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A LIST OF RECORDS OF SOME RARE VASCULAR PLANT SPECIES OCCURRING IN THE MALTESE ISLANDS (CENTRAL MEDITERRANEAN)

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ABSTRACT

A check-list of one hundred and twenty-three (123) rare or infrequent vascular plant species occurring in the Maltese Islands is hereby given, along with brief notes concerning the record date and location, population size and distribution on the islands.

Keywords: rare, infrequent, vascular plant species, Maltese Islands

KEY

In compiling the following species list, the author has followed the family sequence adopted by Lanfranco 2001.

For each species, the localities where populations of the species were discovered by the author are given. The wider district where a specific locality is situated is given when:

a) the locality name is a micronym known only by a handful of farmers who happen to live or own land in the same locality, eg. Dingli cliffs area (district): Rdum ta' Hurrieqa (micronym);

b) when a single toponym serves different specific localities that are well separated geographically, eg. Il-Mosta area: (district) Wied Hanzir (a toponym for at least 3 different valleys in Malta and Gozo).

(**P.1**) = Other records for this species are listed in **Part 1** published in The Central Mediterranean Naturalist Volume 4 Part 3, 2007.

(**P?**) = Specimens found are doubtfully autochthonous and may have been planted.

* = Species no longer found in specific locality.

(**Number**) = Number of individuals found in a locality on date of discovery.

The list covers a period of research from Spring 1991 to Summer 2008. The date on which each species was first discovered is given in brackets. In cases where the exact date of discovery was not recorded, an approximate date is given:

(early 1990's) = found between 1991 and 1995;

(late 1990's) = found between 1996 and 1999;

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(c. xxxx) = found in the year xxxx or up to 2 years before or after that year.

In some cases (eg. *Medicago monspeliaca*), identification was made from dead dessicated specimens found during the summer drought, not during the active growth season. Identification was made possible by the presence of the distinctive fruits that were well preserved.

The third and final part of this Species List series will be published in the next issue of The Central Mediterranean Naturalist.

ERRATA CORRIGE for PART 1. (THE CENTRAL MEDITERRANEAN NATURALIST Volume 4 Part, 2007).

2. *Delphinium staphisagria* L.

GOZO - Mgarr valley * (7-1992) *should read as:* GOZO - l-Imgarr area: Taht ta' l-Erbgħa / ta' Setgħer * (7-1992).

31. *Trifolium angustifolium* L.

MALTA - high ground overlooking Wied Babu (vicinity of il-Hofra tal-Bħir) (24-6-2003) *should read as:* rocky terraces overlooking Wied Babu (below il-Hotba) (3-2000).

33. *Vicia villosa* Rothmaler

MALTA - Dingli cliffs area: among a boulder scree facing the North East side of il-Wardija ta' San Ġorġ (29-4-2003) *should read as:* Dingli cliffs area: among a boulder scree at the turning point between Rđum ta' Ħurrieqa and il-Wardija ta' San Ġorġ (29-4-2003).

58. *Ophrys lutea* Cavanilles *should read as:* *Ophrys lutea* Cavanilles s.l. incl. *Ophrys sicula* Tineo

MALTA - high ground overlooking Wied Babu (vicinity of il-Hofra tal-Bħir) (c.2000) *should read as:* MALTA - rocky terraces overlooking Wied Babu (below il-Hotba) (3-2000).

Species list:

PART 2

Phylum: *Lycophyta*

Class: *Lycopsida*

Family: *Selaginellaceae*

1. *Selaginella denticulata* (L.) Spring

MALTA - San Ġwann area: the turning point between Wied il-Kbir / tal-Frañċiż and Wied Ġhomor (1995) - Wied il-Faħam (5-4-2000) - Wied Ħanżir (parallel to Wied Qirda) (1992) (*abundant in some parts, forming extensive mats; possibly the largest population in the country*) - Wied Ħarq Ħamiem (1) (1995) - Wied Qirda (1992).

Phylum: *Sphenophyta*

Class: *Equisetopsida*

Family: *Equisetaceae*

2. *Equisetum ramosissimum* Desfontaines

MALTA - il-Baħrija area: many places including ta' Ghambierda, tat-Tulliera (1992) - Burmarrad (early 1990's) - Dingli cliffs area: Rdum Dikkiena (1995) - Ġnien il-Kbir, Ġnien iż-Żgħir, Wied ta' l-Isqof valley system (1992) - il-Girgenti (1992) - Ġħajn il-Kbira (1992), Wied tal-Girgenti (1991) valley system - Ġħajn Tuffieħa area: abundant around Roman baths, il-Ġnien, along Wied il-Ġinna, tas-Sold, up to ir-Ramla tal-Mixquqa / ir-Ramla ta' Snien / Golden bay (1992) - l-Imtahleb area: il-Bruka, Wied ta' Markozz, along path leading to ta' Pajpurijiet, along path leading to ta' Soklos, Wied ir-Rummien (1992) - l-Imtarfa area: Ġħajn Kellija (15-2-1995) - ir-Rabat area: on a *ħitan tas-sejjeħ* along a road connecting Ġħajn Qajjet and Ġnien Fieres (2001) - Wied tal-Ġnejna: il-Ġnien (1992) - Wied il-Hesri (19-6-2006) - Wied il-Luq (*only 1 small patch in a wooded area*) (2004).

GOZO - Wied ir-Riħan (early 1990's).

Phylum: *Filicophyta*

Class: *Filicopsida*

Family: *Hemionitaceae*

3. *Anogramma leptophylla* (L.) Link

MALTA - Il-Maqluba (1991) - Ras il-Pellegrin (7-4-2008) - San Ġwann area: turning point between Wied Ghomor and Wied il-Kbir (early 1990's) - Wied Babu (1991) - Wied il-Fulija (vicinity of Salib tal-Ġholja) (12-2005) - Wied Ġħar Dalam (3-10-2003) - Wied il-Għasel, Wied l-Isperanza, Wied is-Sjir valley system (1992) - Wied Ġanżir (2000) - Wied tal-Kalkara (10-3-2004) - Wied Qirda (1992) - Wied Żnuber (1995).

GOZO - below Fort Chambray (west side) (4-3-2004) - Mgarr ix-Xini (12-1992) - il-Munxar area: Wied tal-Ġhawdxija (30-11-2007) - Ta' Ġenċ area: Fuq tal-Gruwa (18-10-2005) - ix-Xagħra area: Rdum ta' Kilulu, Rdum tas-Surgu, Ġħajn Barrani cliffs and boulder screes (21-3-2004) - iż-Żewwieqa (9-12-2007).

Family: *Aspleniaceae*

4. *Asplenium ceterach* L.

MALTA - Wied Ġħar Dalam (1) (3-10-2003) - Wied il-Għasel area: ta' Sunta l-Ġhawdxija (?) (on terraces at the last valley turn just before the quarry) (12-1992), below ta' Barbamaru (on South-facing valleyside, just before main road bridge) (11-3-2008) - Wied Żembaq (3-10-2003).

GOZO - iż-Żewwieqa (1) (9-12-2007).

The only previous record for Gozo was from Xlendi (Gulia, later cited by Borg).

5. *Asplenium trichomanes* L.

GOZO - Ta' Ġenċ area: Fuq tal-Gruwa (15) (18-10-2005) - iż-Żewwieqa (8) (23-2-2008).

Phylum: Magnoliopsida

Class: Magnoliopsida

Family: *Ranunculaceae*

6. *Clematis cirrhosa* L.

MALTA - il-Bahrija area: Wied il-Mielah (1992) - Il-Buskett area: woodland below ix-Xaghra tal-Bosk (12-2-2008) - Dingli cliffs area: Screes between Rdum tal-Madalena (below Madalena chapel) and il-Wardija; Wied tal-Kappillan (early 1990's) - il-Fawwara (1995) - Ġnien Ġhajj Tuffieħa (1996) - Ġnien iż-Żghir (1992) - Hoffret ir-Rizz (18-3-2004) - l-Imselliet area: scree around ix-Xaghra tat-Tombu and Għar ir-Rajs (26-10-2006) - l-Imġarr area: Triq il-Kbira (leading to il-Bokka ta' Ċerċura) (early 1990's) - l-Imtarfa area: Santa Luċija (16-1-2002) - Marfa peninsula: rocks below il-Minzel ta' Piswella (1-1993) - il-Mellieħa area: Ġnien Inġraw (2000); escarpments between Ġnien Inġraw and Wied tal-Madonna (2000); Ġhajj Żejtuna (early 1990's); between Ras il-Griebeġ and Ġhajj Żejtuna (14-3-2000); Wied il-Ġhajj (2000); Qasam Barrani (2002) - Mġarr area: an escarpment below ix-Xaghra ta' San Martin (vicinity of tal-Palma) (1998) - Misraħ Ġhonoq (4-2002) - Pembroke (early 1990's) - north side of il-Qolla (vicinity of Chadwick Lakes / Wied il-Qliegħa) (14-3-2003) - Ras il-Pellegrin (early 1990's) - screes between is-Salib tal-Ġholja and Wied il-Fulija (early 1990's) - San Ġwann area: Wied Ġhomor (1995) - San Martin (7-1992) - rocks overlooking Triq il-Mistra (5-11-2006) - tal-Virtu (28-5-2008) - Wied Babu (1992) - Wied ta' Biġġemma / il-Ġnien ta' Biġġemma (3-11-2007) - Wied id-Dis (5-4-2000) - Wied tal-Ġnejna: il-Ġnien (1992) - Wied Ġholleħa (1991) - Wied il-Hesri (early 1990's) - Wied il-Hmar area (vicinity of Tas-Santi): il-Port (5-2-2004) - Wied l-Isperanza, Wied il-Għasel valley system (1993) - Wied Moqbol / Wied Brandina (9-10-2002) - Wied ta' Seqła (vicinity of l-Imselliet) (13-4-2002) - Wied Xkora (3-2000) - Wied Żnuber (1995) - iż-Żebbiegħ: rubble walls alongside Triq iż-Żebbiegħ, Triq l-Imġarr (13-4-2002).

GOZO - Mġarr ix-Xini (12-1992) - il-Munxar area: Wied tal-Ġhawdxija (14-11-2007) - Ta' Ċenċ area: Fuq tal-Gruwa (18-10-2005) - ix-Xaghra area: abundant among boulder screes and rubble walls at il-Pergla, Ġhajj Barrani, Rdum tas-Surgu, Rdum ta' Kilulu (21-3-2004) (*possibly the most extensive population in the country, at places dominating continuous stretches of 20m square or more*) - Wied Ilma (below Ġhajj Għabdun hill) (21-10-2006) - Wied is-Sabbara (26-1-2008) - iż-Żewwieħa (9-12-2007).

C. cirrhosa was recorded in the past as: “ **Malta**, qua e la ... **Gozo**, piuttosto rara ” (*Sommier & Caruana Gatto 1915*). Seems to have increased and become frequent, abundant in some areas, probably due to the elimination of grazing herds.

7. *Ranunculus arvensis* L.

MALTA - il-Girgenti (1992) - l-Imtarfa area: fields alongside it-Telgħa ta' Slampa (31-5-2008).

Partial to cultivated fields with clay soils.

