, Palermo.

The information on new reports for Tunisia were obtained by comparison with Cuénod (1954), Pottier-Alapetite (1979-1981), Greuter & al. (1984, 1986, 1989), Greuter (2008), Le Floc'h & al. (2010), Dobignard & Chatelain (2010-2013), and Euro+Med (2006-); while first records for individual phytogeographical areas were checked against the aforementioned relevant literature and take into account the following floristic and taxonomic papers: Nabli (1989), El Hamrouni (2001), Ghrabi-Gammar & al. (2009), Ferchichi-Ben Jamma & al. (2010), Domina & Jaouadi (2013), Biondi & al. (2013, 2014), El Mokni & al. (2015), and Martin & al. (2015).

ALGAE

Characeae

Chara sp. – NE – submerged

17b – 0695 – [10]

PTERIDOPHYTA

Equisetaceae

Equisetum telmateia Ehrh. – K – perennial.

32: 1191 [7] (sterile).

Isoetaceae

Isoetes duriaeae Bory – K – perennial.

43: 1365 [4].

Isoetes histrix Bory – CB, K, M – tufted perennial.

8: 0301 [12]; **19b:** 0868 [10]; **21e:** 0914 [4]; **30b:** 1135 [1].

Polypodiaceae

Anogramma leptophylla (L.) Link – CB NE – annual.

5: 0204 [3]; **8d:** 0317 [1]; **17d:** 0723 [10].

Asplenium ceterach L. – DT NE VM – perennial.

12b: 0495 [6]; **16:** 0630 [6]; **17e:** 0724 [4]; **28e:** 1066 [4].

Asplenium obovatum Viv. – K – tufted perennial.

34e: 1227 [8].

Asplenium onopteris L. – K – perennial.

34c: 1217 [8].

Asplenium trichomanes L. – K – perennial, rachis brown.

34e: 1209 [2]; **39:** 1329 [7]; **41c:** 1341 [10]; **42b:** 1347 [9].

Cheilanthes acrostica Tod. – DT.

12b: 0497 [3].

Cosentinia vellea (Aiton) Tod. – NE – perennial.

17e: 0719 [6].

Polypodium cambricum L. – K NE – rhizomatose perennial.

17e: 0721 [13]; **34b:** 1219 [17]; **36:** 1267 [5]; **39:** 1314 [5].

Polystichum setiferum (Forssk.) Woynar – K – tufted perennial.

34: 1218 [11].

Pteridium aquilinum (L.) Kuhn – K – rhizomatose perennial.

34: 1222 [10].

Selaginellaceae

Selaginella denticulata (L.) Spring – CB DT K NE VM – perennial.

1: 0069 [4]; **5:** 0187 [10]; **8:** 0332 [4]; **12b:** 0496 [3]; **17:** 0725 [10]; **28:** 1065 [5]; **34:** 1221 [3].

GYMNOSPERMAE

Cupressaceae

Juniperus macrocarpa Sm. – NE – shrub 1 m.

18: 0793 [10].

Juniperus turbinata Guss. – CB M NE – shrub 1-3 m.

5: 0202 [9]; **17:** 0745 [11]; **18:** 0775 [9]; **21:** 0916 [4] (juvenile).

Tetraclinis articulata (Vahl) Mast. – DT – shrub or small tree 4-6 m.

1: 0044 [7]; **15:** 0549 [10]; **16:** 0597 [7].

Ephedraceae

Ephedra fragilis Desf. – NE – straggling shrub 1-1.5 m.

17e: 0728 [13]; **26:** 1004 [13].

Pinaceae

Pinus halepensis Mill. – DT – tree 5 m.

1: 0040 [5]; **12:** 0446 [11].

Pinus pinaster Aiton – K – partly planted, also spontaneous tree 14 m.

30: 1124 [14].

DICOTYLEDONES*Acanthaceae**Acanthus platyphyllus* (Murb.) Prain – **CB K NE** – perennial.**8c:** 0319 [10] (sterile); **17:** 0735 [10] (in bud); **34:** 1203 [7] (sterile); **42:** 1361 [3] (only leaves).This taxon is clearly morphologically and taxonomically isolated from *A. mollis* L. deserving to be considered a separated species.*Aizoaceae**Carpobrotus edulis* (L.) N. E. Br. – **NE** – creeping perennial, flowers yellow or purplish pink.**18b:** 0800 [6].*Anacardiaceae**Pistacia lentiscus* L. – **CB DT NE** – shrub, 1-3 m .**1:** 0039 [10]; **5:** 0179 [10]; **11d:** 0375 [9]; **17:** 0688 [10].*Apocynaceae**Nerium oleander* L. – **VM** – shrub 1.5 m.**28b:** 1062 [10] (in fruit).*Periploca angustifolia* Labill. – **DT NE** – shrub 1,5 m, flowers dark purplish brown, margin and outside green.**1:** 0017 [8]; **16:** 0551 [10] (in fruit); **17:** 0635 [11].*Vinca major* L. – **K** – perennial, 40 cm, long runners, flowers pale violet.**40:** 1333 [17].*Aquifoliaceae**Ilex aquifolium* L. – **K** – evergreen tree, 5 m.**42:** 1353 [12].*Araliaceae**Hedera algeriensis* Hibberd – **CB K** –, trailing or climbing.**8d:** 0314 [10] (sterile); **34:** 1202 [16] (in fruit).*Aristolochiaceae**Aristolochia navicularis* Nardi – **K NE** – perennial, perigon tube pale greenish yellow with pale greenish-brown limb.**8f:** 0780 [13]; **37:** 1280 [7].*Betulaceae**Alnus glutinosa* (L.) Gaertn. – **K** – tree 10 m.**32:** 1173 [12].*Boraginaceae**Alkanna tinctoria* Tausch – **CB NE** – prostrate perennial, flowers deep blue with purple eye and tube.**7:** 0273 [3]; **11g:** 0367 [8]; **18e:** 0756 [9]; **25:** 0970 [13].

Anchusa azurea Mill. – **VM** – annual, flowers deep blue, tube purple.

28: 1083 [9].

Borago officinalis L. – **CB M VM** – annual or perennial, flowers bright blue.

11: 0394 [10]; **20:** 0884 [10]; **28:** 1086 [4].

Cerinthe major L. – **VM** – flowers black purple proximally, yellow distally.

28: 1070 [15].

Cynoglossum cheirifolium subsp. *heterocarpum* (Kunze) Maire – **CB DT VM** – annual or biennial, flowers whitish turning pale purplish, venation inconspicuous.

7: 0270 [9]; **12:** 0483 [3]; **28:** 1068 [12].

Cynoglossum creticum Mill. – **CB** – biennial, flowers purple turning blue, with net of dark veins.

11j: 0426 [6].

Echium parviflorum Moench – **CB DT NE VM** – flowers blue.

1b: 0035 [10]; **11:** 0393 [8]; **13:** 0498 [8]; **16:** 0558 [8]; **17:** 0639 [1]; **28:** 1076 [9].

Echium plantagineum L. – **VM** – biennial, flowers purple.

28: 1085 [9].

Echium sabulicola subsp. *decipiens* (Pomel) G. Klotz – **CB NE** – perennial, flowers dark bluish violet.

6: 0238 [10]; **18e:** 0758 [9].

Myosotis discolor Pers. – **M** – annual, flowers pale blue with yellow centre.

19: 0858 [7].

Myosotis ramosissima Rochel – **K** – annual, flowers blue.

36: 1246 [7]; **37:** 1282 [4].

Nonea vesicaria (L.) Rchb. – **CB** – perennial, flowers dark brownish violet.

6d: 0216 [11]; **11c:** 0391 [11].

Cactaceae

Opuntia maxima Mill. – **VM**.

28c: 1058 [5] (sterile).

Callitrichaceae

Callitriche obtusangula Le Gall – **K**.

32b: 1192 [10].

Callitriche stagnalis Scop. – **M** – annual.

19c: 0819 [15]; **20b:** 0912 [12] (aerial).

Campanulaceae

Campanula erinus L. – **NE** – annual, flowers pale blue.

17: 0665 [3].

Caprifoliaceae

Viburnum tinus L. – **K M** – shrub, 3 m, evergreen, flowers white.

21: 0938 [12] (in fruit); **39:** 1315 [13].

*Caryophyllaceae**Arenaria cerasioides* Poir. – **M** – annual, flowers white, anthers dark blue.

19: 0813 [21]; 21: 0935 [11]; 29e: 1108 [8].

Arenaria leptoclados (Rehb.) Guss. – **DT K NE** – annual, flowers white.

16: 0600 [13]; 17: 0705 [3]; 32d: 1190 [3].

Cerastium diffusum subsp. *gussonei* (Lojac.) P. D. Sell & Whitehead – **K** – annual, flowers white.

32d: 1188 [7].

Cerastium glomeratum Thuill. – **CB K M NE** – annual, flowers white .5: 0192 [10]; 8: 0321 [14]; 11k: 0419 [10]; 17: 0691 [12]; 19: 0823 [15]; 21: 0934 [9];
29e: 1103 [9]; 32d: 1187 [7]; 34: 1216 [12]; 36: 1259 [15]; 37: 1292 [4]; 39: 1324 [7].*Dianthus rupicola* subsp. *hermaeensis* (Cosson) O. Bolòs & Vigo – **CB** –subshrub.

8d: 0305 [11] (sterile).

Herniaria hirsuta L. – **CB** – annual.

5: 0211 [1].

Minuartia mediterranea (Ledeb.) K. Malý – **DT K NE** – annual, flowers white.

16: 0601 [3]; 17: 0704 [4]; 32d: 1189 [1].

Moehringia pentandra Gay – **M** – annual, flowers white.

19: 0811 [1].

Moenchia erecta (L.) P. Gaertner & al. – **K M** – annual, flowers white.

19: 0848 [5]; 36: 1260 [7]; 37: 1287 [1].

Paronychia argentea Lam. – **CB DT K M** – prostrate perennial.4: 0115 [10]; 5: 0198 [10]; 7: 0281 [3]; 12: 0447 [9]; 15: 0533 [15]; 29e: 1102 [19]; 37:
1289 [12].*Paronychia capitata* (L.) Lam. – **DT** – decumbent perennial.

1: 0008 [1]; 13: 0500 [6].

Paronychia echinulata Chater – **CB M** – annual.

8: 0324 [2]; 19: 0863 [6].

Petrorhagia prolifera (L.) P. W. Ball & Heywood – **M** – annual.

21: 0915 [3] (in bud).

Polycarpon polycarpoides (Biv.) Zodda – **DT** – perennial.

1: 0052 [4]; 16: 0592 [10].

Polycarpon tetraphyllum (L.) L. – **CB K** – annual.

5: 0193 [3]; 39: 1326 [7].

Polycarpon tetraphyllum subsp. *alsinifolium* (Biv.) Ball – **CB NE** – annual.

6: 0247 [14]; 18: 0795 [10].

Rhodalsine geniculata (Poir.) F. N. Williams – **M** – decumbent perennial, flowers pale pink.

29e: 1109 [12].

Sagina apetala Ard. – **CB K M** – annual.

5: 0196 [12]; 19: 0851 [4]; 36: 1238 [4].

Sagina maritima G. Don – **NE** – annual.

18f: 0779 [2].

Silene barrattei Murb. – **NE** – perennial, flowers pale pink.

18: 0789 [10].

Silene colorata Poir. – **CB DT NE** – annual, flowers bright purplish pink, tips of coronal scales whitish – **5: 0180** [14]; **7: 0275** [14]; **11: 0424** [10]; **15: 0536** [12]; **16: 0596** [10]; **18: 0778** [10]; **25: 0974** [7].

Silene gallica L. – **CB DT M** – annual, flowers pale pink, unblotched .
11: 0423 [4]; **15: 0534** [1]; **20: 0893** [4]; **21: 0933** [1]; **29e: 1110** [10].

Silene nocturna L. – **CB K M** – annual, flowers pale pink, dirty outside.
4: 0129 [7]; **29e: 1104** [9]; **31: 1158** [3].

Silene succulenta Forssk. – **CB NE** – fleshy-leaved perennial, flowers white inside, dirty purple outside.
6: 0252 [10]; **18: 0788** [3]; **26: 1006** [15].