8. *Ranunculus bulbosus* subsp. *aleae* (Willkomm) Rouy & Foucault

MALTA - il-Bahrija area: valleybed between il-Qliegħi and it-Tulliera (1992) - il-Bidnija area (21-12-2002) - il-Fiddien (1992), Wied il-Qlejgħa (c. 2001) valley system - Wied il-Fulija (vicinity of is-Salib tal-Ġholja) (12-2005) - Wied Gerżuma (1992) - Wied l-Isperanza, Wied il-Għasel valley system (1993) - Wied il-Hesri (1992) - Wied il-Hmar (vicinity of tas-Santi) (7-3-2008) - Wied il-Luq, Wied tal-Girgenti valley system (1992) - Wied ta' Seqła (vicinity of l-Imselliet) (13-4-2002) - Wied Xkora (3-2000), Wied Hanżir, Wied Qirda, Wied il-Kbir, il-Marsa (1992) valley system.

9. *Ranunculus ficaria* L.

MALTA - Wied Għolliċa (1992) - Wied l-Isperanza, Wied il-Għasel valley system (1993) - Wied il-Luq (1992) - Wied Xkora, Wied Hanzir valley system (3-2000) - Wied Żembaq (3-10-2003).

10. *Ranunculus trichophyllus* Chaix

MALTA - il-Fiddien, Wied il-Qliegħa valley system (late 1990's) - Wied tal-Girgenti (1992)* - Wied tal-Hżejjen (13-4-2002).

Family: *Papaveraceae*

11. *Hypocoum imberbe* Smith

MALTA - Għajn Tuffieħa area: il-Wita tat-Torri (2008); it-Tafal (21-5-2008) - Marfa peninsula: Wied ta' Msid / tal-Merħla (2002); Wied ta' l-Armier (12-3-2008) (*possibly the largest population in the country*).

GOZO - tal-Bardan (5-3-2008) - il-Qala area: il-Gwiedi (19-4-2005) - San Lawrenz area: tal-Foqra (along road down to id-Dwejra) (1995); l-Almagħaġ (20-2-2008) - Santa Luċija area: ta' Klula (5-4-2004).

A rare agrospecies found in fields with shallow soil, among grain and animal fodder crops, often near the coast.

Family: *Urticaceae*

12. *Parietaria lusitanica* L. (**P.1**)

MALTA - H'Attard area: Trejġet ir-Regin (17-3-2008) - Marfa peninsula: Rdum il-Qawwi, rocks below il-Minzel ta' Piswella (25-5-2008) - Ras il-Pellegrin (7-4-2008).

GOZO - il-Munxar area: Wied tal-Għawdxija (30-11-2007) - ix-Xaghra area: ta' Fogħtier / taħt in-niċċa (24-11-2007) - very abundant in boulder screes and old rubble walls at iż-Żewwieq, il-Hawlija, iż-Żebbuġ, tal-Bombli (7-12-2007), up to below il-Wied ta' Rdum (opposite il-Ġebba tal-Halfa) (27-1-2008) (*possibly the largest and most extensive population in the country*).

13. *Urtica pilulifera* L.

MALTA - frequent along roads and country-lanes at Bubaqra, in-Nigret area (2002) - Hal Far area: ta' Rikka (15-3-2005), Triq Hal Far (between iż-Żurriq and tal-Baqqari) (20-12-2002), Wied Moqbol / Wied Brandina (20-3-2004) - Hal Għargħur: Triq iż-Żellieq (5-4-2000)* - Wied Qirda, Wied il-Kbir valley system (1992) - Xrobb l-Għaġin (1) (12-3-2003).

Family: *Juglandaceae*

14. *Juglans regia* L.

MALTA - il-Kunċizzjoni (overlooking Wied il-Hmar and tas-Santi) (27-8-1996) (*These trees have trunks as massive as those of the oaks at Ballut tal-Wardija and could be of great antiquity*) - Ġnien Fieres (late 1990's).

Family: *Aizoaceae*

15. *Mesembryanthemum crystallinum* L.

MALTA - Marsascale: on coast alongside Triq is-Salini (2003) - Pembroke coast (late 1990's) - Tigne (early 1990's).

GOZO - ir-Ramla l-Hamra sand dunes (2) (1995)*; under *Tamarix* trees adjacent to ir-Ramla l-Hamra sandy beach (9-4-2008) - Santa Luċija / il-Kerċem area: along road between ta' Klula up to Wied Sansun (5-4-2004).

Family: *Caryophyllaceae*

16. *Silene fruticosa* L.

GOZO - Mgarr ix-Xini (12-1992).

Family : *Polygonaceae*

17. *Fallopia convovulus* (L.) L.A.Love

MALTA - il-Baħrija area: ta' Namura (30-5-2008) - fields around il-Ballut tal-Wardija (22-5-2008) - ħad-Dingli: is-Sienja (17-6-2008) - Ġnien il-Kbir (28-5-2008) - il-Girgenti area: l-Għajn il-Kbira (11-2003) - il-Mosta: Triq Wied is-Sijr (15-6-2008) - ir-Rabat area: Ġnien Fieres (31-5-2008); ta' Koronja (2003) - San Martin (22-5-2008) - Wied Gerżuma (30-5-2008) - Wied il-Luq (28-5-2008).

Grows in cultivated fields with deep soil.

18. *Persicaria glabra* (Willdenow) M.Gomez

MALTA - Wied il-Ħzejjen (2002).

GOZO - Wied Sara (10-6-2008).

19. *Persicaria lanigera* (R.Brown) Sojak

GOZO - Wied il-Għasri (30-9-2000) - Wied Sara, Wied tal-Grazzja valley system (10-1992).

20. *Persicaria senegalensis*

MALTA - l-Għajn il-Kbira, il-Girgenti valley system (1992) - il-Mosta area: Wied ta' San Pawl tal-Qliegħi, Wied Ħanżira valley system (1999).

Family: *Plumbaginaceae*

21. *Plumbago europaea* L. (P.1)

MALTA - is-Sigġiewi area: Triq l-Imwieġel (11-10-2007); Blat il-Qamar (8-11-2007) - Wied Qannotta (1998) - plane between Wied Qirda and Wied Ħanżir (23-5-2008).

Family: *Brassicaceae*

22. *Cardamine hirsuta* L.

MALTA - il-Buskett: Verdala (late 1990's) - l-Għar ta' San Brinkat (vicinity of Wied Anġlu) (late 1990's) - Wied il-Għasel area: Wied is-Sijr, l-Għadira (2001).
GOZO - il-Munxar area: Wied tal-Għawdxija (30-11-2007).

A frequent weed of potted plant nurseries; very rare in non-anthropogenic habitats, where it grows on well shaded damp rocks.

23. *Lepidium graminifolium* L.

MALTA - ir-Rabat area: il-Fiddien, Wied il-Qliegħa valley system (3-2001); l-Għeriexem, near iċ-Ċimiterju ta' Santa Margerita and Roman Villa, is-Saqqajja, Triq it-Tigrijiet (late 1990's); along uphill road between ir-Rabat and il-Baħrija (late 1990's); Wied ta' Ġnien Hira (late 1990's).

Common in Gozo; hence no records are given.

Grows mainly along roadsides in urban areas and country lanes, rarely in wet valleybeds.

24. *Nasturtium officinale* R.Brown

MALTA - il-Baħrija area: several places including ta' Namura, tas-Sarena, valleybed between il-Qliegħi and tat-Tulliera, Wied il-Mielah (8-1992) - il-Fiddien, Wied il-Qlejgħa valley system (1992) - Ġebel id-Dwejra, Ġnien Hira, il-Qattara, start of Wied il-Hemsija valley system (late 1990's) - l-Imtahleb area: Wied ta' Markozz (1992) - il-Mellieħa area: Ghajn Hadid (14-3-2000) - San Martin (7-1992) - Wied tal-Ġnejna / Wied taċ-Ċercura (1992) - Wied Ghajn Mula (13-4-2002) - Wied tal-Ħmar (vicinity of tas-Santi) (27-8-1996) - Wied il-Luq (1992); at meeting point between Wied il-Luq and Wied tal-Girgenti (1995).

GOZO - id-Dwejra area: il-Qattara (7-1993) - l-Imgarr area: il-Ġnien (early 1990's) - Wied tal-Lunzjata, Fontana valley system (29-7-1994) - Wied tas-Sasis / Wied tal-Petroċilju, Wied il-Għasri valley system (30-9-2000).

25. *Neslia apiculata* Fischer, Mayer & Ave-Lallemont (**P.1**)

GOZO - il-Qala area: ta' Cassar, ta' Simar (plateau overlooking Wied is-Simar) (19-2-2008).

26. *Sinapis arvensis* L.

MALTA - l-Aħrax tal-Mellieħa area: il-Qatgħa ta' Plegg (12-3-2008) - il-Baħrija area: ta' Xafura (overlooking Fomm ir-riħ bay) (c.2001) - Fort Bengħisa area: tal-Ħarrub (2002) - Ghajn Tuffieħa area: it-Tafal (21-5-2008) - il-Mellieħa area: il-Qortin (facing il-Manikata) (31-1-2007); between it-Torri l-Aħmar and *acacia* wood below (13-6-2003); between it-Torri l-Aħmar and Triq Ghajn Tuta (2-9-2004) - on il-Magħtab refuse dump debris (9-11-2003) - Wied ta' Kandja (2000) - Wied is-Sewda (13-8-2007) - Wied Żnuber (13-3-2004).

Common in Gozo; hence no records are given. Infrequent in Malta.

27. *Rapistrum rugosum* (L.) Allioni (**P.1**)

MALTA - Dingli cliffs area: il-Faqqanija quarries (2-6-2008) - il-Girgenti area: Ċens Mota (2-6-2008).

Family: *Malvaceae*

28. *Lavatera trimestris* L.

MALTA - fields between il-Ballut tal-Wardija and Ghajn Istars, Wied tal-Pwales (22-5-2008) - il-Buskett (30-3-2004) - Ġnien il-Kbir (28-5-2008) - Ġnien is-Sultan (31-5-2008) - l-Imtarfa area: Ġebel id-Dwejra (late 1990's) - ir-Ronzija (?) (between tal-Virtu and Wied l-Isqof) (28-5-2008) - Wied il-Ħmar (vicinity of Tas-Santi) (c. 2000) - Wied ir-Rum (1994).

Family: *Euphorbiaceae*

29. *Andrachne telephioides* L.

MALTA - l-Aħrax tal-Mellieha area: fields near it-Telġha tal-Aħrax (12-3-2008) - ħ'Attard (17-3-2008) - Bubaqra area: il-Bur ta' l-Imtoli (24-6-2003) - around Ġebel Ciantar quarries (2-6-2008) - Ġnien il-Far hamlet (overlooking il-Buskett) (18-2-2008) - Ġnien Ingraw (early 1990's) - ta' Glidi (between l-Imnajdra Temple and it-Torri tal-Hamrija) (14-2-2008) - l-Imdawwra (overlooking Wied il-Bassasa) (18-10-2007) - l-Imġarr area: il-Ħawlija (7-3-2008) - frequent at il-Kappara, San Ġwann tal-Għargħar area (1991), including Wied Għolliqqa (1991)* - il-Mosta area: Triq il-Beżbiżija (2008) - ir-Rabat area: Triq il-Buskett (early 1990's) - San Martin (7-1992).

Usually found between street pavement cobblestones in urban areas and country lanes, occasionally in cultivated fields, rarely on rocks.

30. *Euphorbia aleppica* L. (**P.1**)

MALTA - Dingli cliffs area: in fields between Bejtet il-Fenek and ta' Sabbghat (9-6-2008).

Family: *Crassulaceae*

31. *Sedum caespitosum* (Cavanilles) DC. (**P.1**)

MALTA - il-Baħrija area: Wied il-Mielah, Ras ir-Raheb clifftops (overlooking Fomm ir-Riħ) (30-5-2008) - l-Aħrax tal-Mellieha area: il-Madonna ta' l-Aħrax (19-4-2008) - ix-Xagħra ta' Lawrenti (overlooking Buskett) (18-2-2008).

GOZO - taċ-Ċawl coastal rocks (17-4-2008) - il-Munxar area: Ras il-Fekruna (10-4-2008); karstland between il-Munxar and Wied tal-Għawdxija (10-4-2008) - ta' Sannat area: il-Qortin / Saguna cliffs (11-1-2008) - tal-Bardan (5-3-2008).

32. *Sedum litoreum* Gussone

MALTA - l-Għallis coastline (early 1990's) - Wied id-Dis (5-4-2000).

GOZO - taċ-Ċawl coastal rocks (17-4-2008).

33. *Sedum stellatum* L. (**P.1**)

MALTA - Wied il-Għasel area: rocks close to the meeting point of Wied is-Sijr and Wied il-Għasel (11-3-2008).

Family: *Rosaceae*

34. *Potentilla reptans* L.

MALTA - il-Bahrija area: valleybed between tat-Tulliera and il-Qliegħi (1992) - il-Fiddien (c.2001) - Ġnien il-Kbir (1992) - l-Imtahleb area: il-Bruka (1992) - ir-Rabat area: l-Gheriexem (late 1990's) - San Martin (7-1992) - Wied tal-Ġnejna / Wied tač-Čerčura (2-1992) - Wied Gerżuma (1992) - Wied Hażrun (1992) - Wied l-Isperanza, Wied il-Għasel valley system (1993) - Wied il-Hesri (1992) - Wied il-Luq, Wied tal-Girgenti, Triq tal-Girgenti valley system (*possibly the largest population in the country*) (1992) - Wied Qirda, Wied il-Kbir, il-Marsa valley system (1992).

GOZO - Daħlet Qorrot (2-1993) - in a semi-permanent waterhole in the interior of Mgarr ix-Xini (12-2005) - Wied ir-Riħan (24-4-2003).

35. *Rosa sempervirens* L.

MALTA - il-Girgenti area: scree around Inquisitor's Palace (late 1990's) - is-Salib tal-Għolġa area: scree overlooking Wied il-Fulġa (11-2005) - San Ġwann area: Wied Ġhomor (1995) - Wied Anġlu (early 1990's) - Wied Hażrun (1992).

Family: *Fabaceae*

36. *Anagyris foetida* L. (**P.1**)

MALTA - Ġnien il-Far (overlooking Buskett) (25-3-2008).

37. *Astragalus sesameus* L.

MALTA - Laroka plateau (overlooking Buskett) (12-2-2008) - next to l-Imtahleb church (1) (5-4-2003) - in-Nigret area (South Malta): ix-Xaġħra ta' Sur Anġla karstland, then occurring intermittently downhill to il-Munqar (8-4-2003) - Ras il-Pellegrin (7-4-2008).

GOZO - ič-Čittadella: St. John's Demibastion (17-2-2004) - ta' Ġordan hilltop (20-3-2008) - in-Nadur area: ix-Xaġħra tat-Torri ta' Sopu (overlooking Rdum il-Kbir) (23-4-2003) - ta' Sannat area: il-Qortin / Saguna cliffs (5-3-2008).

Past literature records this species as "abbastanza frequente ...Gozo, in molti luoghi" (Sommier & Caruana Gatto 1915) "frequent" (Haslam et. al. 1977). For this reason, records for this species were not kept by the author prior to the year 2003. It was then noticed by Mr. E. Lanfranco to have declined dramatically and to have become infrequent. It thus became advisable to record localities where it occurs.

38. *Coronilla valentina* L.

MALTA - between il-Ballut tal-Wardija and San Martin (7-1992) - Dingli cliffs area: Rdum ta' Hurrieqa, il-Wardija (1995) - l-Imtahleb area: between Għar Ilma and ta' Liska hamlet (early 1990's) - Rdum Majjiesa (5-2000) - Wied Babu area: Wied Babu, including ix-Xaqlib tax-Xrika, Salib il-Wied, near il-Blata ta' Qančula (1991); Taħt il-Munqar (3-2000) - rocky terraces overlooking Wied Babu (below il-Hotba) (3-2000) - Wied Anġlu (early 1990's) - Wied il-Bassasa (in il-Barriera tal-Boqq) (3-2000) - Wied Qirda (1992).

GOZO - in-Nadur area : Ta' Hida (?) (a scree on the West side) (27-4-1998) - Ta' Čenč area: ta' Čenč cliff-edge (1992) - ix-Xaġħra area: il-Pergla ž-Žgħira / il-Pergla ta' Majsi (21-11-2006); is-Sisien (point on the perimeter of il-Qortin plateau refuse dump facing Marsalforn) (21-3-2004).

39. *Hymenocarpus circinnatus* (L.) Savi

GOZO - ta' Sannat area: il-Qortin / Saguna cliffs (5-3-2008).

40. *Lathyrus cicera* L. (P.1)

MALTA - l-Aħrax tal-Mellieħa area: ix-Xewkija (6) (12-3-2008) - rocky terraces overlooking Wied Babu (below il-Ħotba) (16-1-2008) - Wied il-Bassasa (3-2000) - Wied Mejxu (1995) - karstland between ix-Xemxija heights and il-Mizieb woodland (5) (28-1-2007).

41. *Medicago lupulina* L.

MALTA - Laroka plateau (overlooking il-Buskett) (4-2008) - Mgarr area: ix-Xagħra taż-Żingier (3-2007) - il-Wardija area: behind Palazzo Gauci (25-4-2007) - Wied il-Għasel area: between il-Knisja tal-Għar and turning pint to Misraħ Ġhonoq (4-2002) - ix-Xagħra tat-Tombu (near l-Imselliet school) (13-4-2002).

M.lupulina was recorded in the past as: “ **Malta e Gozo, commune !** ” (*Sommier & Caruana Gatto 1915*); “common” (*Haslam et al. 1977*). Seems to have declined dramatically.

42. *Medicago marina* L.

MALTA - ir-Ramla tal-Mellieħa (3) (early 1990's)* - ir-Ramla tal-Mixquqa / ir-Ramla ta' Snien / Golden Bay (1991).

GOZO - ir-Ramla l-Ħamra (1992) (*the largest surviving population*).

43. *Medicago monspeliaca* (L.) Trautvetter (P.1)

MALTA - l-Aħrax tal-Mellieħa area: il-Qatgħa ta' Pleġġ (12-3-2008) - Ġnien il-Far (overlooking il-Buskett) (25-3-2008) - il-Mistra area: ix-Xagħra tal-Qortin (12-3-2003) - ta' Glidi (between Mnajdra temple and it-Torri tal-Ħamrija) (14-2-2008) - Ras il-Pellegrin (7-4-2008) - slopes overlooking Wied Babu, below il-Ħotba (16-1-2008) - Wied il-Ħesri (11-10-2007) - iż-Żebbiegħ (13-4-2002).

GOZO - ta' Għammar hill (20-3-2008) - ta' Ġordan hill (20-3-2008) (*possibly the largest Gozo population*) - il-Qala area: il-Ħotba (plateau overlooking Triq iċ-Ċawl downhill country road) (19-2-2008); ta' Cassar, ta' Simar (plateau overlooking Wied is-Simar) (19-2-2008); ta' Rdum clays (opposite il-Ġebbla tal-Ħalfa) (11-4-2008) - iż-Żewwieqa (11-4-2008).

44. *Ononis ornithopodoides* L. (P.1)

MALTA - il-Buskett area: Verdala (14-1-2008) - il-Mellieħa area: at the turning point between Wied tal-Madonna and Għajn Żejtuna (21-1-2008) - in a disused quarry at Wied Magħlaq (16-1-2008) - between ix-Xemxija heights and il-Mizieb woodland (28-1-2008).

GOZO - ix-Xagħra area: tal-Gabdol (on perimeter of il-Qortin refuse dump, overlooking il-Pergla) (12-2007) - very abundant on boulders at iż-Żewwieqa, il-Ħawlija, iż-Żebbuġ, tal-Bombli (7-12-2007) up to the scree at the mouth of Wied ta' Rdum (opposite il-Ġebbla tal-Ħalfa) (27-1-2008) (*possibly the largest and most extensive population in the country*).

45. *Trifolium fragiferum* L.

MALTA - l-Imtarfa area: it-Telgħa ta' Slampa (early 1990's) - Wied ta' l-Imselliet (13-4-2002) - Wied il-Qlejgħa (c.2001).

GOZO - id-Dwejra area: Wied tal-Port (26-3-2003) - Ghajn Għabdun (21-10-2006) - il-Kerċem area: ix-Xejriet (hill opposite facing Ghajn Għabdun) (12-6-2008) - Wied Marsalforn (10-1992) - Wied is-Sabbara (26-1-2008) - Wied tas-Sasis, Wied il-Għasri valley system (30-9-2000) - Wied ta' Xhajma (5-4-2006).

46. *Trifolium tomentosum* L.

MALTA - l-Aħrax tal-Mellieħa area: is-Sur ta' l-Aħrax (7-6-2008) - Dingli cliffs area: Rdum ta' Għar Bittija (16-6-2008) - around Gebel Ciantar quarries (2-6-2008) - is-Salib tal-Għolja area: l-Imsaqqa (2-6-2008) - Wied Qirda (23-5-2008).

GOZO - ix-Xlendi valley (c.2004).

T. tomentosum was recorded in the past as: "**Malta, Gozo e Comino, comune !**" (*Sommier & Caruana Gatto 1915*); "**frequent**" (*Haslam et al. 1977*) and was as common as *Trifolium resupinatum* L. until the 1960's (*E. Lanfranco, pers.com.*). Hence no records were kept during the 1990's, until the author realised that it was no longer as common as past records indicate. Seems to have declined dramatically and is now infrequent.

47. *Vicia tenuissima* (Bieberstein) Schinz et Thellung (P.1)

MALTA - Marfa peninsula: Ghajn Tuta (25-5-2008) - Wied ta' Fomm ir-Riħ (7-4-2008) - Wied Gerżuma (30-5-2008) - Wied l-Isperanza (on a valleybed boulder) (13-5-2008).

Partial to clay soils.

Family: *Lythraceae*

48. *Lythrum junceum* Banks & Solander

MALTA - il-Baħrija area: several places including ta' Namura, valleybed between tat-Tulliera and il-Qliegħi, Wied il-Mielah (1992) - clay terraces between il-Ballut tal-Wardija and Ghajn Istas, Wied tal-Pwales (early 1990's) - il-Fiddien, Wied il-Qlejgħa (1992), il-Qlejgħa l-Kbira (14-3-2003), Wied ta' l-Armla (31-5-2008) valley system - Ġnien Hira (late 1990's) - Ghajn Tuffieħa area: clay slopes overlooking ir-Ramla ta' Ghajn Tuffieħa (1992) - l-Imtahleb area: Rdum tal-Qaws (overlooking tal-Gagħwija) (1995); Wied ir-Rummien (1992); Rdum tas-Sarg, Rdum tal-Vigarju, Wied tal-Hut, Wied ta' Ġordajna (1995) - l-Imtarfa area: it-Telgħa ta' Slampa (early 1990's) - Rdum Depiro (1995) - San Martin (7-1992) - along Triq il-Wardija (25-4-2007) - Wied l-Arkata (vicinity of il-Bidnija) (21-12-2002), Wied Ghajn Mula, Wied tal-Hzejjen, Wied ta' l-Imselliet valley system (13-4-2002) - Wied tal-Ġnejna / Wied tač-Čerčura (1992) - Wied Gerżuma (1992) - Wied tal-Halqun, Wied ta' Fomm ir-Riħ valley system (7-4-2008) - Wied l-Isperanza, Wied il-Għasel valley system (1993) - Wied tal-Mistra (early 1990's).