Silene tunetana Murb. – **DT M VM** – annual, flowers uniformly pink or with a whitish aureola around a dark purple eye, and with pale coronal scales.
16: 0595 [11]; **20: 0876** [12]; **28: 1063** [10].

Spergula arvensis L. subsp. *arvensis* – **CB** – annual, to 15 cm.
5: 0205 [8].

Spergularia bocconeai (Scheele) Graebner – **CB**.
4: 0127 [1].

Spergularia maritima subsp. *tunetana* (Maire) Greuter & Burdet – **CB** – flowers pink.
4: 0118 [11].

Spergularia salina J. Presl & C. Presl – **CB** – annual.
6e: 0253 [15].

Stellaria media (L.) Vill. – **CB DT K M NE** – annual, flowers white.
5: 0194 [10]; **8b: 0320** [10]; **11k: 0419a** [1]; **12: 0448** [11]; **17: 0690a** [10]; **25: 0976** [5]; **25: 0999** [2]; **26c: 1012** [4]; **29: 1119** [14]; **36: 1261** [1]; **39: 1325** [9]; **41: 1338** [6 p.p.].

Note. – *Stellaria media* and *Stellaria pallida* often grow intermingled and are closely similar in appearance, which explains why many of our gatherings resulted to be mixed; nevertheless, on closer inspection the species are well distinct and do not appear to intergrade.

Stellaria neglecta Weihe – **K** – annual, flowers white, 10 stamens.
34: 1214 [10].

Stellaria pallida (Dumort.) Piré – **CB DT K M NE** – annual, flowers apetalous or white.
5: 0194a [10 p.p.]; **8b: 0329** [6]; **12: 0448a** [11 p.p.]; **17: 0690** [10 p.p.]; **19: 0854** [1];
26c: 1014 [5]; **41: 1338a** [6 p.p.].

Casuarinaceae

Casuarina cunninghamiana Miq. – **NE** – tree 10 m, planted.
25: 1001 [10].

Chenopodiaceae

Arthrocnemum macrostachyum (Moric.) K. Koch – **CB** – shrub or creeping shrublet.
4: 0119 [11]; **6e: 0217** [10]; **6e: 0248** [11].

Beta maritima L. – **CB** – perennial.
6c: 0240 [8].

Chenopodium murale (L.) S. Fuentes & al. – **CB DT M** – annual.
2: 0076 [9]; **6c: 0259** [10]; **29: 1118** [19].

Emex spinosa (L.) Campd. – **CB NE** – perennial.

6c: 0260 [7]; **17f:** 0712 [1].

Halimione portulacoides (L.) Aellen – **CB**.

4: 0114 [10].

Halocnemum cruciatum (Forssk.) Console & Tod. – **CB**.

4: 0113 [9].

Note. – According to Bacchetta & al. (2012) there are morphological differences between the populations of *Halocnemum* found around the Mediterranean and those from the saline shores of Lake Inder north of the Caspian Sea, in W Kazakhstan, that had been described in 1771 as *Salicornia strobilacea* Pallas. These authors adopted the name *H. cruciatum*, based on *S. cruciata* Forssk. from Alexandria of Egypt, for the circummediterranean plants previously known as *Halocnemum strobilaceum* (Pallas) M. Bieb. Independently, Papini & al. (2004) had found significant differences, at the DNA level, between *Halocnemum* plants from the delta of the river Po in NE Italy and those near Cagliari in S Sardinia. More recently, Biondi & al. (2013, 2014) have demonstrated that two clearly separable species indeed exist, differing in morphology (including seed microcharacters) as well as ecology, but that only the S Mediterranean plants (from Spain, Sardinia, Sicily, S Anatolia, Cyprus and the whole of N Africa) belong to *H. cruciatum*, whereas those of peninsular Italy, Greece and Turkey-in-Europe remain in *H. strobilaceum*.

Sarcocornia perennis (Mill.) A. J. Scott – **CB**.

4: 0120 [10].

Suaeda vera J. F. Gmel. – **CB** – decumbent shrub.

4: 0126 [9]; **7:** 0284 [9].

Cistaceae

Cistus clusii Dunal – **DT** – shrub, 50 cm, flowers white.

1: 0001 [10].

Cistus creticus subsp. *eriocephalus* (Viv.) Greuter & Burdet – **CB DT** – shrub, 0.8-1.5 m, flowers pink with yellow eye.

1: 0011 [10]; **11d:** 0385 [10]; **12:** 0487 [10].

Cistus monspeliensis L. – **CB DT K M NE** – shrub 0.4-1 m, flowers white with yellow eye.

5: 0195 [10]; **12:** 0486 [10]; **16:** 0561 [12]; **17:** 0700 [7]; **19:** 0822 [10]; **21:** 0924 [9]; **29c:** 1105 [10]; **31:** 1155 [10]; **36:** 1257 [10].

Cistus salviifolius L. – **DT K M NE** – shrub, 20-80 cm, flowers white with yellow eye, sepals normally pubescent but often glabrous, purple in centre.

1: 0014 [7]; **12:** 0488 [10]; **18:** 0799 [11]; **25:** 0995 [10]; **29c:** 1117 [7]; **30:** 1138 [11]; **37:** 1290 [7]; **37:** 1291 [5]; **39:** 1327 [10]; **41:** 1339 [3]. **41:** 1339a [4]; **42:** 1359 [7]; **42:** 1360 [7].

Fumana arabica (L.) Spach – **DT** – shrublet 30-50 cm, flowers yellow.

1: 0042 [10]; **12:** 0490 [5].

Fumana laevipes (L.) Spach – **DT** – shrublet 20 cm, flowers yellow.

1: 0021 [10].

Fumana scoparia Pomel – **DT:** 15 cm, flowers yellow.

1: 0054 [1].

Fumana thymifolia (L.) Webb – **CB DT K M** – shrublet 20-30 cm, flowers yellow.

1: 0033 [11]; **3:** 0090 [6]; **5:** 0184 [11]; **16:** 0562 [10]; **21:** 0927 [4]; **29c:** 1106 [7]; **30:** 1137 [3]; **31:** 1156 [11].

Halimium halimifolium (L.) Willk. – **K M** – shrub 40-50 cm.

29c: 1113 [10] (old fruits); **30:** 1136 [9] (fruit remains).

Helianthemum croceum (Desf.) Pers. – **DT** – suffrutex 20 cm, flowers yellow.

16: 0565 [14].

Tuberaria guttata (L.) Fourr. – **CB** – perennial, flowers yellow.

8: 0330 [3].

Tuberaria lignosa (Sweet) Samp. – **K** – perennial.

30: 1128 [3] (in bud).

Tuberaria lipopetala (Murb.) Greuter & Burdet – **CB** – annual, petals yellow, unspotted.

8: 0333 [2].

Compositae

Achillea maritima (L.) Ehrend. & Y. P. Guo – **CB** – perennial.

6: 0256 [11].

Anacyclus clavatus (Desf.) Pers. – **DT NE** – annual, ray flowers white, disk yellow.

1b: 0010 [6]; **17:** 0713 [3].

Andryala integrifolia L. – **VM** – perennial, flowers lemon yellow.

28: 1023 [1].

Andryala laxiflora DC. – **DT** – annual, in bud.

16: 0634 [2].

Anthemis secundiramea Biv. – **CB** – annual, ray flowers white, disk yellow.

5: 0143 [4]; **8:** 0291 [1]; **10:** 0349 [4].

Anthemis ubensis Pomel – **DT NE** – annual, ray flowers white.

15: 0516 [1]; **25:** 0952 [2].

Arctotheca calendula (L.) Levyns – **M** – stoloniferous perennial, ray flowers yellow, lead-coloured outside, disk dark purple.

20: 0899 [4].

Artemisia arborescens L. – **NE** – shrub, 1.5 m.

17e: 0707 [9] (sterile).

Bellis annua L. – **CB K NE VM** – annual, to 6 cm, ray flowers white, disk yellow.

4: 0108 [4]; **5:** 0150 [2]; **6c:** 0230 [3]; **8:** 0293 [2]; **18d:** 0794 [8]; **25:** 0987 [2]; **28:** 1024 [2]; **32:** 1193 [2]; **41:** 1334 [8].

Bellis prostrata Pomel – **M** – perennial, ray flowers white.

19: 0859 [4].

Bellis sylvestris Cirillo – **CB DT K M** – perennial, to 30 cm, ray flowers whitish-pink, disk yellow.

1: 0027 [6]; **5:** 0145 [4]; **8:** 0289 [5]; **12:** 0432 [4]; **19:** 0845 [2]; **34:** 1212 [8]; **39:** 1330 [4].

Calendula arvensis L. – **CB DT K NE VM** – 40 cm, annual, ray flowers orange, rarely yellow, disk sometimes blackish purple.

1b: 0015 [5]; **4:** 0097 [3]; **6c:** 0221 [5]; **15:** 0510 [3]; **17:** 0718 [3]; **28:** 1020 [6]; **38:** 1304 [7].

Calendula stellata Cav. – **CB DT VM** – annual or perennial, 20 cm, flowers orange.

5: 0155 [4]; **12:** 0433 [8]; **28:** 1021 [6].

Carduus getulus Pomel – **CB** – perennial or biennial.

5: 0197 [3].

Carduus spachianus Dur. – **CB DT M NE** – normally annual, 1 m, flowers dark lilac to purplish pink.

1b: 0003 [9]; **5:** 0134 [9]; **11:** 0362 [7]; **17:** 0715 [3]; **20:** 0946 [10]; **25:** 0959 [10].

Carthamus pinnatus Desf. – **DT VM** – acaulescent perennial.

1: 0025 [5]; **28:** 1027 [3] (in bud).

Centaurea calcitrapa L. – **K M** – perennial.

20: 0905 [6] (in bud); **32:** 1194 [8] (in bud).

Centaurea napifolia L. – **CB** – perennial, radiate flowers purple.

11: 0369 [10].

Centaurea sphaerocephala L. – **NE** – perennial.

18: 0796 [3] (in bud); **25:** 0954 [9] (in bud).

Chamaemelum fuscatum (Brot.) Vasc. – **CB M** – annual, 20 cm, ray flowers white, disk yellow.

5b: 0139 [3]; **19:** 0843 [2].

Cichorium intybus L. – **CB**.

11: 0425 [1] (in bud).

Coleostephus myconis (L.) Rchb. f. – **CB DT NE VM** – annual, 30 cm, ray flowers yellow or white with yellow base.

5: 0144 [3]; **16:** 0606 [3]; **25:** 0953 [4]; **28:** 1022 [8].

Cotula coronopifolia L. – **CB M NE** – perennial, flowers yellow.

4b: 0098 [6]; **17c:** 0716 [10]; **21d:** 0945 [3].

Crepis vesicaria L. – **CB DT** – perennial, 20 cm, ligules yellow, outside often reddish.

1b: 0029 [5]; **5b:** 0147 [4]; **12:** 0435 [8]. **12:** 0435a [1].

Dittrichia viscosa (L.) Greuter – **DT**.

1: 0050 [3].

Erigeron bonariensis L. – **CB K** – annual (sometimes perennial?), 10 cm, flowers brownish.

4: 0112 [2]; **7b:** 0265 [4]; **38:** 1302 [4].

Filago argentea (Pomel) Chrtk & Holub – **DT** – annual.

15: 0509 [2].

Filago gallica L. – **CB DT M** – annual.

5: 0186 [1]; **8:** 0292 [2]; **15:** 0535 [3]; **19:** 0847 [5].

Filago pygmaea L. – **CB NE** – annual, to 5 cm.

4: 0105 [3]; **5:** 0146 [2]; **5:** 0190a [1]; **8:** 0286 [3]; **10:** 0351 [2]; **17:** 0711 [13] (in bud);

17: 0717 [3].

Galactites tomentosus Moench – **CB** – annual, radiating flowers pale lilac.

10: 0353 [7].

Glebionis coronaria (L.) Spach – **CB** – annual, flowers yellow.

6d: 0214 [5].

Hedypnois rhagadioloides (L.) F. W. Schmidt – **CB DT M NE** – annual, to 10 cm, ligules yellow.

4: 0099 [3]; **5:** 0164a [1]; **5b:** 0148 [4]; **7b:** 0264a [1]; **11:** 0368 [4]; **15:** 0511 [2]; **15:** 0512 [2]; **17:** 0697 [5]; **17:** 0722 [10]; **20:** 0911 [5].

- Helichrysum stoechas* subsp. *barrelieri* (Ten.) Nyman – **CB NE** – ± decumbent subshrub, 20 cm, bracts lemon yellow.
10: 0342 [11]; **18:** 0774 [4].
- Helminthotheca aculeata* (Vahl) Lack – **DT** – perennial.
12: 0438 [1] (sterile).
- Hyoseris lucida* L. – **NE** – perennial, ligules yellow.
18: 0781 [7].
- Hyoseris radiata* L. – **CB DT K NE VM** – perennial, 20 cm, ligules yellow tinged greenish-purple outside, sometimes with purple teeth.
1: 0028 [3]; **8:** 0288 [9]; **16b:** 0607 [10]; **17:** 0702 [6]; **28:** 1019 [8]; **36:** 1264 [10].
- Hyoseris scabra* L. – **CB NE VM** – annual, 1-2 cm, ligules pale yellow.
4: 0110 [5]; **5:** 0160 [5]; **17:** 0720 [2]; **28:** 1025 [4].
- Hypochaeris achyrophorus* L. – **CB DT NE** – annual, 15-40 cm, ligules yellow, outside reddish.
1: 0038 [2]; **1b:** 0041 [1]; **7b:** 0264 [3]; **10:** 0350 [2]; **14:** 0507 [4]; **16:** 0590 [7]; 0698 [3]; **18:** 0785 [9].
- Hypochaeris glabra* L. – **CB** – annual, ligules yellow.
6c: 0224 [4].
- Hypochaeris laevigata* (L.) Ces. & al. – **K DT** – perennial, ligules yellow.
12: 0436 [4] (in bud); **36:** 1263 [4].
- Jacobsaea delphiniiifolia* (Vahl) Pelser & Veldkamp – **M** – annual, flowers yellow.
20: 0904 [7].
- Laphangium luteoalbum* (L.) Tsvelev – **CB** – annual.
5: 0190 [1].
- Launaea fragilis* (Asso) Pau – **DT** – perennial.
15: 0541 [5] (in bud).
- Leontodon tuberosus* L. – **CB DT M** – perennial geophyte, to 30 cm, ligules yellow, outside reddish.
1b: 0034 [3]; **5:** 0158 [10]; **8:** 0285 [5]; **19:** 0844 [9].
- Micropus supinus* L. – **CB** – annual.
5: 0185 [1].
- Osteospermum* (hybr.) – **K** – perennial, flowers pale lavender, bluish violet outside; cultivated for ornament and escaping.
31b: 1150 [1].
- Pallenis maritima* (L.) Greuter – **CB M NE** – perennial, ligules yellow, red outside.
10: 0340 [6]; **18b:** 0786 [6]; **29:** 1089 [5].
- Pallenis spinosa* (L.) Cass. – **CB DT** – perennial, flowers lemon yellow.
1: 0045 [2]; **11:** 0371 [2].
- Phagnalon rupestre* subsp. *illyricum* (H. Lindb.) Ginzb. – **CB DT** – suffrutex 30-40 cm, flowers yellowish.
1: 0004 [7]; **5:** 0140 [4]; **11:** 0363 [10]; **12:** 0434 [5].
- Phagnalon saxatile* (L.) Cass. – **DT NE** – suffrutex 30 cm.
14: 0506 [10]; **16:** 0618 [15]; **17:** 0714 [6].
- Picris sinuata* (Lam.) Lack – **CB NE** – perennial.
6: 0215 [10]; **10b:** 0335 [4] (sterile); **25:** 0956 [10] (sterile).

Plagius maghrebinus Vogt & Greuter – **K** – shrub to 1.2 m.

34: 1207 [13] (sterile).

Podospermum laciniatum (L.) DC. – **CB**: 10-20 cm, ligules yellow.

4: 0111 [10].

Reichardia intermedia (Sch. Bip.) Samp. – **CB DT** – ligules yellow.

1b: 0032a [1]; **5:** 0164 [2]; **12:** 0437 [4]; **16:** 0594 [3].

Reichardia picroides (L.) Roth – **CB DT NE** – perennial, ligules yellow.

1b: 0032 [4]; **10:** 0337 [3]; **18:** 0765 [2].

Rhaponticum acaule (L.) DC. – **VM** – acaulescent perennial, flowers pale yellow.

28: 1026 [1].

Scorzonera coronopifolia Desf. – **DT** – geophyte, outer ligules yellow, reddish outside, central flowers dark purple.

12: 0431 [4]; **16:** 0593 [1].

Scorzonera undulata subsp. *deliciosa* (DC.) Maire – **DT M NE VM** – perennial geophyte, ligules pink.

15: 0508 [2]; **16:** 0589 [10]; **17:** 0699 [2]; **19:** 0852 [5]; **28:** 1064 [2].

Senecio leucanthemifolius Poir. – **CB** – annual, flowers yellow.

8: 0287 [2].

Senecio leucanthemifolius subsp. *mauritanicus* (Pomel) Greuter – **CB DT** – annual, to 30 cm, flowers yellow.

1b: 0047 [3]; **5:** 0161 [2]; **6:** 0220 [11]; **12:** 0430 [2].

Senecio leucanthemifolius var. *vernus* (Biv.) Fiori – **NE** – annual, ligules yellow.

18: 0764 [3]; **25:** 0951 [2]; **29:** 1090 [2].

Senecio lividus L. – **M** – annual, flowers yellow.

19: 0850 [10].

Senecio vulgaris L. – **K** – annual, flowers yellow.

34: 1213 [4]; **37:** 1281 [3]; **39:** 1331 [4].

Sonchus asper (L.) Hill – **M** – annual, ligules yellow, reddish outside.

20: 0898 [3].

Sonchus bulbosus (L.) N. Kilian & Greuter – **CB K NE** – geophyte, to 20 cm, ligules yellow, purplish tinged outside.

4: 0100 [4]; **6c:** 0223 [3]; **26:** 1003 [4]; **31:** 1149 [3].

Sonchus oleraceus L. – **DT** – 70 cm, ligules yellow.

1b: 0013 [5].

Sonchus tenerrimus L. – **CB NE** – annual to 30 cm, ligules yellow.

5: 0162 [2]; **17:** 0696 [8]; **25:** 0955 [4].

Urospermum dalechampii (L.) F. W. Schmidt – **CB** – perennial to 40 cm, ligules sulphur yellow, purple outside.

11: 0364 [9]; **28:** 1028 [5].

Urospermum picroides (L.) F. W. Schmidt – **DT K NE** – annual, ligules yellow.

1b: 0019 [2]; **17:** 0706 [8]; **39:** 1332 [2].

Convolvulaceae

Convolvulus durandoi Pomel – **K M** – decumbent perennial, flowers pale purplish pink with dark veins in throat and purple stripes outside.

19: 0810 [10]; **31:** 1152 [7].

Convolvulus siculus L. – DT NE – annual, flowers blue.

16: 0552a [1]; **17:** 0675 [3].

Convolvulus tricolor L. subsp. *tricolor* – M VM – perennial, flowers blue with a yellow corona around a white centre.

20: 0906 [5]; **28:** 1071 [3].

Convolvulus tricolor subsp. *cupanianus* (Sa'ad) Stace – DT – annual, flowers blue with a yellow corona around a white centre.

16: 0552 [13].

Crassulaceae

Crassula tillaea Lester-Garland – K – annual.

36: 1236 [9].

Sedum caeruleum L. – CB K – annual.

5: 0181 [2] (sterile); **36:** 1266 [3] (in bud).

Sedum cepaea L. – K – annual.

34: 1226 [3] (sterile).

Sedum dasypetalum L. – CB – perennial.

8d: 0309 [3] (sterile).

Sedum stellatum L. – NE – annual.

17: 0640 [10] (with old fruits).

Sedum tuberosum Coss. & Letourn. – K – perennial.

31: 1162 [4] (with old fruits).

Umbilicus horizontalis (Guss.) DC. – NE – geophyte.

17: 0641 [2] (with old fruits); **17:** 0641a [6] (with old fruits).

Cruciferae

Arabidopsis thaliana (L.) Heynh. – K – annual, flowers white..

36: 1250a [2];

Biscutella didyma L. – CB DT M NE – annual, to 50 cm, flowers pale yellow.

5: 0163 [10]; **8:** 0325 [4]; **12:** 0452 [4]; **16:** 0631 [10]; **18e:** 0762 [10]; **19:** 0836 [10];

20: 0889 [10]; **25:** 0978 [9].

Brassica gravinae Ten. – DT – perennial, flowers pale yellow.

1: 0064a [2]; **12b:** 0492 [10]; **13:** 0505 [4].

Brassica napus L. – M – perennial, flowers yellow.

20: 0900 [8].

Brassica souliei subsp. *amplexicaulis* (Desf.) Greuter & Burdet – DT – annual, flowers yellow.

16: 0629 [10].

Cakile maritima Scop. subsp. *maritima* – CB – annual, flowers purplish pink.

6: 0242 [8].

Capsella × gracilis Godr. – CB K – annual, to 60 cm, flowers white.

5: 0174b [1]; **36:** 1262a [2]; **38:** 1307b [2].

Capsella bursa-pastoris (L.) Medik. – CB K M – annual,to 60 cm, flowers white or pinkish.

5: 0174a [4]; **19:** 0838 [1]; **38:** 1307 [6].

Capsella rubella Reut. – **CB DT K NE** – annual, to 25 cm, flowers white or pinkish.

5: 0174 [2]; **12:** 0450 [2]; **17:** 0747 [4]; **32b:** 1184 [2]; **36:** 1262 [6]; **38:** 1307a [1].

Cardamine hirsuta L. – **CB DT K M** – annual, flowers white.

8b: 0323 [3]; **12:** 0449 [5]; **19:** 0870 [3]; **36:** 1250 [4]; **43:** 1366 [2].

Diplotaxis erucoides (L.) DC. – **CB DT** – 50 cm, flowers white or pinkish.

2: 0078 [3]; **4:** 0130 [4].

Diplotaxis muralis (L.) DC. – **DT** – annual, flowers pale yellow.

3: 0095 [1]; **12:** 0494 [5].

Diplotaxis simplex (Viv.) Spreng. – **CB** – flowers pale yellow.

5: 0203 [5].

Diplotaxis virgata (Cav.) DC. – **DT K** – hapaxanthous ?, 60 cm, flowers yellow.

1: 0064 [5]; **38:** 1310 [11].

Erophila verna (L.) Chevall. – **K** – annual, flowers white.

36: 1251 [11].

Eruca sativa subsp. *longirostris* (Uechtr.) Jahand. & Maire – **CB** – annual, flowers pale yellow with violet veins.

7: 0278 [12]; **10:** 0358 [4].

Hirschfeldia incana (L.) Lagr.-Foss. – **CB DT K NE** – annual, 70-100 cm, flowers yellow.

2: 0081 [9]; **7:** 0279 [8]; **10:** 0352 [10]; **12:** 0451 [6]; **15:** 0538 [2]; **16:** 0632 [4]; **17:** 0753 [9]; **38:** 1303 [6].

Lepidium glastifolium Desf. – **K** – perennial, flowers white.

36: 1245 [3].

Lobularia maritima (L.) Desv. – **CB DT NE** – annual, flowers white, honey-scented.

5: 0178 [12]; **11:** 0421 [10]; **15:** 0539 [10]; **17:** 0732 [3]; **25:** 1000 [1].

Malcolmia doumetiana (Coss.) Rouy – **CB NE** – annual, flowers white to pale pink.

6: 0237 [11]; **18:** 0798 [11]; **25:** 0997 [13].

Moricandia arvensis (L.) DC. – **DT** – flowers pink.

3: 0093 [6].

Nasturtium officinale R. Br. – **K** – perennial, flowers white.

32b: 1186 [14].

Raphanus raphanistrum L. – **CB K NE** – annual or biennial? to 70 cm, flowers pale yellow with pink to violet veins outside.