Family: *Myrtaceae*

49. *Myrtus communis* L.

MALTA - il-Ballut tal-Wardija (1) (early 1990's) - il-Girgenti, including 1 large specimen along Triq il-Girgenti (1992) - l-Imtarfa area: Santa Luċija (1) (16-1-2002) - il-Mellieħa area: Ġnien Ingraw (early 1990's) - is-Salib tal-Għolja area: scree below ta' San Lawrenz (1992) - San Martin (7-1992) - Wied Gerżuma (1992) -

Wied Hanzira (parallel to Wied Qirda) (1992) - ix-Xaghra ta' l-Isqof (overlooking Ġnien il-Kbir) (1) (1992).

Family: *Zygophyllaceae*

50. *Fagonia cretica* L.

MALTA - Il-Ġnejna area: il-Qarraba (1992); alongside Triq il-Ġnejna (close to ir-Ramla tal-Ġnejna) (1992); il-Gudja (facing Wied il-Halqun) (7-4-2008).

51. *Tribulus terrestris* L.

MALTA - area between h'Attard and Ta' Qali: Wied il-Hemsija (17-5-2008) - il-Bahrija area: near the playing field (1992)* (*the largest specimen ever observed by the author: more than 1m across*) - Birżebbuġa area: St. George's Bay (1992) - Marfa peninsula: l-Armier (early 1990's) - il-Mellieħa area (1992), including Triq il-Wied (near Ġnien Ingraw)* (6-10-2006) - il-Mosta (early 1990's) - Hal Safi (21-8-2007) - is-Siġġiewi area: near Dar il-Providenza (16-8-2007); Wied il-Hesri (20-8-2004) - Valletta, Floriana, Pieta area (1992) - Wied il-Qoton (21-8-2007).

GOZO - fields behind ir-Ramla l-Hamra sand dunes (8-1992).

Seems to be increasing as its preferred habitat, polluted dusty places, increases.

Family: *Polygalaceae*

52. *Polygala monspeliaca* L.

MALTA - Ġnien il-Far (overlooking il-Buskett) (25-3-2008) - il-Mellieħa area: Wied Hanzira (2002) - Mgarr area: ix-Xaghra taż-Żingier (7-3-2008) - karstland below Selmun, adjacent to il-Mistra (late 1990's) - Wied il-Bassasa (3-2000) - frequent on karstland stretches between ix-Xaghra tal-Borghom (overlooking l-Imtahleb), across to Wied Rini and Pupiruwa (10-4-2002) - ix-Xaghra tat-Tombu (near l-Imselliet school) (13-4-2002).

GOZO - il-Qala area: Wied ta' Rdum (19-4-2008).

Family: *Apiaceae*

53. *Apium nodiflorum* (L.) Lagasca

MALTA - h'Attard area: Wied ta' l-Irmiedi (17-5-2008), Wied il-Hemsija (17-3-2008) - il-Bahrija area: several places including ta' Namura, is-Sarena, valleybed between il-Qliegħi and tat-Tulliera, Wied il-Mielah (1992) - il-Fiddien, Wied il-Qlejgħa (1992) valley system - Ġebel id-Dwejra, Ġnien Hira, il-Qattara, start of Wied il-Hemsija valley system (late 1990's) - Ġnien il-Kbir, Ġnien iż-Żgħir, Wied ta' l-Isqof valley system (1992) - Ġnien is-Sultan (31-5-2008) - San Martin (7-1992) - Wied tal-Ġnejna / Wied taċ-Ċerċura (1992) - Wied Ġhajn Mula (13-4-2002) - Wied Hażrun (1992) - Wied il-Hmar (vicinity of tas-Santi) (27-8-1996) - Wied il-Kbir (23-5-2008) (*flourished in a pool of run-off from a recently opened mushroom farm*) - Wied il-Luq, Wied tal-Girgenti valley system (1992).

GOZO - id-Dwejra area: il-Qattara (7-1993) - Ġhajn Għabdun (21-10-2006) - Hondoq ir-Rummien area: ta' Għaroba (1997) - l-Imgarr area: il-Ġnien (early 1990's) - Wied tal-Ġhajjun (between ix-Xaghra and in-Nuffara hill) (5-4-2006) - Wied tal-Lunzjata, Fontana (including Ġhajn Tuta, Ġhajn il-Kbira, wara l-Biċċerija) Wied tax-Xlendi / Wied ta' l-Ilma valley system (29-7-1994) - Wied ta' San Blas (early 1990's) - Wied Sara, Wied

tal-Grazzja, Wied ta' Marsalforn valley system (10-1992) - Wied tas-Sasis / Wied tal-Petročilju, Wied il-Għasri valley system (30-9-2000).

Increasing and now the dominant species in most permanent watercourses due to soaring levels of nitrogenous pollution and anthropogenic disturbance. Often takes over completely after valleybeds are bulldozed.

54. *Bupleurum lancifolium* Hornemann

MALTA - fields behind Ġebel Ciantar quarries (2-6-2008) - Ġnien il-Kbir (28-5-2008) - Ġnien il-Far (vicinity of il-Buskett) (1) (25-3-2008) - il-Mellieħa area: terraces between it-Telgħa ta' Selmun and Wied il-Miżieb (27-4-2005) - l-Imġarr area: l-Iskorvit (late 1990's) - Wied Gerżuma (30-5-2008) - Wied Qirda (2) (1992) - iż-Żellieqat (overlooking Wied iż-Żurrieq) (16-1-2008).

GOZO - il-Qala area: il-Gwiedi (19-2-2008) - Ix-Xagħra area: fields around il-Qortin refuse dump (19-9-2007).

B. lancifolium was recorded in the past as: “ **Malta**, non raro, ed in alcuni luoghi abbondante! ” (Sommier & Caruana Gatto 1915); “ locally frequent ” (Haslam et al. 1977). For this reason, records were not usually kept prior to the year 2000. It was then noted by Mr. E. Lanfranco to have declined and was now infrequent. It thus became advisable to record localities where it occurs.

55. *Eryngium maritimum* L.

MALTA - Marfa peninsula: ir-Ramla tal-Bir (8-1992)*; ir-Ramla tat-Torri (8-1992) - ir-Ramla tal-Mixquqa / ir-Ramla ta' Snien / Golden Bay (2) (1991)*.

GOZO - ir-Ramla l-Hamra (8-1992) - ix-Xatt l-Aħmar (2) (10-1992).

56. *Oenanthe globulosa* L.

MALTA - il-Fiddien, Wied il-Qlejgħa / Chadwick lakes, il-Qliegħa l-Kbira valley system (3-2001) - Mgarr area: Wied il-Hmar (vicinity of tas-Santi) (7-3-2008) - Wied l-Isperanza, Wied il-Għasel valley system (2000).

O. globulosa was recorded in the past as: “ frequente ” (Sommier & Caruana Gatto 1915); “ frequent ” (Haslam et al. 1977); and was found in all permanent watercourses until the 1960's (E. Lanfranco pers.com). Seems to have declined dramatically.

57. *Pseudorlaya pumila* (L.) Grande

GOZO - ir-Ramla l-Hamra (6) (1995)*.

Not seen again after the above mentioned date; may be extinct.

Family: *Rhamnaceae*

58. *Zizyphus zizyphus* (L.) Meikle

MALTA - l-Imtahleb area: Wied ta' Għar Ilma (early 1990's) - Wied ta' Bingemma / il-Ġnien ta' Bingemma (3-11-2007).

GOZO - Dahlet Qorrot (2-1993) - ta' Għammar hill flanks (9-11-2006).

Family: *Sambucaceae*

59. *Sambucus ebulus* L.

MALTA - Ġnien il-Kbir, Ġnien iż-Żgħir (vicinity of Wied ta' l-Isqof) (1992) - ir-Rabat area: Ġnien Fieres (2001).

GOZO - Fontana area: Wara l-Biċċerija, ir-razzett tal-Għajn il-Kbira (29-7-1994).

60. *Sambucus nigra* L.

MALTA: il-Ġnejna valley: il-Ġnien (1) (2-1992) - Ġnien Għajn Tuffieħa (1) (13-2-1995) - l-Imtarfa area: Sant Alessio (2) (6-5-1996) - Wied il-Ħesri (1) (early 1990's) - Wied Liemu (1) (late 1990's) - iż-Żejtun area: Triq Marsaxlokk (1) (10-2003).

GOZO - Fontana area: Wied ta' Siekel (1) (29-7-1994) - l-Għasri : Triq il-Fanal (1) (6-12-1996); Wied tas-Sasis / Wied tal-Petroċilju (1) (18-2-2002) - ix-Xagħra: at a corner between Triq it-Tigrija and Triq Marsalforn (1) (late 1990's); il-Pergla (21-3-2004) - iż-Żellieqa (overlooking ix-Xlendi) (2) (1994).

Unlikely to be indigenous. Formerly much cultivated for its medicinal properties. Always found near old farmsteads.

Family: *Valerianaceae*

61. *Centranthus calcitrapae* (L.) Dufresne

MALTA - l-Aħrax tal-Mellieħa area: l-Aħrax ta' Ġewwa (*unusually growing along a roadside*) (19-4-2008) - Marfa Peninsula: boulder screes between il-Minzel ta' Ruman / il-Minzel tar-Rixtellu and ta' Qassisu (4-2007); Rđum il-Qawwi, rocks below il-Minzel ta' Pisswella (25-5-2008) - Ras il-Pellegrin (7-4-2008) - Wied Żnuber (27-2-2004) - Wied il-Għasel (11-3-2008).

GOZO - Mgarr ix-Xini (12-2005) - ix-Xagħra area: Għajn Barrani, Rđum tas-Surgu, Rđum ta' Kilulu (21-3-2004) - Rđum il-Kbir (vicinity of San Blas) (2003) - iż-Żewwieqa (23-2-2008).

62. *Centranthus ruber* (L.) DC.

MALTA - ħ'Attard: on old walls near Triq Sant Antnin (17-3-2008).

GOZO - on an escarpment at Wied tal-Għattuq (22-11-2007).

Frequently cultivated as a pot plant in the past. It is thus difficult to ascertain whether the wild plants found are truly indigenous or long naturalized. However the Gozo population may be autochthonous since it is growing in its typical phytocoenosis: a limestone escarpment, among native garrigue vegetation.

Family: *Convolvulaceae*

63. *Calystegia sepium* (L.) R.Brown

MALTA - in fruit orchards and among thickets at San Martin (3-2000).

GOZO - among a stand of *Arundo donax* behind ir-Ramla l-Ħamra sand dunes (19-7-2006).

64. *Calystegia silvatica* (Kitaibel) Grisebach

MALTA - ħ'Attard area: in a *Bougainvillea* hedge at San Anton gardens (17-3-2008); Wied ta' l-Irmiedi (17-5-2008); Wied il-Hemsija, Wied ta' Ċampira valley system (17-3-2008) - in fruit orchards and among reeds at Ġnien il-Kbir (1992) - Wied il-Luq (*Confined to il-Buskett area in 1992; spread to Girgenti borehole by 28-5-2008*) - Wied ta' l-Imsida (1992).

GOZO - l-Ghasri area: Wied tas-Sasis / Wied tal-Petroċilju (10-6-2008).