5: 0209 [1]; **27:** 1017 [5]; **38:** 1308 [11].

Rapistrum rugosum (L.) All. – **CB** – annual, flowers pale yellow.

6c: 0254 [1]; **11:** 0428 [4].

Sinapis alba L. – **VM** – annual, flowers yellow.

28: 1050 [5].

Sinapis arvensis L. – **DT** – annual, flowers yellow.

15: 0538a [4].

Sisymbrium irio L. – **DT** – flowers yellow.

3: 0094 [7].

Sisymbrium officinale (L.) Scop. – **M NE** – annual, flowers pale yellow.

17: 0738 [5]; **29:** 1116 [11].

*Cynomoriaceae**Cynomorium coccineum* L. – **CB**.**4:** 0101 [13].*Cytinaceae**Cytinus hypocistis* subsp. *macranthus* Wettst. – **CB K** – on *Halimium halimifolium*, flowers bright yellow, scales orange red.**5:** 0135 [5]; **30:** 1129 [11].*Ericaceae**Arbutus unedo* L. – **K** – tree, 3 m.**36:** 1234 [11].*Erica arborea* L. – **CB K M** – shrub, to 2 m (30 cm when grazed), flowers white or pinkish.**5:** 0177 [12]; **8:** 0313 [10]; **19:** 0825 [9]; **34:** 1198 [10]; **36:** 1254 [10].*Erica multiflora* L. – **DT** – shrub, 1.5-2 m, flowers pink.**1:** 0055 [11]; **12:** 0458 [8].*Erica scoparia* L. – **K M** – shrub 1.5 m.**19:** 0832 [8] (in bud); **30:** 1125 [10] (in bud).*Euphorbiaceae**Euphorbia amygdaloides* L. – **K** – hapaxanthous.**39:** 1316 [3]; **42:** 1354 [14].*Euphorbia bivonae* Steudel – **CB NE** – shrub 0.3-1 m, or hanging shrub 4-5 m.**5:** 0176 [16]; **17:** 0644 [12].*Euphorbia dendroides* L. – **DT** – shrub to small tree 1.5-2 m, cyathium glands yellow.**12:** 0477 [10]; **16:** 0564 [6].*Euphorbia exigua* L. – **DT M NE** – annual.**16:** 0610 [3]; **17:** 0680 [4]; **19:** 0873 [1].*Euphorbia helioscopia* L. – **CB DT M NE VM** – annual, cyathium glands greenish yellow.**1b:** 0037 [7]; **6c:** 0225 [11]; **11:** 0386 [10]; **17:** 0652 [11]; **20:** 0882 [9]; **28:** 1079 [3].*Euphorbia peplus* L. – **CB NE** – annual.**6c:** 0222 [10]; **17:** 0667 [15].*Euphorbia peplus* var. *minima* DC. – **CB DT** – annual.**8:** 0290 [2]; **16:** 0611 [1].*Euphorbia terracina* L. – **CB NE** – annual, biennial or perennial.**7:** 0272 [12]; **11:** 0406 [11]; **25:** 0986 [10].*Fagaceae**Quercus canariensis* Willd. – **K** – semideciduous tree 10-20 m.**34:** 1205 [16] (old fruits); **36:** 1255 [12]; **41:** 1336 [13].*Quercus coccifera* L. – **CB DT M NE** – shrub or tree, 0.8-5 m.**5:** 0201 [3]; **11d:** 0384 [9]; **12:** 0473 [11]; **18:** 0777 [10]; **21:** 0926 [11]; **25:** 0996 [12];**29c:** 1112 [11] (sterile).

Quercus ilex subsp. *ballota* (Desf.) Samp. – **CB DT** – tree, 4-10 m.

8: 0304 [11]; **12:** 0474 [13].

Quercus ilex subsp. *ballota* (Desf.) Samp. × *Q. coccifera* L. – **DT** – tree 4 m.

12: 0475 [8].

Quercus suber L. – **K M** – evergreen tree 2-20 m.

21: 0925 [11]; **34:** 1206 [9] (old fruits); **36:** 1256 [10]; **41:** 1335 [10].

Frankeniaceae

Frankenia hirsuta L. – **CB** – prostrate perennial.

6e: 0250 [3].

Frankenia laevis L. – **CB NE**.

4: 0123 [6]; **17c:** 0708 [8] (sterile).

Frankenia pulverulenta L. – **CB** – annual, flowers white.

4: 0131 [1]; **6e:** 0251 [1].

Gentianaceae

Blackstonia perfoliata (L.) Huds. – **K** – flowers yellow.

39: 1312 [4].

Geraniaceae

Erodium botrys (Cav.) Bertol. – **CB** – annual.

8: 0327 [1].

Erodium cicutarium (L.) L'Hér. – **CB K** – annual, flowers pale lilac to purplish pink.

8: 0326 [12]; **30:** 1132 [5]; **39:** 1318 [7].

Erodium laciniatum (Cav.) Willd. – **CB NE** – annual, flowers purplish pink.

5: 0188 [13]; **18e:** 0770 [9].

Erodium malacoides (L.) L'Hér. – **CB DT** – annual, flowers purplish pink.

2: 0079 [8]; **11:** 0420 [1]; **12:** 0491 [9]; **16:** 0598 [10].

Erodium moschatum (L.) L'Hér. – **CB DT K** – annual, flowers pink to violet.

2: 0080 [7]; **5:** 0182 [7]; **38:** 1305 [15].

Geranium lucidum L. – **NE** – annual, flowers purplish pink.

17e: 0710 [10].

Geranium molle L. – **CB K** – annual, flowers purplish pink .

7: 0283 [3]; **8:** 0306 [14]; **11k:** 0418 [6]; **34:** 1215 [7]; **36:** 1258 [8]; **39:** 1323 [10].

Geranium purpureum Vill. – **NE** – annual, flowers deep purplish pink.

17: 0709 [10]; **25:** 0975 [10].

Geranium robertianum L. – **M** – annual, flowers pink.

19: 0839 [10].

Globulariaceae

Globularia alypum L. – **DT** – shrub 40 cm, flowers blue.

12: 0478 [10].

Guttiferae

Hypericum afrum Lam. – **K** – semi-shrub 1 m.

41: 1340 [11].

Hypericum australe Ten. – **CB K M** – ascending perennial or suffrutex, flowers yellow, reddish outside.

5: 0212 [2]; **21:** 0932 [5]; **29:** 1097 [2]; **30:** 1131 [7]; **31:** 1159 [3].

Labiatae

Lamium amplexicaule L. – **K** – annual.

37: 1279 [6].

Lavandula multifida L. – **DT** – suffrutex 30 cm, flowers bluish violet.

15: 0525 [15]; **16:** 0572 [10].

Lavandula stoechas L. – **CB M** – shrub 40-80 cm, flowers blackish violet, as also the sterile bracts – **5:** 0168 [6]; **19:** 0817 [12]; **21:** 0921 [7]; **29:** 1099 [11].

Prasium majus L. – **CB DT NE** – shrub 1 m, flowers white.

11: 0407 [10]; **16:** 0586 [9]; **17:** 0674 [4].

Rosmarinus officinalis L. – **CB DT** – shrub 0.4-1 m, flowers blue or bluish violet.

1: 0048 [8]; **10:** 0339 [10]; **12:** 0476 [9].

Salvia microphylla Kunth – **K** – Cultivated.

35: 1230 [5].

Salvia verbenaca L. – **CB DT NE VM** – biennial, flowers pale to dark blue viole (lower lip sometimes white), plant fetid.

1: 0030 [8]; **5:** 0159 [13]; **12:** 0462 [10]; **18e:** 0757 [6]; **25:** 0971 [7]; **28:** 1080 [8].

Salvia viridis L. – **DT** – annual, flowers pink.

16: 0559 [15].

Satureja nervosa Desf. – **CB DT** – suffrutex, flowers pale to dark lilac or lavender.

3: 0091 [10]; **11i:** 0417 [4]; **16:** 0560 [8].

Stachys arenaria Vahl – **CB**.

5: 0183 [2] (sterile).

Stachys arvensis (L.) L. – **CB M** – annual, flowers pale bluish or purplish pink.

8: 0307 [1]; **19:** 0809 [13].

Stachys marrubiifolia Viv. – **M** – annual, flowers purplish pink.

29: 1100 [10].

Stachys ocymastrum (L.) Briq. – **DT** – annual, corolla white with pale yellow, purple-dot-ted lower lip and white, laterally purple-marked upper lip with linear lobes.

12: 0484 [2]; **16:** 0587 [10].

Teucrium fruticans L. – **M** – shrub 40 cm, flowers pale blue with dark veins.

19: 0875 [2]; **21:** 0920 [10].

Thymus algeriensis Boiss. & Reut. – **DT** – shrublet 20 cm, flowers purplish pink.

1: 0020 [6]; **12:** 0479 [11]; **16:** 0588 [10].

Thymus numidicus Poir. – **K** – shrublet 20 cm.

30: 1127 [6] (sterile).

Leguminosae

Acacia cyclops G. Don f. – **NE** – shrub 2 m, cultivated and escaping.

26b: 1011 [9].

Acacia saligna (Labill.) Wendl. f. – **CB NE** – naturalised tree c. 8 m, flowers yellow.

11d: 0409 [12]; **25:** 0994 [10].

Anthyllis barba-jovis L. – **M** – shrub 2.5 m, flowers whitish yellow.

29b: 1092 [10].

Anthyllis vulneraria subsp. *maura* (Beck) Maire – **DT NE** – biennial or perennial, flowers white to pink with pink or dark purple keel, calyx purplish distally.

1: 0049 [10]; **12:** 0439 [14]; **25:** 0963 [16].

Astragalus caprinus L. – **DT** – flowers yellowish green.

1: 0043 [8].

Astragalus epiglottis L. – **NE** – annual, flowers bluish .

17: 0650 [4].

Astragalus falciformis Desf. – **DT** – flowers bluish.

1: 0072 [13].

Astragalus hamosus L. – **NE** – decumbent annual, standard bluish, wings and keel whitish.

17: 0646 [4].

Astragalus longicaulis Pomel – **DT** – decumbent annual, flowers pale blue.

13: 0504 [3].

Astragalus sesameus L. – **NE** – annual, flowers blue.

17: 0648 [1].

Calicotome infesta subsp. *intermedia* (C. Presl) Greuter – **CB DT** – spiny shrub 0.7-2 m, flowers yellow.

1: 0031 [6]; **5:** 0149 [9]; **10:** 0341 [11]; **11d:** 0412 [9]; **12:** 0441 [9]; **15:** 0526 [10]; **16:** 0633 [7].

Calicotome villosa (Poir.) Link – **M NE VM** – spiny shrub 1.5-1.8 m, flowers yellow.

18e: 0763 [7]; **19:** 0830 [9]; **21:** 0937 [7]; **28:** 1047 [7]; **29:** 1120 [7].

Ceratonia siliqua L. – **DT** – tree 15 m.

12: 0457 [10].

Coronilla juncea L. – **DT M** – straggling shrub 1.7 m, flowers yellow.

1: 0007 [4], 0067 [10]; **21:** 0944 [3].

Coronilla scorpioides (L.) W. D. J. Koch – **DT NE** – annual, flowers yellow.

1: 0074 [3]; **17:** 0643 [10].

Coronilla valentina L. subsp. *valentina* – **NE** – shrub 80 cm, flowers yellow.

17: 0638 [7].

Cytisus villosus Pourr. – **K** – shrub 1-2 m, flowers yellow.

34: 1224 [13]; **37:** 1284 [9]; **39:** 1313 [7].

Genista aspalathoides Lam. – **CB DT M** – spiny cushion 20 cm or shrub 0.4-1.5 m, flowers yellow.

1: 0058 [10]; **5:** 0151 [3]; **5:** 0152 [10]; **8:** 0303 [10]; **10:** 0343 [10]; **29c:** 1121 [12].

Genista ferox Poir. – **M VM** – spiny shrub 1-2 m, flowers yellow.

20: 0903 [13]; **28:** 1052 [6] (in fruit); **29d:** 1111 [12] (in fruit).

Genista tricuspidata Desf. – **DT** – shrub 40 cm, flowers yellow.

1: 0071 [4]; **2:** 0083 [7].

Genista ulicina Spach – **K M** – straggling shrub 1-1.5 m, flowers yellow.

19: 0853 [1]; **21:** 0943 [2]; **37:** 1283 [10] (sterile).

Hedysarum coronarium L. – **NE VM** – perennial, flowers reddish purple.

18d: 0766 [5] (in bud); **28:** 1048 [14].

- Hedysarum spinosissimum* subsp. *capitatum* (Rouy) Asch. & Graebn. – **CB DT VM** – annual (perennial?), flowers pink to purple.
1: 0073 [7]; **11c:** 0373 [20]; **28:** 1042 [11].
- Hippocrepis biflora* Spreng. – **DT NE** – annual, flowers yellow.
1b: 0018 [3]; **17:** 0653 [6].
- Hippocrepis brevipetala* (Murb.) E. Domínguez – **NE VM** – annual (perennial?), flowers yellow, very fragrant.
17: 0655 [2]; **28:** 1046 [18].
- Hippocrepis ciliata* Willd. – **CB DT** – annual, flowers yellow.
1b: 0022 [6]; **11:** 0411 [5].
- Hippocrepis emerus* subsp. *emeroides* (Boiss. & Sprun.) Lassen – **DT** – shrub 1.5 m, flowers yellow.
1: 0005 [15].
- Hymenocarpos circinnatus* (L.) Savi – **DT** – annual, flowers yellow.
15: 0542 [3].
- Lathyrus cicera* L. – **DT** – annual, flowers dark purple.
16: 0626 [3].
- Lathyrus clymenum* L. – **DT** – annual, standard purple, wings and keel bluish violet.
1: 0070 [7]; **16:** 0625 [9].
- Lathyrus ochrus* (L.) DC. – **CB** – annual, flowers pale yellow.
11j: 0387 [12].
- Lens nigricans* (M. Bieb.) Godr. – **NE** – annual, flowers pale blue.
17: 0668 [13].
- Lotus biflorus* Desr. – **DT** – annual, flowers yellow.
16: 0613 [10].
- Lotus cytisoides* L. – **CB DT K M NE** – perennial, flowers yellow.
2: 0087 [10]; **5:** 0173 [11]; **8:** 0302 [18]; **10:** 0336 [15]; **11:** 0413 [10]; **12:** 0442 [12];
15: 0540 [13]; **25:** 0960 [15]; **29:** 1122 [14]; **32:** 1166 [11]; **36:** 1235 [11].
- Lotus cytisoides* subsp. *conradiae* Gamisans – **CB NE** – perennial, flowers yellow.
6: 0227 [14]; **18:** 0768 [10]; **26:** 1002 [12].
- Lotus edulis* L. – **CB DT M NE** – annual, flowers yellow, standard with purple veins.
1b: 0002 [11]; **2:** 0086 [4]; **11:** 0361 [12]; **12:** 0455 [10]; **15:** 0543 [4]; **16:** 0617 [10];
17: 0642 [12]; **18e:** 0771 [10]; **19:** 0834 [5].
- Lotus ornithopodioides* L. – **CB DT M NE** – annual, flowers yellow.
1b: 0024 [7]; **2:** 0088 [10]; **11:** 0403 [9]; **12:** 0456 [10]; **16:** 0615 [10]; **17:** 0637 [6];
19: 0835 [8].
- Lotus tetragonolobus* L. – **CB DT M VM** – annual, flowers dark purple.
11c: 0379 [12]; **16:** 0624 [3]; **20:** 0901 [5]; **28:** 1043 [4].
- Lupinus cosentinii* Guss. – **NE** – annual, standard and wings blue, standard with twin whitish macula, keel whitish with dark violet tip.
25: 0957 [9].
- Medicago littoralis* Loisel. – **CB DT K NE** – decumbent annual, flowers yellow.
11: 0415 [10]; **13:** 0503 [11]; **15:** 0544 [3]; **18:** 0769 [10]; **32:** 1168 [5].
- Medicago lupulina* L. – **NE** – annual, flowers yellow, fruit pubescent.
17: 0658 [10].

Medicago marina L. – **CB** – perennial, flowers yellow.

6: 0232 [14].

Medicago minima (L.) L. – **DT** – annual, flowers yellow.

15: 0548 [10].

Medicago monspeliaca (L.) Trautv. – **NE** – annual, flowers yellow.

17: 0660 [14].

Medicago polymorpha L. – **NE** – annual, flowers yellow.

17: 0636 [2]; **17:** 0651 [7].

Medicago soleirolii Duby – **CB** – annual, flowers yellow.

5: 0166 [2].

Melilotus messanensis (L.) All. – **CB** – annual 30 cm, flowers yellow.

4: 0106 [11]; **7:** 0267 [3].

Melilotus sulcatus Desf. – **CB DT** – annual, flowers yellow.

4: 0107 [12]; **11j:** 0388 [4]; **16:** 0623 [10].

Ononis alba Poir. subsp. *alba* – **DT** – annual, flowers light pink.

16: 0627 [3].

Ononis hispanica subsp. *ramosissima* (Desf.) Förther & Podl. – **CB** – suffrutex 50 cm, flowers yellow with red stripes.

10: 0346 [12].

Ononis variegata L. – **CB NE** – perennial, flowers yellow, standard with reddish veins.

6: 0226 [12]; **18:** 0767 [12].

Parkinsonia aculeata L. – **K** – invasive naturalised alien shrub 2 m.

33: 1195 [7] (sterile).

Retama raetam (Forssk.) Webb – **CB NE** – retamoid shrub 1-1.5 m, flowers white.

6: 0219 [10]; **25:** 0958 [15].

Scorpisurus muricatus L. – **CB DT** – annual, flowers yellow suffused orange, standard purple-veined.

2: 0084 [4]; **11j:** 0389 [12]; **16:** 0622 [10].

Trifolium campestre Schreb. – **M NE** – annual, flowers pale yellow.

17: 0662 [1]; **21:** 0936 [5].

Trifolium nigrescens Viv. – **CB DT K NE** – annual (perennial?), flowers whitish to pale pink.

4: 0109 [11]; **15:** 0547 [4]; **17:** 0645 [2]; **32:** 1167 [1].

Trifolium scabrum L. – **CB DT K NE** – annual, flowers pale pink to whitish.

4: 0116 [6]; **15:** 0545 [3]; **17:** 0656 [16]; **32:** 1169 [4].

Trifolium stellatum L. – **CB DT NE** – annual, flowers white turning pale pink.

2: 0085 [6]; **11:** 0397 [12]; **15:** 0546 [5]; **17:** 0647 [10].

Trifolium subterraneum L. – **CB M K** – annual, flowers white.

5: 0170 [10]; **19:** 0833 [12]; **36:** 1242 [5].

Trifolium suffocatum L. – **CB K** – annual (perennial?), flowers whitish.

5: 0167 [3]; **36:** 1243 [7].

Trifolium tomentosum L. – **CB K NE** – annual, flowers pink.

4: 0117 [4]; **17:** 0664 [15]; **38:** 1295 [14].

Trigonella foenum-graecum L. – **CB M VM** – annual, flowers whitish, plant aromatic; also cultivated.

11: 0422 [2]; **20:** 0902 [10]; **28:** 1041 [10].

Tripodion tetraphyllum (L.) Fourr. – **CB DT NE** – annual, standard cream, wings yellow, keel yellow or dark purple tipped.

11: 0370 [4]; **16:** 0614 [16]; **17:** 0666 [13].

Vicia leucantha Biv. – **CB** – annual, flowers whitish.

11j: 0372 [12].

Vicia sativa L. – **CB** – annual, flowers purple, standard paler.

11j: 0414 [14].

Vicia sativa subsp. *nigra* (L.) Ehrh. – **CB NE** – annual, 30 cm, flowers purplish viole, standard sometimes bluish.

7: 0266 [3]; **25:** 0962 [3].

Vicia villosa Roth subsp. *varia* (Host) Corb. – **NE** – annual, standard, wing claw and keel blue, wings distally white, keel with twin round white subapical macula.

25: 0961 [12].

Linaceae

Linum bienne Mill. – **CB DT K M** – annual, flowers blue.

3: 0089 [6]; **5:** 0200 [4]; **19:** 0821 [11]; **31:** 1157 [7].

Linum decumbens Desf. – **DT** – annual, flowers burgundy.

16: 0602 [12].

Linum trigynum L. – **DT** – annual, flowers sulphur yellow.

16: 0608 [6].

Malvaceae

Malope malacoides subsp. *tripartita* (Boiss. & Reut.) Maire – **VM** – perennial, flowers purplish pink with dark veins.

28d: 1067 [12].

Malva olbia (L.) Alef. – **M** – shrub 3.5 m, flowers purple.

21: 0941 [5].

Malva parviflora L. – **DT K** – annual, flowers pink.

2: 0082 [9]; **38:** 1293 [11].

Malva sylvestris L. – **DT** – perennial, flowers purplish pink with darker veins.

2: 0077 [6]; **16:** 0591 [10].

Moraceae

Ficus infectoria Roxb. – **NE** – tree 10 m, planted.

26bis: 1015 [10].

Myoporaceae

Myoporum tenuifolium G. Forst. – **K** – shrub, 2 m, flowers white.

38: 1306 [9].

Myrtaceae

Eucalyptus gomphocephala DC. – **M** – tree 10 m.

19: 0820 [14].

Myrtus communis L. – **K** – shrub 2 m.

43: 1363 [11].

Oleaceae

Fraxinus angustifolia subsp. *oxycarpa* (Willd.) Franco & Rocha Afonso – **K** – tree over 4 m.

32: 1177 [6] (in fruit).

Jasminum fruticans L. – **DT NE** – shrub 0.7-1 m, flowers yellow.

12: 0493 [7]; **16:** 0620 [10]; **17:** 0663 [10].

Phillyrea latifolia L. – **CB DT K M** – shrub 1-3 m, flowers pale yellow.

5: 0136 [10]; **12:** 0480 [10]; **16:** 0575 [10]; **19:** 0826 [10]; **36:** 1237 [15].

Orobanchaceae

Orobanche crenata Forssk. – **CB** – annual, stigma yellow.

11j: 0400 [1].

Orobanche minor Sm. – **M**.

23: 0948 [4] (on *Galactites tomentosus*).

Orobanche mutelii F. W. Schultz – **NE** – annual, flowers pale lilac, stigma white.

17: 0746 [1] (on *Hyoseris radiata*).

Orobanche nana (Reut.) G. Beck – **NE** – annual, flowers pale bluish violet to lilac or purple, stigma white.

25: 0967 [10] (on *Oxalis pes-caprae*); **25:** 0968 [4] (on *Medicago littoralis*); **26:** 1008 [4] (on *Oxalis pes-caprae*).

Orobanche schultzii Mutel – **NE** – annual.

18: 0801 [1] (on *Asteraceae* sp.; in bud).

Orobanche variegata Wallr. – **DT M VM** – annual, flowers dark dirty blood-red distally, pale proximally, stigma yellow.

1: 0023 [2] (on *Calycotome villosa*); **5:** 0153 [2] (on *Calicotome villosa*); **19:** 0865 [2]; **28:** 1040 [7].

Oxalidaceae

Oxalis pes-caprae L. – **DT** – geophyte, flowers yellow.

16: 0619 [10].

Papaveraceae

Fumaria bastardii Bor. – **CB** – annual, flowers purple with dark tip.

6c: 0245 [10].

Fumaria bicolor Sommier – **CB M NE** – annual, flowers whitish to pale pink with dark purple tip.

5: 0210 [1]; **8:** 0294 [1]; **17:** 0736 [8]; **18:** 0784 [11]; **25:** 0989 [8]; **29:** 1115 [12].

Fumaria capreolata L. – **K M** – annual, flowers white with blackish purple tip.

19: 0842 [2]; **36:** 1265 [3].

Papaver dubium L. – **NE** – annual, petals brick red, unspotted.

17: 0733 [1].

Papaver hybridum L. – **NE** – annual, petals blood-red with black basal spot.

17: 0730 [10].

Papaver rhoeas L. – **K** – annual, flowers flame red, lacking dark spots.
31: 1153 [1].