65. *Calystegia x lucana* (Tenore) G. Don

MALTA - in orchards and among reeds at Ġnien il-Kbir (1992) - in orchards and among thickets at San Martin (3-2000) - Wied l-Isperanza, Wied il-Ghasel valley system (2001) (*Only 2 specimens were seen in 2001. But by 12-11-2006, much of the valleybed was colonized, climbing shrubs like Rubus ulmifolius and Ricinis communis*) - Wied il-Luq (1992) (*Confined to il-Buskett area in 1992; spread as far as Girgenti borehole by 28-5-2008*).

Calystegia sp. pl. were recorded in the past as: "**Malta**, raro, trovato soltanto a Ġnien il Gbir! e al Boschetto (Borg) " (*Sommier & Caruana Gatto 1915*); "*endangered*" (*Lanfranco 1989*). They seem to be currently increasing and spreading rapidly. This may be due to an increase in suitable habitat: well shaded places with hedges and reeds for twining climbing stems. Most valleybeds are now dominated by extensive dense stands of *Arundo donax*, since such reeds are rarely harvested nowadays. Dense thickets of *Rubus ulmifolius* are also common since firewood is no longer collected and grazing has greatly diminished. *Ricinus communis*, an alien shrub with tall stems, has now infested most valleybeds too. Also, today farmers have much less time for weeding orchards.

Family: *Boraginaceae*

66. *Echium sabulicola* Pomel

GOZO - abundant on cliff-tops between tal-Bardan, il-Qortin / Saguna cliffs (ta' Sannat area), Ta' Ċenċ area to Wied is-Sabbara (1993), sometimes forming extensive meadows.

Family: *Lamiaceae*

67. *Ballota nigra* L.

MALTA - il-Bahrija area (1992) - Birkirkara area: alongside Triq Mannerino (1992)*; an unbuilt plot alongside Triq il-Kan. Indri Galea (2006) - Blata l-Bajda: an unbuilt plot alongside Triq l-Ispartani (1991)* - Ġnien Ghajn Tuffieha (14-5-1996) - Gwardamangia: near St. Luke's hospital entrance (1992)*; behind Junior College Upper Lyceum (1992)* - Ghajn Hamiem watercourse (vicinity of l-Imtarfa station) (late 1990's) - l-Imtahleb area: il-Frajna (1992) - il-Pieta: outside Ta' Braxia Cemetery back gate (late 1990's) - San Ġwann area: alongside Vjal ir-Riħan (15-6-2008) - Wied Balluta (1991) - Wied tal-Buskett, Wied il-Luq, Wied tal-Girgenti, Ghajn il-Kbira valley system, also near Girgenti borehole (1992) - Wied Qirda, Wied il-Kbir valley system (1992) - University of Malta campus (1991).

GOZO - Dahlet Qorrot (2-1993) - Fontana area: Wara l-Biċċerija (29-7-1994) - l-Ghasri: a lane branching from Triq il-Fanal (2-2002)* - Hondoq ir-Rummien area: ta' Gharoba (1997) - l-Imġarr (early 1990's) - along uphill road from l-Imġarr to in-Nadur (19-7-2006) - il-Pergla (5-1994) - under olive trees along road between ta' Sannat and taċ-Ċawla (ir-Rabat area) (11-1-2008) - Wied tal-Ghattuq (22-11-2007) - Wied ta' Marsalforn (1) (16-10-2002) - along Wied ir-Riħan road (20-6-2005) - Wied tax-Xlendi (1994) - ix-Xagħra area: Ghajn Xejba (late 1990's) - ix-Xewkija area: Wied Hanzira (1993).

68. *Melissa officinalis* L.

MALTA - il-Bahrija area: in an citrus fruit orchard at ta' Żinzla (1-11-1996) * - il-Mellieha area: Għajn Hadid (14-3-2000).

GOZO - abundant along the watercourse at Wied tal-Ghattuq, Wied tal-Għażien (22-11-2007).

Unlikely to be indigenous; probably an archeophyte. Formerly much cultivated by apiarists as crushed leaves were used to attract honeybee swarms into pottery jars.

69. *Phlomis fruticosa* L.

MALTA - il-Girgenti area: tal-Palazz (12-2005) - Għar Lapsi area: Wied ta' l-Ilsna, ix-Xagħra ta' Għar Lapsi (14-2-2008) - Hal Qormi area: Wied il-Kbir (early 1990's) - Hoffret ir-Rizz and surrounding karstland (18-3-2004) - il-Mellieha area: Ġnien Ingraw (early 1990's); Għajn Żejtuna (early 1990's) - Wied Anġlu (early 1990's) - Wied il-Faham (early 1990's) - Wied il-Għasel (1993) - Wied il-Hesri (1992) - Wied il-Maghlaq (early 1990's) - Wied Qirda (1) (1992) - ix-Xagħra ta' Bingham (plateau opposite PaleoChristian tomb necropolis) (3-11-2007) - ix-Xagħra ta' Żingier (overlooking Ġnien Għajn Tuffieha) (3-2007).

70. *Rosmarinus officinalis* L.

MALTA - il-Buskett area: Verdala (late 1990's) - Had-Dingli area: tal-Wata; Hal Tartarni (late 1990's) - Dingli cliffs area (*possibly the largest population in the country*): abundant on boulder scree and escarpments below Madalena chapel: Rdum ta' Għajn Gidem, Rdum tal-Madliena, Rdum Dikkiena (early 1990's); also abundant on the karstic plateau around Madalena Chapel and Bejt il-Fenek, including il-Munxar, tan-Newma, il-Hotba, il-Faqqanija (early 1990's) - il-Girgenti area: escarpments between il-Girgenti and Inquisitor's Palace (early 1990's) - l-Għallis area: Xagħret Frankin, l-Għallis ta' Ġewwa, il-Ghoqod, ix-Xagħra tal-Baħar (7-1993) - Għajn Żejtuna (early 1990's) - Għar il-Kbir area: rocky slopes between Clapham Junction cart ruts and Wied ix-Xagħri (1) (late 1990's); rocky stretches between Għar il-Kbir, ta' Sabbgħat and il-Faqqanija quarries (late 1990's) - l-Imġarr area: id-Daħar (c.2003) - rocks across the road from l-Imselliet school (26-10-2006) - l-Imtaħleb area: Għar Ilma (early 1990's) - between il-Miżieb wood and Wied tal-Kalkara (26-5-2005) - ir-Rabat area: ix-Xagħra tas-Sintini (vicinity of ta' Koronja) (17-3-2004) - is-Salib tal-Għolja area: l-Imsaqqa (late 1990's) - San Ġwann area: Wied Ghomor (1995) - San Martin (7-1992) (P?) - Wied Babu (1991) - rocky terraces overlooking Wied Babu (below il-Hotba) (3-2000) - Wied Balluta (1991) - Wied il-Bassasa (3-2000) - Wied Gerżuma (1992) - Wied Għar Dalam (3-10-2003) - Wied Hażrun (1992) - Wied Qirda (1992) - Wied Rini (1992) - Wied Xkora (3-2000) - Wied Żnuber (3) (1995) - ix-Xagħra tal-Isqof (overlooking Ġnien il-Kbir) (8-1992) - iż-Żellieqat (overlooking Wied iż-Żurrieq) (16-1-2008).

GOZO - Iż-Żewwieqa area: iż-Żebbuġ (1) (23-2-2008) (*The only autochthonous Gozo population known to the author*).

71. *Stachys ocymastrum* (L.) Briquet (P.1)

GOZO - ta' Għammar hill clay flanks (20-3-2008).

72. *Teucrium scordium* L.

MALTA - il-Bahrija area: valleybed between il-Qliegħi and tat-Tulliera (1992) *.

Population suddenly reduced to 1 clump in 1996, then completely wiped out in the late 1990's when a mass of dead Arundo donax reeds heaped up in the valleybed, smothering watercourse vegetation. Now extinct in the

wild. The author has conserved the species by cultivating it in his own private garden from seeds and rhizome cuttings collected at il-Bahrija.

73. *Vitex agnus-castus* L.

MALTA - il-Bahrija area: Ġnien in-Niegra (1992) - Ghajn Żejtuna (1) (early 1990's) - l-Imtahleb area: Wied ta' Għar Ilma (1) (early 1990's)* - Rđum Majjiesa (1) (5-2000) (shown to the author by Eman Calleja) - Wied tal-Ġnejna / Wied taċ-Ċerċura (1992).

GOZO - id-Dwejra area: valleybed between il-Qattara and il-Qawra / Inland Sea (7-1993); Wied tal-Port (1) (26-3-2003) - l-Imġarr area: Taht ta' l-Erbgħa / ta' Setgħer (7-1992) - Mġarr ix-Xini (12-1992) - il-Qala area: Hondoq ir-Rummien area, including ta' Għaroba (1997); Wied tal-Marġa (1997); Wied ta' Rđum (18-4-2005) - ir-Ramla l-Hamra, Wied ta-Ramla (8-1992) - San Blas (1993) - Wied Biljun (late 1990's) - Wied il-Lunzjata, Fontana valley system (29-7-1994) - Wied ta' Marsalforn, Wied tal-Grazzja (10-1992), Wied tal-Għażien, Wied tal-Għattuq (22-11-2007) valley system - Wied ta' Xhajma (5-4-2006) - ix-Xagħra area: il-Pergla, Ghajn Barrani, Rđum tas-Surgu, Rđum ta' Kilulu (5-1994); Rđum ta' Sekek (21-3-2004) - iż-Żewwieqa (including 1 hypochromatic specimen) (late 1990's).

COMINO - Santa Marija bay (9-1992).

Family: *Solanaceae*

74. *Lycium intricatum* Boissier

MALTA - l-Ahrax tal-Mellieħa area: Rđum il-Hmar, l-Ahrax ta' Ġewwa, il-Qatgħa ta' Plegg, tax-Xilep (12-3-2008) - Had-Dingli area: Hal Tartarni (late 1990's) - il-Magħtab (late 1990's) - il-Mellieħa area: Ġnien Ingraw (7) (2000) - il-Wardija area: alongside Triq il-Wardija (25-4-2007).

GOZO - ta' Cassia (between id-Dabrani and is-Salvatur hills) (13-3-2003) - flanks of il-Qolla s-Safra (11-3-2003).

Family: *Scrophulariaceae*

75. *Kickxia elatine* (L.) Dumortier (P.1)

GOZO - id-Dwejra area: Wied ta' Kerrex, Wied ta' l-Abatija (12-6-2008) - abundant at l-Ehbiel (fields along highway between Tal-Hniena, ix-Xewkija, and it-Torri, Ghajnsielem) (10-6-2008) - Ghajnsielem area: fields along Triq il-Qieghħan (27-6-2008) - il-Kerċem area: ix-Xejriet (hill opposite facing Ghajn Għabdun) (12-6-2008) - fields alongside Triq l-Għarb (12-6-2008) - Wied Marsalforn (4-6-2008).

Frequent in Gozo; rare in Malta. Usually grows in wheat fields, flourishing after the harvest, during early Summer.

76. *Kickxia commutata* (Bernhardt) Fritsch

MALTA - Wied Babu (1992) - Wied Qirda (1992).

Unlike other *Kickxia* present in the Maltese islands, *K.commutata* does not grow in cultivated fields but in dry valleybeds.

Recorded in the past as: " abbastanza frequente " (Sommier & Caruana Gatto 1915); " locally frequent " (Haslam et al. 1977). In the author's experience, it is now much rarer than these literature references indicate.

77. *Linaria pseudolaxiflora* Lojacono (P.1)

GOZO - abundant on clifftops along il-Qortin / Saguna cliffs (ta' Sannat area), tal-Bardan, Sanap cliffs (il-Munxar area) (5-3-2008) (possibly the largest population in the country) - ta' Ghammar hilltop (20-3-2008) - ta' Ġordan hilltop (20-3-2008).