Plantaginaceae

Plantago afra L. – **CB DT NE VM** – annual.

11: 0398 [13]; **15:** 0532 [4]; **16:** 0577 [10]; **17:** 0683 [6]; **18e:** 0759 [14]; **25:** 0980 [9];
28: 1081 [8].

Plantago albicans L. – **CB NE** – perennial.

11c: 0390 [10]; **25:** 0988 [10].

Plantago coronopus L. – **CB**.

– 0104 [12].

Plantago crassifolia Forssk. – **CB M NE** – perennial.

6: 0231 [13]; **18:** 0760 [10]; **29:** 1098 [3].

Plantago lagopus L. – **CB DT** – annual.

1: 0056 [10]; **6c:** 0229 [12].

Plantago weldenii Rchb. – **CB**.

4: 0102 [6]; **4:** 0103 [6].

Plumbaginaceae

Limonium hippoponense Brullo & Erben – **NE**.

18d: 0805 [5] (sterile).

Limonium zembrae Pignatti – **CB** – perennial.

10: 0348 [1] (sterile).

Polygalaceae

Polygala monspeliaca L. – **M** – annual, flowers greenish with dirty purple veins.

19: 0872 [10].

Polygala numidica Pomel – **K M** – perennial, flowers green becoming pale to purplish blue turning green again, crest whitish.

19: 0840 [4]; **29c:** 1107 [4]; **30:** 1126 [9]; **31:** 1161 [5].

Polygonaceae

Polygonum aviculare L. – **K** – annual, flowers whitish to pink.

31: 1163 [1]; **38:** 1300 [6].

Polygonum maritimum L. – **M NE** – perennial, tepals white, outside with greenish stripe.

21b: 0931 [5]; **26:** 1007 [6].

Rumex bucephalophorus L. – **CB** – annual – **5:** 0191 [10] (sterile).

Rumex bucephalophorus L. subsp. *bucephalophorus* – **CB NE** – annual.

6b: 0255 [12]; **25:** 0973 [7].

Rumex bucephalophorus subsp. *gallicus* (Steinh.) Rech. f. – **DT NE** – annual.

16: 0599 [14]; **18:** 0787 [11].

Rumex roseus L. – **NE** – perennial.

26: 1010 [11].

Primulaceae

Anagallis arvensis L. – **CB DT NE** – annual, flowers deep blue with purple tube.

1: 0053 [5]; **5:** 0189 [5]; **6c:** 0236 [10]; **16:** 0585 [10]; **17:** 0673 [7].

Anagallis monelli L. – **CB VM** – perennial, flowers deep blue with purple eye and tube.

5: 0206 [3]; **10:** 0354 [10]; **28:** 1072 [8].

Asterolinon linum-stellatum (L.) Duby – **DT** – annual.

16: 0616 [10].

Ranunculaceae

Adonis microcarpa DC. – **VM** – annual, flowers flame red with black eye and stamens.

28: 1054 [16].

Clematis cirrhosa L. – **M NE** – woody climber.

17: 0749 [8] (sterile); **19:** 0818 [5] (sterile young shoots).

Clematis flammula L. – **M** – woody climber.

19: 0815 [10] (sterile).

Nigella damascena L. – **DT** – annual, sepals whitish with greenish-blue veins, honey-leaves blackish blue.

16: 0576 [3].

Ranunculus aquatilis L. – **K M** – most leaves floating, flowers white.

20: 0892 [1]; **43b:** 1367 [10].

Ranunculus arvensis L. – **VM** – annual, flowers yellow.

28: 1051 [11].

Ranunculus bullatus L. – **NE** – geophyte.

17: 0739 [9] (sterile).

Ranunculus ficaria subsp. *ficariiformis* Rouy & Fouc. – **K M VM** – perennial, petals bright yellow, greenish or purplish green outside.

19: 0827 [10]; **28:** 1061 [6]; **34:** 1220 [10].

Ranunculus macrophyllus Desf. – **VM** – geophyte, flowers yellow.

28: 1053 [10].

Ranunculus millefoliatus Vahl – **DT** – geophyte, flowers yellow.

12: 0454 [14].

Ranunculus muricatus L. – **M NE** – annual, flowers yellow.

17: 0737 [10]; **17:** 0743 [7]; **19:** 0831 [10]; **21:** 0919 [7]; **29:** 1114 [15].

Ranunculus ophioglossifolius Vill. – **K** – perennial, flowers yellow.

32: 1180 [2].

Ranunculus paludosus Poir. – **CB M** – geophyte, flowers bright yellow.

5: 0199 [6]; **8:** 0328 [10]; **19:** 0824 [10]; **21:** 0918 [13].

Ranunculus peltatus Schrank – **M** – floating leaves present, petals white with yellow claw.

20: 0890 [11].

Ranunculus spicatus subsp. *blepharicarpus* (Boiss.) Grau – **DT K M NE** – geophyte, flowers yellow.

12: 0453 [6]; **17:** 0740 [12]; **19:** 0829 [3]; **34:** 1225 [4].

Ranunculus trichophyllus Chaix – **K M** – annual, all leaves submersed, flowers white, very small.

20: 0891 [12]; **32:** 1183 [8].

Resedaceae

Reseda alba L. – **CB DT NE** – annual or biennial, flowers white.

11: 0410 [9]; **16:** 0628 [7]; **25:** 0998 [11].

Reseda lutea L. – **DT** – perennial, flowers pale yellow.

13b: 0499 [2].

Rhamnaceae

Rhamnus alaternus L. – **CB K** – shrub 2-5 m, flowers yellowish green.

11d: 0382 [7]; **34:** 1197 [15]; **43:** 1362 [5].

Rhamnus lycioides subsp. ***oleoides*** (L.) Jahand. & Maire – **CB NE VM** – shrub 0.3-1.5 m.

11d: 0383 [13]; **17:** 0731 [5] (in bud); **28:** 1088 [4] (in bud).

Rhamnus myrtifolius Willk. – **DT** – decumbent shrub ca. 10 cm.

16b: 0603 [2].

Rosaceae

Aphanes floribunda (Murb.) Rothm. – **K** – annual.

36: 1271 [3].

Crataegus azarolus L. – **DT VM** – shrub or tree, 3-5 m, flowers white, styles 2-3.

13: 0502 [8]; **28:** 1044 [10].

Crataegus monogyna Jacq. – **K VM** – shrub 1-2.5 m, flowers white, style 1.

28: 1045 [7]; **37:** 1285 [8].

Prunus avium L. – **K** – tree 4 m.

42: 1349 [3]; **43:** 1368 [7].

Prunus prostrata Labill. – **DT** – small, erect shrub, flowers pink.

12: 0440 [8].

Rubus incanescens (DC.) Bertol. – **K**.

42: 1355 [7] (sterile); **43:** 1369 [7] (sterile).

Rubus ulmifolius Schott – **CB K M NE** – sometimes climbing in trees to at least 5 m, flowers white.

11d: 0404 [9] (sterile); **11f:** 0408 [6]; **19:** 0864 [10] (sterile); **25:** 0969 [10]; **34:** 1204 [12] (with *Smilax*, old fruits).

Rubiaceae

Crucianella maritima L. – **NE** – suffrutex, sterile.

18: 0782 [6].

Galium murale (L.) All. – **M** – annual.

19: 0849 [3].

Galium verrucosum Huds. – **CB DT K VM** – annual, flowers white to pale yellow, fruit whitish, verrucose.

8: 0310 [12]; **12:** 0482 [12]; **16:** 0583 [16]; **28f:** 1078 [10]; **36:** 1268 [15].

Rubia peregrina L. – **CB DT** – straggling perennial, flowers white to greenish white.

11d: 0416 [11]; **16:** 0573 [8].

Sherardia arvensis L. – **CB DT K M** – annual, flowers pink to reddish violet.

1: 0046 [6]; **5:** 0171 [6]; **15:** 0527 [10]; **16:** 0584 [12]; **20:** 0880 [15]; **36:** 1248 [3].

Valantia muralis L. – **CB NE** – annual.

7: 0271 [5]; 8: 0308 [15]; 17: 0659 [11]; 17: 0734 [1]; 18d: 0772 [10].

Salicaceae

Populus alba L. – **K** – tree 3 m.

36: 1270 [4].

Salix atrocinerea Brot. – **K** – shrub or tree to 5 m.

32: 1170 [8] (sterile); 32: 1174 [9]; 39: 1311 [13].

Saxifragaceae

Saxifraga tridactylites L. – **NE** – annual, flowers white.

17: 0703 [2].

Scrophulariaceae

Antirrhinum majus subsp. *tortuosum* (Lam.) Ball – **DT** – perennial, flowers purple with yellow marks in throat.

16: 0574 [10].

Cymbalaria muralis P. Gaertn. & al. – **M**.

22: 0947 [11].

Linaria cossonii Bonnet & Barratte – **NE** – biennial?, flowers purple.

25: 0993 [6].

Linaria doumetii Bonnet & Barratte – **DT** – annual, flowers white with yellow throat and violet veins.

12: 0485 [5].

Linaria multicaulis subsp. *heterophylla* (Desf.) D. A. Sutton – **CB** – annual, flowers yellow.

7: 0268 [6].

Linaria reflexa (L.) Desf. – **CB DT K M NE VM** – annual, flowers white or pale blue to bright violet with orange-yellow throat marks .

5: 0165 [5]; 8: 0312 [3]; 11: 0392 [5]; 15: 0531 [5]; 18e: 0761 [8]; 20: 0881 [4]; 28: 1069 [9]; 37: 1286 [8].

Linaria triphylla (L.) Mill. – **DT M VM** – annual, flowers pale yellow, lower lip yolk yellow, spur violet.

15: 0530 [2]; 20: 0883 [1]; 28: 1077 [16].

Misopates orontium (L.) Raf. – **DT** – annual, flowers pale purplish pink.

16: 0609 [10].

Odontites squarrosum (Rchb.) Bolliger – **DT** – semishrub, flowers dark red.

1: 0009 [8].

Parentucellia latifolia (L.) Caruel – **DT VM** – annual, corolla limb whitish, tube and sometimes upper lip dark purple.

12: 0459 [6]; 28: 1074 [5].

Scrophularia canina L. – **DT** – perennial 1 m, flowers blackish purple with white lower lip.

16: 0554 [10].

Scrophularia laevigata Vahl – **NE** – perennial, flowers dirty red.

17e: 0693 [10].

Scrophularia peregrina L. – NE – annual, flowers blackish purple.

17: 0692 [7].

Scrophularia tenuipes Coss. & Durieu – K – perennial.

4d: 1196 [2] (sterile).

Verbascum creticum (L.) Kuntze – DT M VM – biennial, flowers yellow, filament wool and marks on two upper corolla lobes dark purple.

13: 0501 [3]; 20: 0879 [9]; 28: 1084 [3].

Veronica arvensis L. – K M NE – annual, flowers blue.

17: 0681 [14]; 19: 0814 [5]; 36: 1231 [10]; 38: 1294 [12].

Veronica cymbalaria Bodard – K NE – annual, flowers white, often small.

17: 0657 [8]; 26c: 1013 [12]; 32: 1164 [9]; 34: 1200 [7]; 36: 1247 [14].

Veronica polita Fr. – NE – annual.

17: 0657a [2].

Solanaceae

Datura metel L. – M – perennial.

21c: 0930 [4] (old fruits).

Hyoscyamus albus L. – NE – annual, flowers pale yellow throughout.

17f: 0649 [10].

Lycium europaeum L. – CB – shrub, fruit red.

6c: 0239 [10].

Tamaricaceae

Tamarix africana Poir. – CB K M NE – shrub or small tree 2-4 m, flowers whitish.

11f: 0399 [11]; 17c: 0701 [11]; 20: 0908 [10]; 32: 1176 [7].

Theligonaceae

Theligonum cynocrambe L. – DT K M NE – annual.

16: 0556 [10]; 17: 0726 [5]; 19: 0812 [12]; 34: 1223 [4].

Thymelaeaceae

Thymelaea argentata (Lam.) Pau – DT – shrub 0.8 m.

1: 0012 [5].