Frequent in Gozo; very rare in Malta.

78. *Veronica anagallis-aquatica* L.

MALTA - il-Bahrija area: several places including ta' Sarena, valleybed between il-Qliegħi and tat-Tulliera, Wied il-Mielah (8-1992) - il-Fiddien, Wied il-Qlejgha / Chadwick lakes valley system (1992) - Wied tal-Ġnejna / Wied taċ-Ċerċura (1992) - Wied Gerżuma (1992) - Wied il-Ħmar (vicinity of Tas-Santi) (27-8-1996) - Wied ta' l-Isqof (1992) - Wied il-Kbir (23-5-2008) (flourished in a pool of run-off from a recently opened mushroom farm) - Wied il-Luq, Wied tal-Girgenti valley system (1992).

GOZO - Hondoq ir-Rummien area: ta' Gharoba (1997) - l-Imġarr area: il-Ġnien (early 1990's) - Wied il-Għasri (30-9-2000) - Wied ta' San Blas (early 1990's).

Family: *Orobanchaceae*

79. *Orobanche cernua* Loeffling

MALTA - Marsascala: coastline along Triq is-Salini (2003) - rocks opposite St. Paul's Islands (1) (early 1990's).

GOZO - Marsalforn area: il-Mielħa (4-6-2008) - il-Munxar area: Sanap cliffs (5-3-2008) - ta' Rdum (opposite il-Ġebba tal-Ħalfa) (12-4-2008).

COMINO - l-Għamieri peninsula (early 1990's).

80. *Orobanche densiflora* Salzmann f. *melitensis* Beck

MALTA - l-Aħrax tal-Mellieħa area: il-Ponta tal-Bir, ta' Tutti, it-Torri tal-Qortin it-Twil, ta' Makka, l-Għar tal-Għasafar, is-Sur ta' l-Aħrax, around it-Torri l-Abjad, il-Bieb tal-Għar, tax-Xmajjar, between l-Aħrax tar-Ramal and il-Wied tar-Ratal, tax-Xilep, Rdum il-Ġriewi (early 1990's) - il-Mellieħa area: Ġnien Ingraw (2001); il-Ħalqun ta' San Diklaw (2001); ir-Ramla tal-Mellieħa (early 1990's); rocks around it-Tunnara museum (4-2007); Wied tal-Madonna (18-9-2006) - between il-Mistra bay and rocks facing St. Paul's Islands (1) (12-3-2003) - Qalet Marku peninsula (29-4-1993) - Wied il-Għasel area: between il-Knisja tal-Għar and turning point to Misraħ Ġhonoq (1) (4-2002).

81. *Orobanche hederæ* Duby

MALTA - abundant at San Anton Gardens (early 1990's) - Wied Harq Hamiem (1) (1995) (shown to the author by Darrin Stevens).

82. *Orobanche lavandulacea* Reichenbach (P.1)

MALTA - Dingli cliffs area: il-Wardija (16-6-2008) - boulder screes on clay slopes overlooking ir-Ramla ta' Ghajn Tuffieħa (5-4-2008) - Ras il-Pellegrin (7-4-2008).

Family: *Plantaginaceae*

83. *Plantago major* L.

MALTA - l-Argotti Botanic Gardens (1992) - il-Bahrija area: several places including valleybed between tat-Tulliera and il-Qliegħi, tas-Sarena (8-1992)* - il-Fiddien (c.2001) - Ġebel id-Dwejra olive grove (late 1990's) - Ġnien il-Kbir (1992) - Ġhajn Tuffieħa area: il-Ġnien, around Roman baths, il-Wied tal-Ġinna (13-2-1995) - l-Imtahleb area: Wied ta' Markozz, along road leading to ta' Pajpurijiet (1992) Rdum tas-Sarg, Rdum tal-Vigarju, Wied ta' Ġordajna (1995) - il-Mellieħa area: Ġhajn Ħadid (14-3-2000) - l-Imtarfa area: Santa Luċija (16-1-2002) - ir-Rabat: it-Telgħa tas-Saqqajja (1) (c.2004)* - San Ġiljan: it-Telgħa ta' San Ġiljan (1) (4-2007) - San Martin (7-1992) - Valletta: Royal Opera House ruin (1) (1992)* - Wied tal-Ġnejna: il-Ġnien (1992) - Wied Gerżuma (1992)* - Wied il-Luq (1992) - Wied Qirda (1992).

GOZO - Dahlet Qorrot (2-1993)* - San Blas, Rdum il-Kbir area (1993) - Wied tal-Lunzjata, Fontana (including l-Ġhajn il-Kbira), Wied tax-Xlendi / Wied ta' l-Ilma valley sytem (29-7-1994)* - Wied ir-Riħan (24-4-2003).

Was increasing until the 1990's, maybe due it being a nitrophilic species. Now seems to be diminishing, due to intensive modification of valleybeds by agricultural development.

84. *Plantago bellardi* Allioni (P.1)

MALTA - l-Aħrax tal-Mellieħa area: il-Madonna ta' l-Aħrax (19-4-2008); tax-Xilep, Rdum il-Ġriewi (7-6-2008).

Family: *Asteraceae*

85. *Anacyclus tomentosus* (Allioni) DC.

MALTA - h'Attard area: ta' Ċampira, ta' Irmiedi (fields between Wied il-Ħemsija, Wied ta' Ċampira, Wied ta' l-Irmiedi valley system and Triq l-Imdina highway) (17-5-2008) - ta' Qali national park (17-5-2008) - San Pawl il-Baħar area: in a *Eucalyptus* grove outside is-Simar nature reserve (2004); Telgħet ix-Xemxija (22-5-2008).

May not be indigenous. Found in open grassy places that have been subject to much leveling by human development.

86. *Anthemis arvensis* L.

MALTA - Laroka plateau (overlooking il-Buskett) (early 1990's) - Pieta pinetum (c.2003) - Wied Qirda (late 1990's) - Wied iż-Żurrieq area: along a pathway between il-Wied tal-Majla and ix-Xagħra ta' Smith / ix-Xagħra ta' Ras il-Bajjada (2005).

Past literature records this species as " Malta e Gozo, commune ! "(Sommier & Caruana Gatto 1915) " common "(Haslam et al. 1977) and was still frequent until the 1960's (E. Lanfranco pers.com.). Seems to have declined dramatically.

87. *Atractylis cancellata* L. (P.1)

MALTA - tal-Malaċin / ta' Pijru, ta' Żejsi (humps of rock on the outskirts of il-Mosta, along Triq Xifer il-Kief) (13-4-2002) - il-Mellieħa area: between il-Mizieb and Wied tal-Kalkara (6-3-2001) - Wied il-Għasel area: between il-Knisja tal-Għar and turning point to Misraħ Ghonoq (4-2002).

88. *Carlina lanata* L.

MALTA - Marfa peninsula: Ras il-Qammieħ (25-5-2008) - clay slopes overlooking ir-Ramla ta' Ghajn Tuffieħa, including il-Qarraba (7-2002) - Ras il-Pellegrin (7-4-2008) - it-Taflija (overlooking ir-Ramla tal-Mellieħa) (13-6-2003) - Wied Bufula (c.2000).

This species is recorded in past literature as " common " (Haslam et al. 1977) and was still frequent until the 1970's (E. Lanfranco & M. Briffa pers.com). Seems to have declined dramatically. Partial to clay soils.

89. *Catananche lutea* L. (P.1)

MALTA - ta' Glidi (between Haġar Qim, l-Imnajdra temples and it-Torri tal-Ħamrija) (14-2-2008) - l-Aħrax tal-Mellieħa area: il-Qatġha ta' Pleġġ (12-3-2008).

90. *Crupina crupinastrum* (Moris) Visiani

MALTA - l-Argentier (plateau overlooking il-Ballut tal-Wardija and San Martin) (22-5-2008) - il-Manikata area: ix-Xaġhra l-Ħamra (13-7-2007) - il-Mellieħa area: Ġnien Inġraw; Ghajn Żejtuna (21-1-2008); l-Imġiebah (6-2002); karstlands around il-Prajjiet / Popeye Village (2002); rocky terraces along it-Telġha ta' Selmun (c. 2000); around it-Torri l-Aħmar (13-6-2003); Wied Hanzira (2002) - il-Mizieb ridge: karstland stretches between il-Mizieb woodland and il-Manikata, including ix-Xaġhra ta' Rassa (22-3-2003); between ix-Xemxija heights and il-Mizieb woodland (26-4-2005); around Xemxija Civil Protection Unit enclosure (22-4-2005) - Pembroke (22-6-2003) - ta' Pijru, ta' Żejsi / tal-Malaċin (humps of rock on the outskirts of il-Mosta, along Triq Xifer il-Kief) (13-4-2002) - Wied id-Dis (5-4-2000) - karstland stretches between Wied Rini and Pupiruwa (10-4-2002) - Wied Mejxu (1995) - ix-Xaġhra tat-Tombu (near l-Imselliet school) (13-4-2002) - iż-Żebbieġħ (13-4-2002).

GOZO - ix-Xewkija area: ix-Xaġhra tal-Kus (4-5-2003).

Frequent among garrigue and steppic vegetation in the Northern half of the island of Malta; virtually absent elsewhere.

91. *Geropogon hybridus* (L.) Schultz Bip.

MALTA - il-Mellieħa area : around it-Torri l-Aħmar (31-8-2004), across to Triq Ghajn Tuta and ta' Wied Musa (2-9-2004) - il-Qolla (overlooking Wied il-Qlieġħa / Chadwick Lakes) (14-3-2003) - Ghajn Tuffieħa area: il-Wied tal-Ġinna, it-Tafal area (7-2002); clay slopes overlooking ir-Ramla ta' Ghajn Tuffieħa, including il-Qarraba (late 1990's) - between is-Salina and Ġhallis tower (c.2000) - Selmun clays (late 1990's) - Wied tal-Ġnejna / Wied taċ-Ċerċura (late 1990's) - Wied tal-Ħalqun, Wied ta' Fomm ir-Riħ valley system (1 unusually large specimen, over 0.75 m tall, was present) (7-4-2008) - Wied ta' l-Imselliet (13-4-2002).

92. *Hyoseris frutescens* Brullo & Pavone

MALTA - Dingli cliffs area: on a rock on which is built a rectangular *ħitan tas-sejjeħ* hut at il-Wardija (1995) - Marfa peninsula: coastal rock boulders below Ghajn Tuta (26-5-2008).

H. frutescens is common in Gozo; hence no Gozo records are given.

93. *Onopordum argolicum* Boissier (P.1)

MALTA - Dingli cliffs area: it-Turretta (9-6-2008).

94. *Podospermum resedifolium* (L.) DC.

MALTA - Ghajn Tuffieha area: il-Qarraba (2007) - Wied ta' Fomm ir-Riĥ (7-4-2008).

GOZO - id-Dabrani hill flanks (25-1-2005) - ta' Ġordan hill flanks (10-6-2008) - ta' Harrax hill flanks (25-1-2005) - ta' Leveċċa hillock (between iż-Żebbuġ and l-Għasri) (1996) - Marsalforn / ix-Xagħra area: il-Mielha, below Rdum ta' Kilulu (5-1994) - ix-Xagħra area: Taħt in-niċċa / ta' Fotier terraces (4-6-2008).

Frequent in Gozo; rare in Malta. Partial to clay soils.

95. *Scolymus grandiflorus* Desfontaines

MALTA - Wied Gerżuma (30-5-2008).