Thymelaea hirsuta (L.) Endl. – CB M – fetid shrub 0.5-1.5 m, flowers pale yellow.

7: 0277 [10]; 10: 0355 [11]; 10: 0356 [13]; 19: 0816 [12].

Ulmaceae

Ulmus minor subsp. *canescens* (Melville) Browicz & Ziel. – K – tree 7 m.

32: 1229 [9] (sterile).

Umbelliferae

Daucus carota subsp. *fontanesii* Thell. – CB – decumbent perennial, flowers pale pink, central flower dark purple.

10: 0357 [10].

Ferula communis L. – NE – perennial, flowers yellow.

17: 0694 [11].

Helosciadium nodiflorum (L.) W. D. J. Koch – K – perennial.

4: 1201 [7] (sterile).

Kundmannia sicula (L.) DC. – VM – perennial.

28: 1057 [7] (in bud).

Sanicula europaea L. – K – perennial, flowers white.

39: 1317 [17].

Scandix pecten-veneris L. – CB DT VM – annual, flowers white.

11j: 0395 [5]; 16: 0557 [10]; 28f: 1073 [7].

Smyrnium olusatrum L. – CB VM – perennial, flowers pale greenish yellow.

11h: 0396 [18]; 28: 1082 [10].

Thapsia garganica L. – VM – perennial, flowers yellow.

28: 1087 [14].

Urticaceae

Parietaria judaica L. – CB – perennial.

8e: 0331 [2].

Parietaria lusitanica L. – DT NE – annual.

16: 0555 [1]; 17: 0689 [18].

Urtica membranacea Poir. – CB NE – annual – 6c: 0233 [8]; 7: 0280 [10]; 7: 0282 [12];

8b: 0318 [10]; 25: 0972 [8].

Urtica pilulifera L. – DT NE – annual.

5: 0537 [10]; 17: 0661 [8].

Urtica urens L. – K – annual.

38: 1309 [11].

Valerianaceae

Centranthus calcitrapae (L.) Dufr. – DT NE – annual, flowers pale pink.

16: 0553 [5]; 25: 0977 [12].

Centranthus ruber (L.) DC. – DT – perennial, flowers dark purplish pink.

16: 0563 [7].

Fedia graciliflora (L.) Fisch. & C. A. Mey. – CB DT K M NE VM – annual, flowers purplish pink to reddish violet.

5: 0172 [13]; 8: 0300 [16]; 11c: 0378 [10]; 12: 0481 [11]; 16: 0582 [10]; 17: 0654 [7];

17: 0682 [12]; 19: 0828 [11]; 28: 1075 [8]; 31: 1151 [6]; 36: 1249 [4]; 38: 1296 [16].

Valeriana tuberosa L. – DT – geophyte, flowers light pink.

12: 0460 [2].

Valerianella carinata Lois. – K – annual, flowers whitish.

36: 1244 [12].

Valerianella discoidea (L.) Lois. – DT – annual, flowers whitish.

15: 0529 [13].

Valerianella microcarpa Loisel. – K NE – annual, flowers pale pink.

17: 0672 [15]; 25: 0979 [12]; 32: 1165 [2].

Verbenaceae

Citharexylum spinosum L. – NE – tree 10 m, planted.

26bis: 1016 [9].

Verbena officinalis L. – CB.

11e: 0427 [10] (sterile).

Violaceae

Viola riviniana Rchb. – K – stoloniferous perennial, flowers violet with whitish centre, spur violet.

34: 1199 [11]; 39: 1328 [7]; 42: 1350 [1]; 43: 1364 [7].

MONOCOTYLEDONES*Alismataceae*

Alisma lanceolatum With. – M – perennial, flowers bluish pink.

20: 0877 [8].

Amaryllidaceae

Narcissus tazetta L. – CB – geophyte, flowers white with yellow paracorolla.

11e: 0401 [1].

Araceae

Ambrosina bassii L. – CB – geophyte.

8: 0297 [2].

Arisarum vulgare O. Targ. Tozz. – DT K VM – geophyte, spathe whitish green with purplish spots and stripes, spadix yellowish or purplish brown.

15: 0528 [1]; 28: 1029 [8]; 38: 1298 [2].

Arum italicum Mill. – M VM – geophyte, spathe pale greenish yellow, spadix yellow.

20: 0895 [1]; 21: 0922 [10]; 28: 1030 [7].

Cyperaceae

Bolboschoenus maritimus (L.) Palla – K – stoloniferous perennial.

31: 1145 [9].

Carex cuprina (Heuff.) A. Kern. – K – tufted.

32: 1178 [15].

Carex depressa Link – K.

39: 1320 [7]; 41: 1344 [12]; 43b: 1373 [9].

Carex distachya Desf. – K M – tufted perennial.

19: 0856 [10]; 34: 1210 [10]; 36: 1233 [7]; 39: 1321 [6]; 43: 1374 [4].

Carex distans L. – K M NE – tufted perennial.

32: 1181 [14].

Carex divisa Huds. — stoloniferous perennial.

18f: 0792 [10]; 29: 1101 [4]; 31: 1144 [8].

Carex divulsa Stokes – K – perennial.

37: 1273 [12].

Carex flacca subsp. *serrulata* (Spreng.) Greuter – **CB K M NE** – stoloniferous perennial.

5: 0141 [12]; **10:** 0360 [1]; **18f:** 0791 [17]; **19:** 0855 [10]; **31:** 1146 [10]; **37:** 1278 [14];
41: 1345 [1]; **42:** 1351 [8]; **42:** 1356 [8]; **43:** 1372 [8].

Carex halleriana Asso – **CB DT K M** – tufted perennial.

1: 0065 [5]; **5:** 0142 [10]; **19:** 0856a [1]; **34:** 1211 [5]; **39:** 1320a [1].

Carex pendula Huds. – **K** – cespitose perennial.

32c: 1172 [6]; **43:** 1371 [4].

Carex remota L. – **K M** – tufted perennial.

21: 0942 [4]; **41b:** 1342 [6].

Carex sylvatica subsp. *paui* (Sennen) A. Bolòs & O. Bolòs – **K**.

39: 1320b [4]; **41:** 1346 [4]; **43:** 1370 [8].

Cyperus capitatus Vand. – **NE** – stoloniferous perennial.

18: 0776 [8]; **26:** 1005 [11].

Cyperus involucratus Rottb. – **CB** – perennial, naturalised.

11e: 0402 [10].

Cyperus longus subsp. *badius* (Desf.) Asch. & Graebn. – **K** – perennial.

32: 1175 [6].

Eleocharis palustris (L.) R. Br. – **K M** – tufted and stoloniferous perennial.

20: 0907 [10]; **31:** 1142 [13]; **32:** 1179 [4].

Isolepis cernua (Vahl) Roem. & Schult. – **CB K M** – tufted annual.

5: 0138 [12]; **8:** 0299 [6]; **19:** 0862 [13]; **32:** 1182 [2].

Schoenus nigricans L. – **CB** – tufted perennial.

5: 0137 [10]; **6:** 0241 [13]; **10:** 0345 [15].

Scirpoidea holoschoenus (L.) Soják – **CB NE VM** – tufted perennial, to 1 m.

11f: 0377 [10]; **18f:** 0773 [7]; **28:** 1031 [5].

Dioscoreaceae

Dioscorea communis (L.) Caddick & Wilkin – **CB DT M NE** – twining climber, flowers pale green to greenish yellow.

5: 0157 [1]; **12:** 0463 [9] (in bud); **16:** 0621 [7]; **17:** 0751 [1]; **19:** 0841 [8]; **21:** 0923 [1] (sterile).

Gramineae

Aira caryophyllea L. – **NE** – annual.

25: 0981 [6].

Aira cupaniana Guss. – **M** – annual.

20: 0887 [2]; **21:** 0929 [6].

Alopecurus bulbosus subsp. *macrostachyus* (Poir.) Trab. – **K M** – perennial.

20: 0910 [10]; **31:** 1148 [1]; **32:** 1171 [8].

Ammophila arenaria subsp. *arundinacea* H. Lindb. – **CB** – perennial.

6: 0258 [4].

Ampelodesmus mauritanicus (Poir.) T. Durand & Schinz – **DT K M VM** – tufted perennial, to 1.5 m.

1: 0059 [2]; **12:** 0443 [7]; **21:** 0928 [9]; **28:** 1038 [9]; **29:** 1091 [10]; **31:** 1141 [10].

Anthoxanthum gracile Biv. – NE – annual.

17: 0748 [10].

Anthoxanthum odoratum L. – CB – perennial.

8: 0295 [5].

Aristida coerulescens Desf. – DT. – tufted perennial.

15: 0524 [1].

Avena barbata Link – CB DT NE – annual.

6c: 0234 [5]; 7: 0269 [6]; 15: 0513 [5]; 16: 0580 [4]; 17: 0671 [6].

Brachypodium retusum (Pers.) P. Beauv. – CB DT – straggling perennial.

1: 0061 [10]; 11c: 0380 [5].

Bromus hordeaceus L. – DT NE – annual.

1: 0063 [5]; 25: 0990 [3]; 27: 1018 [3].

Bromus madritensis L. – DT NE – annual.

1: 0066 [3]; 15: 0515 [2]; 16: 0567 [1]; 17: 0677 [10]; 25: 0982a [6].

Bromus rigidus Roth – CB NE – annual.

6d: 0218 [10]; 11: 0365 [2]; 25: 0982 [4].

Catapodium marinum (L.) C. E. Hubb. – CB.

4: 0133 [3].

Catapodium rigidum (L.) C. E. Hubb. – NE – annual.

17: 0676 [6].

Cynodon dactylon (L.) Pers. – DT – prostrate perennial.

15: 0514 [4].

Dactylis glomerata subsp. *hispanica* (Roth) Nyman – DT – tufted perennial.

16: 0570 [4].

Echinaria capitata (L.) Desf. – CB – annual, 4 cm.

5: 0169 [2].

Festuca coerulescens Desf. – CB DT K M NE – tufted perennial.

5: 0207 [2]; 8: 0296 [1]; 12: 0444 [2]; 17: 0685 [4]; 19: 0837 [3]; 20: 0885 [1]; 36: 1239 [7]; 37: 1275 [11].

Hordeum murinum subsp. *leporinum* (L.) Arcang. – CB DT NE – annual.

1: 0068 [1]; 6c: 0243 [4]; 11: 0366 [6]; 15: 0522 [2]; 17: 0669 [2].

Hyparrhenia hirta (L.) Stapf – CB DT K – tufted perennial.

1: 0062 [4]; 3: 0096 [2]; 11: 0381 [10]; 31: 1139 [9].

Lagurus ovatus L. – NE – annual.

25: 0983 [5].

Lamarckia aurea (L.) Moench – K NE – annual.

17: 0678 [13]; 36: 1252 [4].

Lolium multiflorum Lam. – K – perennial.

38: 1299 [8].

Lolium perenne L. – NE – annual (?).

25: 0985 [3].

Lolium rigidum Gaudin – DT NE – annual.

16: 0568 [3]; 25: 0985a [1].

Melica magnolii Gren. & Godr. – NE – perennial.

17: 0686 [2].

Melica minuta L. – **K M** – stoloniferous perennial.

20: 0886 [7]; **31c:** 1140 [3]; **36:** 1241 [3]; **39:** 1319 [14]; **42:** 1348 [2].

Piptatherum miliaceum (L.) Coss. – **DT** – tufted perennial.

16: 0566 [9].

Piptatherum thomasii (Duby) Kunth – **K** – perennial.

37: 1276 [6].

Poa annua L. – **K M** – annual.

19: 0807 [11]; **41:** 1337 [3].

Poa bulbosa L. – **CB DT K NE VM** – tufted perennial, to 12 cm.

5: 0154 [6]; **12:** 0445 [4]; **17:** 0679 [4]; **28:** 1039 [8]; **36:** 1240 [6].

Poa infirma Kunth – **CB** – annual.

5: 0175 [13]; **17:** 0670 [9]; **19:** 0808 [5]; **20:** 0888 [11]; **36:** 1253 [5]; **38:** 1301 [11].

Poa pratensis L. – **M**.

24: 0950 [22].

Polypogon subspathaceus Req. – **CB** – annual.

6e: 0257 [10].

Rostraria cristata (L.) Tzvelev – **NE** – annual.

17: 0750 [1].

Rostraria pubescens (Lam.) Trin. – **NE** – annual.

25: 0991 [2].

Setaria viridis (L.) P. Beauv. – **M** – annual.

23: 0949 [20].

Sphenopus divaricatus (Gouan) Rchb. – **CB**.

4: 0132 [2]; **6e:** 0249 [11].

Stipa capensis Thunb. – **DT NE** – annual.

16: 0571 [5]; **17:** 0687 [9].

Stipa tenacissima L. – **CB DT** – tufted perennial.

1: 0060 [6]; **10:** 0338 [1].

Trachynia distachya (L.) Link – **DT NE** – annual.

16: 0569 [10]; **17:** 0684 [2]; **25:** 0984 [5].

Vulpia ligustica (All.) Link – **DT NE** – annual.

15: 0523 [1]; **16:** 0581 [2]; **25:** 0992 [1].

Iridaceae

Gladiolus italicus Mill. – **DT M** – geophyte, flowers purplish pink, three lower tepals with white, dark-bordered median stripe, upper one twice as wide as laterals.

16: 0604 [2]; **20:** 0878 [3]; **21:** 0939 [3].

Iris germanica L. – **K** – perennial, flowers whitish.

37: 1272 [6].

Moraea sisyrinchium (L.) Ker Gawl. – **CB NE** – geophyte, flowers violet.

4: 0122 [14]; **18d:** 0806 [1].

Romulea bulbocodium (L.) Sebast. & Mauri – **CB DT K M NE** – geophyte, flowers pale lavender to purple, whitish outside, throat paler.

6e: 0246 [7]; **8:** 0315 [11]; **15:** 0550 [15]; **18e:** 0803 [5] (in fruit); **19:** 0871 [2]; **20:** 0894 [3]; **29:** 1094 [3]; **30:** 1130 [3]; **42:** 1358 [1].

Romulea ligustica Parl. – **K** – geophyte, flowers bright lilac.

37: 1277 [2].

Romulea ramiflora Ten. – **CB K M VM** – geophyte, flowers pale lilac to purplish pink, pale greenish outside.

8: 0316 [10]; **21:** 0940 [2]; **28:** 1035 [7]; **31:** 1147 [9].

Juncaceae

Juncus acutus L. – **CB K M** – tufted perennial.

4: 0125 [11]; **6e:** 0244 [8]; **11f:** 0405 [2]; **19d:** 0867 [10]; **20:** 0896 [10]; **31:** 1143 [5].

Juncus bufonius L. – **CB K M** – annual.

8: 0322 [3]; **19:** 0861 [5]; **38:** 1297 [10].

Juncus capitatus Weigel – **K M** – annual.

19: 0860 [12]; **30b:** 1134 [2].

Juncus conglomeratus L. – **K** – perennial.

37: 1274 [8].

Juncus effusus L. – **K** – cespitose, 2 to m.

41: 1343 [7].

Juncus rigidus Desf. – **CB**.

4: 0124 [9].

Luzula forsteri (Sm.) DC. – **K** – tufted perennial.

34: 1208 [11]; **36:** 1232 [1]; **39:** 1322 [8]; **42:** 1357 [12].

Juncaginaceae

Triglochin barrelieri Loisel. – **CB** – geophyte.

4b: 0121 [12]; **6e:** 0235 [13]; **10:** 0344 [13].

Liliaceae

Allium roseum L. – **CB NE** – geophyte, bulb tuncis pitted, flowers white or pale pinkish with pale purple midvein outside.

5: 0213 [1]; **10:** 0359 [2]; **11e:** 0429 [1]; **18:** 0783 [8].

Allium triquetrum L. – **M NE VM** – geophyte, tepals white, with green stripe outside, flowers pendulous.

17: 0727 [10]; **19:** 0866 [10]; **28:** 1034 [7]; **29:** 1093 [12].

Asparagus acutifolius L. – **DT**.

1: 0051 [9].

Asparagus albus L. – **DT NE** – shrub 1-1.5 m.

15: 0517 [12] (sterile); **17:** 0729 [19].

Asparagus stipularis Forssk. – **CB**.

7: 0276 [11].

Asphodeline lutea (L.) Rchb. – **DT** – geophyte, flowers yellow.

12: 0461 [4].

Asphodelus fistulosus L. – **CB** – annual, tepals pale pink, midvein purple.

7: 0274 [10].

Asphodelus ramosus L. – **CB DT M VM** – geophyte, flowers white with dirty purplish midvein outside.

11b: 0374 [8]; **12:** 0466 [10]; **20:** 0909 [10]; **28:** 1033 [11].

Bellevalia mauritanica Pomel – **DT M VM** – geophyte, flowers blue to dirty violet in bud, turning pale to whitish with purplish midvein at anthesis, eventually brownish.

12: 0467 [10]; **20:** 0897 [12]; **28:** 1049 [1].

Colchicum cupani Guss. – **DT** –.

1: 0006 [6] (leaves); **15:** 0518 [12] (in fruit).

Dipcadi serotinum (L.) Medik. – **DT** – geophyte, perigon pale brownish purple, inner segments paler.

15: 0519 [10].

Gagea chabertii A. Terracc. – **K** – geophyte, tepals yellow, outside with green stripe.

37: 1288 [2].

Hyacinthoides kroumiriensis El Mokni & al. – **K** – geophyte, fruit glabrous. **Type gathering.**

42: 1352 [6].

Note. – Duplicates of the material collected during the Iter were used by El Mokni & al. (2014) to describe this new species discriminating from *Hyacinthoides aristidis* (Coss.) Rothm.

Leopoldia comosa (L.) Parl. – **DT** – geophyte, flowers brownish with yellow tip, buds dirty violet, sterile flowers bluish violet.

15: 0521 [7].

Muscari neglectum Ten. – **DT** – geophyte, flowers blackish blue with whitish teeth, sterile flowers light blue.

12: 0465 [7].

Ornithogalum algériense Jord. & Fourr. – **DT M** – geophyte, tepals white, outside with green stripe, leaves with white median stripe.

15: 0520 [5]; **16:** 0578 [14]; **19:** 0869 [4]; **20:** 0913 [3].

Ornithogalum umbellatum L. – **VM** – geophyte, tepals white with green stripe outside.

28: 1037 [1].

Ruscus hypophyllum L. – **CB M NE** – perennial 20 cm, berry red.

5: 0156 [2]; **17:** 0742 [5]; **21:** 0917 [3] (sterile).

Scilla peruviana L. – **DT M** – geophyte, flowers pale whitish lavender, anthers yellow.

16: 0605 [9]; **29:** 1096 [1].

Simethis mattiazzii (L.) Sacc. – **CB K M NE** – geophyte, flowers white, pale purplish-green to dirty violet outside.

8: 0311 [3]; **17:** 0744 [10]; **19:** 0857 [1]; **30:** 1123 [10].

Smilax aspera L. – **DT M NE** – woody climber.

1: 0036 [8]; **17:** 0741 [10] (sterile); **29:** 1095 [9] (with immature fruits).

Tulipa sylvestris subsp. *australis* (Link) Pamp. – **CB DT** – geophyte, flowers yellow tinged reddish outside.

1: 0057 [2]; **8:** 0298 [1]; **12:** 0489 [5]; **16:** 0579 [8].

Orchidaceae

Anacamptis longicornu (Poir.) Bateman & al. – **DT** – geophyte, flowers white to pink.

12: 0468 [7].

Neotinea maculata (Desf.) Stearn – **NE** – geophyte, flowers whitish.

25: 0966 [1].

Ophrys bombyliflora Link – **CB NE VM** – geophyte, perigon green, lip brown-felted.

5: 0263 [1]; **9:** 0334 [11]; **18c:** 0797 [6]; **28:** 1032 [1].

Ophrys fusca Link – **DT** – geophyte, perigon green, lip brown-felted with very narrow green margin.

1: 0075 [1]; **3:** 0092 [1]; **12:** 0470 [1].

Ophrys lutea Cav. – **DT NE VM** – geophyte, perigon green, lip brown-felted with wide or narrow yellow border.

1: 0016 [6]; **12:** 0469 [3]; **17:** 0754 [1]; **18c:** 0802 [1]; **18c:** 0804 [1]; **28:** 1036 [1]; **28:** 1060 [1].

Ophrys scolopax subsp. *apiformis* (Desf.) Maire & Weiller – **CB DT NE** – geophyte, perigon white to pink, outer tepals with green midvein, lip downcurved, strongly ornamented, horns very short.

5: 0208 [1]; **10:** 0347 [1]; **12:** 0472 [4]; **17:** 0752 [1].

Ophrys speculum Link – **CB DT M NE** – geophyte, perigon green, lip brown with shiny greenish-blue centre.

1: 0026 [2]; **5:** 0262 [2]; **12:** 0464 [14]; **17:** 0755 [1]; **18c:** 0790 [10]; **19:** 0846 [1]; **25:** 0964 [16].

Ophrys subfuscata (Rchb.) Hausskn. – **VM** – geophyte, tepals green, lip intermediate between *Ophrys fusca* and *O. lutea*.

28: 1056 [2].

Ophrys tenthredinifera Willd. – **DT NE VM** – geophyte, perigon pink, outer tepals with green stripe, lip-felt violet brown, margin yellowish green, gynostemium blunt.

12: 0471 [1]; **25:** 0965 [3]; **28:** 1055 [2].

Palmae

Chamaerops humilis L. – **CB:** 1 m.

6b: 0228 [11].

Phoenix dactylifera L. – **CB** – subspontaneous tree, trunk 2 m.

11f: 0376 [10].

Posidoniaceae

Posidonia oceanica (L.) Delile – **K** – perennial.

31d: 1154 [13].

Typhaceae

Typha domingensis Pers. – **K** – perennial..

32b: 1185 [5].

Results and discussion

A total of 1374 numbers were collected during the Iter Mediterraneum in Tunisia. These numbers correspond to: 1 alga, 6 gymnosperms belonging to 3 families, 14 pteridophytes belonging to 3 families, and 558 angiosperms: 440 dicotyledons belonging to 60 families and 118 monocotyledons belonging to 12 families. Disregarding planted trees and orna-

mentals, three taxa are new records for Tunisia: *Cerastium diffusum* subsp. *gussonei* (**K**), *Senecio leucanthemifolius* subsp. *mauritanicus* (**CB, DT**), and *Ulmus minor* subsp. *canescens* (**K**). All were known from the neighboring countries of North Africa.

New records to single phytogeographical regions are: **Kroumirie (K)**: *Carex sylvatica* subsp. *paui*, *Cyperus longus* subsp. *badius*, *Gagea chabertii*, *Myoporum tenuifolium*, *Ranunculus trichophyllus*, *Romulea ligustica* and *R. ramiflora*. – **Mogods (M)**: *Carex distans*, *Carex flacca* subsp. *serrulata*, *Carex remota*, *Clematis cirrhosa*, *Clematis flammula*, *Cymbalaria muralis*, *Fumaria bicolor*, *Genista aspalathoides*, *Myosotis discolor*, *Orobanche variegata*, *Ruscus hypophyllum*, *Silene tunetana*, *Stachys marrubiifolia*, *Thymelaea hirsuta*, *Viburnum tinus*. – **Dorsale Tunisienne (DT)**: *Astragalus longicaulis*, *Orobanche variegata*; **Tunisie du Nord-Est (NE)**: *Fumaria bicolor*, *Scrophularia laevigata*, *Valerianella microcarpa*; **Cap Bon (CB)**: *Carduus getulus*, *Cistus creticus* subsp. *eriocephalus*, *Cynoglossum cheirifolium* subsp. *heterocarpum*, *Fumaria bicolor*, *Helichrysum stoechas* subsp. *barrelieri*, *Laphangium luteoalbum*, *Medicago soleirolii*, *Spergularia maritima* subsp. *tunetana*.

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Address of the authors:

Werner Greuter & Giannantonio Domina,
Herbarium Mediterraneum, Università di Palermo, via Lincoln 2. 90133, Palermo,
Italy. E-mail: w.greuter@bgbm.org