96. *Senecio pygmaeus* DC.

MALTA - Ghajn Tuffieha area: il-Qarraba (2007) - Marfa peninsula: among boulder screes between il-Minżel ta' Ruman / il-Minżel tar-Rixtellu and ta' Qassisu (vicinity of il-Qammieħ) (1-1993) - Qalet Marku (2-12-2000) - Rdum Majjiesa (5-2000).

GOZO - rocks facing il-Ġebbla tal-Halfa (27-1-2008) - ir-Ramla l-Hamra area: clays below l-Irdum tal-Marin (9-4-2008).

COMINO - l-Ghemieri peninsula (early 1990's).

Class: Liliopsida

Family: *Alismataceae*

97. *Alisma plantago-aquatica* L.

MALTA - il-Fiddien, Wied il-Qlejgħa valley system (1992) - Santa Luċija borehole reservoir (c. 2000) - in a pond along a downhill watercourse between tal-Virtu and Wied ta' l-Isqof (28-5-2008) - Wied tal-Ġnejna / Wied taċ-Ċerċura (1992) - Wied Ghajn Mula, Wied tal-Ħzejjen, Wied ta' l-Imselliet valley system (13-4-2002) - Wied l-Isperanza (1993) - at meeting point between Wied il-Luq and Wied tal-Girgenti (1995) - Wied is-Sewda (1) (13-8-2007).

Family: *Hyacinthaceae*

98. *Bellevalia romana* (L.) Sweet

MALTA - il-Qolla, il-Qliegħa l-Kbira (overlooking Wied il-Qlejgħa / Chadwick lakes) (14-3-2003).

99. *Muscari neglectum* Gussone (**P.1**)

MALTA - Wied il-Għasel area: tal-Markiz (7) (11-3-2008).

100. *Scilla sicula* Tineo

MALTA - had-Dingli area: karstland between Misraħ Suffara and Hoffret ir-Rizz (18-3-2004) - between Għallis Tower and Coast road (late 1990's)* (*destroyed by road construction works*) - Għar Lapsi area: Wied ta' l-Ilsna, ix-Xagħra ta' Għar Lapsi (14-2-2008) - vicinity of Għar ta' San Brinkat (Wied Anġlu) (3-2000) - l-

Imġarr area: Wied il-Ħmar cliff-edge (5-2-2004); ta' Kalabardi (c.2000); ta' Mrejnu (5-4-2005) - Manoel Island (1991)* - il-Manikata area: ix-Xagħra l-Ħamra (c. 2000) - il-Mellieħa area: alongside Triq il-Qortin (14-3-2000); unbuilt plots alongside Triq il-Kbira (late 1990's); between il-Mizieb wood and Wied tal-Kalkara (6-3-2001) - vicinity of in-Nadur hill (17-3-2004) - Pembroke area: in a *Pinus halepensis* grove between St.Patrick's schools and Triq Sant' Andrija (c.2000) - Ras il-Pellegrin (7-4-2008) - frequent on screes and escarpments below the Victoria Lines Fortifications between Triq Burmarrad (il-Mosta) and Triq Xiġer il-Kieġ, including ix-Xagħra tal-Manakku, ix-Xagħra taċ-Ċejluwwa (2002) - vicinity of Wied il-Bassasa (3-2000) - Wied il-Għasel area: below ta' Barbamaru (South-facing valleyside just before road bridge); ta' Sunta l-Għawdxija? (rocks overlooking terraces at last valley turn before the quarry); between the quarry and it-Telgħa t'Alla u Ommu (1993) - Wied Għolliġa (1991) - Wied Harq Ħamiem (1995) - Wied il-Hesri (3-4-2003) - Wied ta' Seqła valleybed (l-Imselliet area) (13-4-2002) - Wied Żembaq (3-10-2003) - Wied iż-Żurriq area: tal-Markiz (2005) (*shown to the author by David Farrugia*) - ix-Xagħra tax-Xini (plateau facing il-Kunċizzjoni, overlooking Tas-Santi) (5-2-2004) - ix-Xemxija area: rocks alongside Triq il-Mistra (late 1990's)* (*destroyed by planting of Ficus nitida trees*).

GOZO - Wied l-Abjad (11-3-2003) (*also observed years previously by Darrin Stevens*) - Wied il-Għasri (9-11-2006).

Family: *Alliaceae*

101. *Allium amethystinum* Tausch

MALTA - Marfa peninsula: ta' Wied Musa, Wied Musa; around it-Torri l-Abjad; tat-Tunnara (1992) - il-Manikata area: ix-Xagħra l-Ħamra (13-7-2007) - Wied Rini (c.2000).

102. *Allium lojaconoi* Brullo, Lanfranco & Pavone

MALTA - l-Aħrax tal-Mellieħa: around it-Torri l-Abjad (7-6-2008) - Dingli cliffs area, including il-Wardija (late 1990's) - around Ġebel Ciantar quarries (2-6-2008) - l-Għallis (late 1990's) - Għajn Tuffieħa area: il-Qarraba (21-5-2008) - il-Hofra, il-Gwejdja (overlooking Wied Babu), Wied Babu (24-6-2003) - Marfa peninsula: Wied taċ-Ċirkewwa, il-Latnija, Ġebel Qammieħ, below il-Minzel ta' Ġaħa (25-5-2008) - il-Mellieħa area: around it-Torri l-Aħmar (13-6-2003) - Pembroke (22-6-2003) - is-Salib tal-Għolja area: l-Imsaqqa (2-6-2008).

GOZO - Ta' Ċenċ area: Fuq tal-Gruwa (7-2006) - coastline between l-Imġarr and Hondoq ir-Rummien (1-7-2003) - Wied il-Għasri (10-6-2008) - ix-Xagħra area: Rdum ta' Sekek, il-Firdien (4-6-2008).

Literature regarding this species has recorded it as a coastal rock plant (eg. Brullo, Lanfranco & Pavone 1982; Lanfranco 1989). However it is also found inland, as in the following localities, where it grows in abundance:

MALTA - l-Argentier (plateau overlooking il-Ballut tal-Wardija and San Martin) (22-5-2008) - Clapham Junction cart ruts (2007) - il-Girgenti area: tal-Palazz (2-6-2008) - l-Imġarr area: ta' Mrejnu, ta' Kalabardi, across ix-Xagħra taż-Żingier to id-Daħar (10-8-2007) - Laroka plateau (overlooking il-Buskett) (4-8-2007) - in-Naxxar area: between it-Telgħa t'Alla u Ommu, il-Fortizza tal-Mosta and Wied il-Għasel quarry (15-6-2008) - Selmun area: il-Ħewlija, il-Ħewwiexa (near PaleoChristian tomb), Tal-Braġ (9-8-2007) - along Triq il-Buskett (9-6-2008) - Wied il-Hesri (20-8-2004).

103. *Allium nigrum* L.

MALTA - Ġnien il-Far (overlooking il-Buskett) (25-3-2008) - in screes below Victoria Lines fortifications alongside Triq Burmarrad, Mosta (late 1990's).

A. nigrum was recorded in the past as: “ **Malta**, commune. Specialmente dal lato Sud e Ovest dell’isola! **Gozo**, frequente! ”(Sommier & Caruana Gatto 1915); “ common ”(Haslam et al. 1977). Seems to have declined dramatically.

Family: *Iridaceae*

104. *Gynandriris aegyptia* (Delile) comb.nov.

MALTA - 1 clump along the road adjacent to Wied Harq Hamiem (13-3-2000).

105. *Iris sicula* Todaro (**P.1**)

GOZO - il-Munxar area: Wied tal-Ghawdxija (30-11-2007).

Family: *Dioscoreaceae*

106. *Tamus communis* L.

MALTA - Marfa peninsula: boulder screes below il-Minzel ta’ Ruman, il-Minzel ta’ Ġaħa, Rdum il-Qawwi, boulder screes below il-Minzel ta’ Pisswella (between iċ-Ċirkewwa and Ras il-Qammieħ) (1-1993) - il-Mellieħa area: in maquis under olive trees along a country lane branching from Triq Borġ Olivier (below Mellieħa parish church and cemetery) (c.2001); Ras il-Griebeġ (1993) - il-Mistra area: Tal-Blata (screes between Selmun and il-Mistra bay) (early 1990’s); screes between il-Mistra bay and Rdum Rxawm (12-3 -2003) - Ras il-Pellegrin (1993) - Rdum Majjiesa (5-2000) - among boulders below Victoria Lines crossing Wied id-Dis (1) (5-4-2000).

GOZO - Mgarr ix-Xini (12-1992) - boulder screes facing il-Ġebbla tal-Ħalfa island rock (26-2-1994) - Rdum il-Kbir (vicinity of San Blas) (1993) - iż-Żewwieqa (23-2-2008).

Family: *Juncaceae*

107. *Juncus acutus* L.

MALTA - il-Baħrija area: valleybed alongside tat-Tulliera (1992) - along watercourses on clay slopes overlooking il-Bajja ta’ Ghajn Tuffieħa, including il-Qarraba (early 1990’s) - l-Imtahleb area: Rdum tas-Sarġ, Rdum tal-Vigarju (1995) - Marfa peninsula: in a temporary rock-pool on Ras il-Qammieħ plateau (1-1993); Wied Musa (vicinity of iċ-Ċirkewwa) (1992) - Marsascalea area: il-Magħluq (early 1990’s) - il-Mellieħa area: Ghadira nature reserve (1991); Ghajn Żejtuna (early 1990’s) - il-Mistra bay (early 1990’s) - Paceville area: il-Qaliet (1992) - is-Salina (1992) - Rdum Majjiesa (5-2000) - Wied Gerżuma (5-2-2004) - at meeting point between Wied Ghar Dalam and St. George’s bay (1) (3-10-2003) - Wied ta’ Kieli (vicinity of Qalet Marku) (29-4-1993).

GOZO - id-Dwejra area: alongside a watercourse between il-Qattara and il-Qawra / Inland Sea (1) (7-1993); along watercourses on a rock ledge at ta’ Spiteri (26-3-2003) - Ghajn Għabdun (1) (21-10-2006) - Ghajnsielem area: in a drainage outfall on the coastline below ta’ Briegħen (vicinity of Mgarr ix-Xini) (4) (12-1992) - l-Għarb area: Triq Santu Pietru (1) (early 1990’s) - Rdum tas-Surgu (clay slopes below il-Qortin plateau refuse dump) (5-1994).

108. *Juncus subulatus* Forsskal

MALTA - il-Baħrija area: ta’ Xafura (overlooking Fomm ir-Riħ) (1992) - il-Mellieħa area: Ghadira nature reserve (1992); Ghadira ż-Żgħira (1992) - clay slopes overlooking ir-Ramla ta’ Ghajn Tuffieħa, including il-Qarraba (1992) - l-Imtahleb area: Wied ta’ Għar Ilma (early 1990’s) - Ras il-Pellegrin clay slopes (2-1993) -

is-Salina (1992) - Wied tal-Ġnejna / Wied taċ-Ċerċura (1992) - Wied Gerżuma (1992) - Wied Ġhajn Mula, Wied tal-Ħzejjen valley system, Wied ta' l-Imselliet valley system (13-4-2002) - Wied il-Halqun, Wied ta' Fomm ir-Rih valley system (*forms extensive valleybed meadows*) (7-4-2008) - Wied tal-Mistra (early 1990's).

Family: *Cyperaceae*

109. *Bolboschoenus maritimus* (L.) Palla (**P.1**)

MALTA - Wied tal-Ħzejjen (13-4-2002)

GOZO - Wied ta' San Blas (27-6-2008) - Wied Sara (10-1992).

110. *Carex distans* L.

MALTA - il-Fiddien (2002) - Marfa peninsula : Ġhajn Tuta (4-2007) - il-Mellieħa area: between Ras il-Griebeg and Ġhajn Żejtuna (14-3-2000); between Selmun and l-Imġiebaħ (1993) - Wied Gerżuma (30-5-2008) - Wied l-Ispanza (13-5-2008).

GOZO - on clay slopes below the South-facing side of Fort Chambray (late 1990's) - Rdum il-Kbir (23-4-2003).

111. *Carex divisa* Hudson

MALTA - Dingli cliffs area: il-Wardija, Rdum ta' Hurrieqa; Rdum ta' Għar Bittija (1995) - il-Fiddien, Wied il-Qlejġħa (1992), il-Qlejġħa l-Kbira (14-3-2003), Wied ta' l-Armla (31-5-2008) valley system - clay slopes overlooking ir-Ramla ta' Ġhajn Tuffieħa (1992) - l-Imtarfa area: it-Telġħa ta' Slampa (early 1990's) - Marfa peninsula: Ras il-Qammieħ (25-5-2008) - ir-Rabat area: Ġhajn Qajjet (1992) - San Martin (22-5-2008) - along a downhill watercourse between tal-Virtu and Wied ta' l-Isqof (28-5-2008) - Wied tal-Ġnejna / Wied taċ-Ċerċura (1992) - Wied Gerżuma (1992) - Wied Ġhajn Mula (2002) - Wied tal-Halqun, Wied ta' Fomm ir-Rih valley system (7-4-2008) - Wied il-Ħesri (1992) - Wied l-Ispanza, Wied il-Għasel valley system (1993) - Wied il-Luq, also near il-Girgenti borehole (1992) - Wied tal-Mistra (early 1990's) - Wied ta' Seqła (vicinity of l-Imselliet) (13-4-2002) - Wied Gerżuma (1992).

GOZO - id-Dwejra area: Wied tal-Port; along watercourses on a rock ledge at ta' Spiteri (26-3-2003) - ta' Ġordan hill (9-11-2006) - Wied tal-Ġhajjun (between ix-Xagħra and in-Nuffara hill) (5-4-2006) - Wied il-Għasri, Wied ta' Sasin valley system (30-9-2000) - Wied il-Qlejġħa (below iż-Żebbuġ hill) (11-3-2003) - Wied ta' Xhajma (5-4-2006).

112. *Carex hispidula* Willdenow

MALTA - il-Bahrija area: Wied il-Mielah (late 1990's) - Dingli cliffs area: Rdum Dikkiena; il-Wardija (1995) - il-Fawwara (1995) - l-Imtaħleb area: Rdum tas-Sarġ (including Wied tal-Ħut, Wied ta' Ġordajna), Rdum tal-Vigarju, below tal-Milord, along a pathway leading to ta' Pajpurijiet, Wied ta' Għar Ilma (1992).

113. *Carex otrubae* Podpera

MALTA - il-Fiddien, Wied il-Qlejġħa valley system (1992) - Ġnien iż-Żgħir (1992) - San Martin (7-1992) - is-Siġġiewi area: ta' Brija (3-4-2003) - Wied tal-Ġnejna (1992) - Wied il-Ħmar (vicinity of tas-Santi) (7-3-2008) - Wied l-Ispanza, Wied il-Għasel valley system (1993) - at meeting point between Wied il-Luq, Wied tal-Girgenti (1995) - Wied tal-Mistra (early 1990's) - Wied Qirda, Wied il-Kbir valley system (1992).

114. *Eleocharis palustris* (L.) Roemer & Schultz

MALTA - abundant at Wied tal-Hżejjen (13-4-2002) (*never seen elsewhere*).

E. palustris was recorded in the past as: "**Malta**, frequente...**Gozo**" (Sommier & Caruana Gatto 1915); " locally frequent " (Haslam et al. 1977) and was still found along most watercourses until the 1960's (E.Lanfranco, pers. com. . Seems to have declined dramatically.

115. *Scirpoides holoschoenus* (L.) Sojak

MALTA - h' Attard area: Wied ta' l-Irmiedi (1992) (*Population much reduced by valleybed bulldozing in 6-2008*) - il-Bahrija area: abundant in most parts including ta' Namura, tas-Sarena, tat-Tulliera, il-Qliegħi, Wied il-Mielah, ta' Ghambierda, also in rock-pools on rocky karstland along Triq is-Sajf ta' San Martin (8-1992) - Dingli cliffs area: Rdum ta' Għar Bittija; Rdum Dikkiena, Rdum ta' Hurrieqa, il-Wardija (1995) - il-Fawwara (1995) - il-Fiddien, Wied il-Qlejgha valley system (1992) - Ghajn Tuffieħa area: il-Ġnien (1996); clay slopes overlooking ir-Ramla ta' Ghajn Tuffieħa (1992) - abundant throughout l-Imtahleb area (*possibly the largest population in the country*); all places including Rdum tal-Qaws (overlooking tal-Gagħwija) (1995), rocks overlooking Għar id-Dwieb (1992); Wied ta' Għar Ilma (early 1990's); Wied ta' Markozz, along roads leading to ta' Pajpurijiet and ta' Soklos, below tal-Milord, Wied tar-Rummien (1992); Rdum tas-Sargħ, Wied ta' Ġordajna, Wied tal-Hut, Rdum tal-Vigarju (1995) - l-Imtarfa area: it-Telgha ta' Slampa (early 1990's) - ir-Rabat area: Ghajn Qajjet (1992) - Rdum Depiro (1995) - Rdum Majjiesa (5-2000) - Wied tal-Ġnejna / Wied tač-Čerčura (1992) - Wied Gerżuma (1992) - Wied Ghajn Mula (2002) - Wied tal-Halqun, Wied ta' Fomm ir-Rih valley system (7-4-2008) - Wied il-Hesri (1992) - Wied il-Hmar (vicinity of tas-Santi) (7-3-2008) - Wied ta' l-Imselliet (13-2002) - Wied l-Isperanza, Wied il-Għasel valley system (1993) - Wied tal-Mistra (early 1990's).

GOZO - il-Qala area: Wied tal-Margħa (1997); Wied is-Simar (25-4-2005) - Wied Biljun (8-7-2003) - ix-Xagħra area: tax-Xaqra (vicinity of Calypso's Cave) (12-2007).

116. *Schoenus nigricans* L.

MALTA - Marfa peninsula: is-Sur ta' l-Ahrax, l-Għar tal-Għasafar (*the largest extant population*) (1992); between l-Ahrax tar-Ramal and il-Wied tar-Ratal (1992); plateau overlooking is-Sur and l-Għar ta' Żamżam (1992); plateau overlooking ir-Ramla tač-Čirkewwa (1) (1-1993)*.

Family: *Poaceae*

117. *Anthoxanthum gracile* Bivona

MALTA - il-Buskett: Verdala (early 1990's) - San Ġwann area: at the turning point between Wied Ghomor and Wied il-Kbir / tal-Frančiz (22-3-2007) - Wied il-Hesri (3-4-2003) - on rocky outcrops of fields alongside road to ix-Xagħra ta' Lawrenti (vicinity of il-Buskett) (3-2008).

118. *Arundo plinii* Turra

MALTA - il-Buskett: Verdala (early 1990's) - il-Fawwara (1995) - l-Fiddien, Wied il-Qlejgha valley system (3-2001) - abundant at il-Girgenti, Ghajn il-Kbira, Wied il-Fulija valley system (1992) - Ġnien il-Kbir (early 1990's) - San Martin (c.2000) - is-Siġġiewi area: ta' Kilpa (2005); Wied il-Hesri (1992) - San Ġwann area: Triq San Ġwann tal-Għargħar (1991); Triq it-Tellerit (Wied Ghollieqa) (1991) - San Martin (2-2003) - Wied Qirda, Wied il-Kbir valley system (1992).

119. *Brachypodium sylvaticum* Beauvois

MALTA - Dingli cliffs area: il-Wardija (16-6-2008) - Ġnien Inġraw (c.2000) - Marfa peninsula: Ġhajn Tuta (4-2007) - Wied Gerżuma (30-5-2008) - Wied il-Ġhasel (13-5-2008) - Wied il-Ħesri (12-11-2006) - Wied il-Luq (c. 2000) - Wied Qirda (23-5-2008).

GOZO - id-Dwejra area: between Wied Sofar and il-Qattara (12-6-2008) - Wied ir-Riġhan (24-4-2003) - Wied ta' San Blas (27-6-2008).

120. *Crypsis aculeata* (L.) Aiton

MALTA - l-Ġhallis area: l-Ġhadira s-Safra (1992) - Paceville area: il-Qaliet saltmarsh (in bare patches among *Juncus acutus* tussocks) (1992)* (last seen in 1996).

121. *Crypsis schoenoides* (L.) Lamarck

GOZO - id-Dwejra area: valleybed between il-Qattara and il-Qawra / Inland Sea (c.1000) (7-1993) (During a site visit in 2007, accompanied by Mr. Joe Sultana, only 4 stunted specimens were found. A photograph of one specimen appeared in the popular publication *Nature in Gozo*).

122. *Sphenopus divaricatus* (Gouan) Reichenbach

MALTA - Ġżira Yacht Marina Garden (c.2003) - Paceville area: il-Qaliet (1-4-1993) - embankments around perimeter of Salina salt pans (15-4-1993) - Sliema area: Qui-Si-Sana playing field (late 1990's)*; Wesġhat Ġuże Tanti (c.2000)*.

Family: *Typhaceae*

123. *Typha domingensis* (Persoon) Steudel

MALTA - ħ'Attard: Wied ta' l-Irmiedi (17-5-2008) - in a pond on karstland overlooking Ballut tal-Wardija (early 1990's) - Blata l-Bajda: Triq Dun Ġ. Preca (early 1990's)* - Dingli cliffs area: Rdum Dikkiena (1995) - il-Fawwara (1995) - il-Fiddien (3-2001)* - il-Girgenti*, Ġhajn il-Kbira valley system (1992) - Ġhajn Riġhana (1992), Wied Ġhajn Mula, Wied il-Ħżejjen valley system (13-4-2002) - Hoffret ir-Rizz area: il-Barriera ta' Paroli (18-3-2004) - il-Manikata area: il-Kamp (2000) - il-Marsa area: a watercourse intersected by Triq Aldo Moro (1992) - il-Mellieħa area: Ġhajn Żejtuna (1993); l-Imġieħa (22-1-1995) - Saint Andrews: an unbuilt plot downside from Triq Sant' Andrija (late 1990's) - San Pawl il-Baħar: alongside Ġnien Anton Buttigieg (early 1990's) - Santa Venera: at a flooded construction site along Triq l-Inkwina (16-5-2008) - in a pond along a downhill watercourse between tal-Virtu and Wied ta' l-Isqof (28-5-2008) - Wied Ġħar Dalam (3-10-2003) - Wied Ħarq Ħamiem (1995) - Wied Qannotta (c. 2000) - Wied il-Qlieħa (7-2-2001).

GOZO - id-Dwejra area: Wied tal-Port (26-3-2003) - l-Ġhadira ta' Sarraflu (5-4-2004) - Ġħajnsielem area: Taħt il-Belt (early 1990's) - abundant in recently excavated ponds and reservoirs between ix-Xaħħra and Wied tal-Ġħajjun (27-6-2008) - Wied Sara, Wied tal-Grazzja, Wied Marsalforn valley system (10-1992) - Wied ta' Xħajma (11-10-2006).

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