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Author: Hand, Ralf

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RALF HAND (ed.)

# Contributions to the flora of Cyprus I.

**Abstract**

Hand, R. (ed.): Contributions to the flora of Cyprus I. – Willdenowia 30: 53-65. 2000. – ISSN 0511-9618.

Starting a series of miscellaneous contributions by various authors, this first instalment includes unpublished data on the vascular plants of Cyprus with an emphasis on distributional considerations. Two taxa, *Paronychia echinulata* and *Hordeum murinum*, were previously not known to occur in Cyprus. The hybrid *Aegilops geniculata* × *A. peregrina*, endemic to Cyprus, is described as the new nothospecies *Aegilops* ×*insulae-cypri.* Data on 57 additional species complete the knowledge about chorology and ecology especially in the western part of the island.

## Introduction

Since the publication of the "Flora of Cyprus" (Meikle 1977, 1985) approximately 200 species have been added to the island's inventory of vascular plants, mostly alien taxa (Hadjikyriakou & al. 1996). Several authors described endemic species new to science during the last two decades (e.g. Brullo 1991, Georgiadis & Chatzikyriakou 1993, Hadjikyriakou & Alziar 2000, Scholz 1995). Various extensive contributions, e.g. by Chrtek & Slavík (1981, 1993, 1994), Della & Iatrou (1995) and Alziar (1985, 2000), summarize many additional floristic records. Other first records were published in the "Med-Checklist Notulae" (last Greuter & Raus 1998) as well as in the flora for the northern part of the island (Viney 1994, 1996). Several publications contribute to the knowledge of the orchid flora (e.g. Hansen & al. 1990), the endemics (e.g. Pantelas & al. 1993) or chromosome numbers (e.g. Slavík & al. 1993, Vogt & Aparicio 2000). The checklist for the Akamas peninsula by Chilton (1997) includes some additions to the flora of W Cyprus, unfortunately without exact localities and data. Despite all these additions, distribution and ecology of many taxa are still insufficiently known and require further investigations.

This series intends to bring together widely scattered results by various authors, on taxonomy, chorology, ecology and cytology of the vascular plants of Cyprus. An emphasis is put on the distribution of species, e.g. first records for the botanical divisions of the island (see below), or the confirmation of records of rare (or rarely collected) taxa.

## Explanations

Nomenclature and sequence of species follow Meikle (1977, 1985) unless otherwise stated. Though the division of the island into eight regions by Meikle (1977: 4-8) corresponds only "very

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roughly to natural phytogeographic areas" and some alterations would be appropriate, it is followed here strictly to have a better comparison for the time being. For the same reason the use of transcribed Greek names for towns, villages and geographical places is preferred for the whole island. In the case of records from the northern parts of the island Turkish names will be mentioned additionally (cf. Viney 1994: xxvi-xxvii).

Specimens are cited if they represent a first record for one of the eight divisions, a first, second or third record for the island as a whole, or for special reasons given in the text. Thus, the criteria are more restrictive than in former contributions concerning Cyprus (e.g. Chrtek & Slavík 1981). The marking "+", added to a division's number, indicates first records. Reports without cited authenticating herbarium sheets by other authors are mentioned but not accepted as first records. If not otherwise stated, specimens cited are kept in the herbaria of the collectors (duplicates in B). The determinations are vouched for by the contributors.

Contributions to the instalments to follow are welcome and should be sent to the editor. The present series of contributions puts an emphasis on the western part of the island, a region often neglected by collectors in the past. Contributions (apart from the editor's) come from Dr Karl Peter Buttler (Frankfurt am Main), Elisabeth & Walter Klein (Reichelsheim), Prof. Dr Hildemar Scholz (Berlin) and Dr Robert Vogt (Berlin), all Germany.

### *Spermatophyta*

### *Ranunculaceae*

***Nigella unguicularis*** (Poir.) Spenn.

According to Meikle (1977: 61) rare and collected only once at Kykko in the Troodos mountains. Not rare in W Cyprus but easily overlooked.

+ Division 1: Armou, valley between church and road to Pafos, waste ground, alt. c. 300 m, 25. 4.1999, *Hand 2888;* Drymou, roadsides at the N edge of the village, alt. c. 500 m, 3.5.1999, *Hand 3045;* Pano Akourdaleia, fields at the E side of the Pitharolakhos gorge WSW of the village, alt. c. 400 m, 8.5.1999, *Hand 3135*.

+ Division 3: Kouklia, small valley SE of Palaia Pafos, phrygana along way, alt. c. 50 m, 12.4.1999, *Hand 2794;* Episkopi (near Pafos), c. 3 km SSE, small gorge below E 606 road, grassy slope, alt. c. 300 m, 7.5.1998, *Hand 2425.* (ed.)

### *Papaveraceae*

***Glaucium flavum*** var. ***leiocarpum*** (Boiss.) Stoj. & Stef.

+ Division 3: Mandria, beach c. 1.7 km SSW, alt. c. 2 m, 2.4.1998, *Hand 2054.* (ed.)

### *Fumariaceae*

***Fumaria bracteosa*** Pomel

+ Division 3: Monagroulli, track to Pentakomo, sandy gravelly fallow land, alt. 250 m, 10.3. 1999, *Klein 9/1999.* E. & W. Klein

### *Cruciferae*

***Enarthrocarpus arcuatus*** Labill.

+ Division 1: Pafos, coast SW of the lighthouse, alt. c. 5-10 m, 5. 3. 1998, *Hand 1870.* (ed.)

***Cakile maritima*** Scop.

+ Division 1: Agios Georgios Pegeias, beach and fields SE of Akrotiri Lara, alt. c. 2 m, 8.3. 1998, *Hand 1890.*

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+ Division 2: Gialia, sandy beach W of the village, W of the coastal road, alt. c. 3 m, 10.4.1999, *Hand 2790.* (ed.)

***Cardaria draba*** (L.) Desv.

+ Division 1: Polemi, by the road c. 400 m towards Stroumbi, alt. c. 400 m, 30.4.1998, *Hand 2389.* (ed.)

***Alyssum akamasicum*** B. L. Burtt

Since its description in 1949 this endemic has been found only in the restricted serpentine outcrops of the Akamas peninsula (Meikle 1977: 138). The investigation of the scattered small serpentine areas in W Cyprus produced many additional records. The area of this species stretches from the Akamas along the coast to the hills east of Pafos.

Division 1: Akoursos, c. 2.5 km SSW, slopes and gorge below serpentine quarry, alt. c. 100 m, 2.3.1998, *Hand 1818;* Empa, serpentine quarry at the road to Tala, alt. c. 150 m, 7. 3.1998, *Hand 1871;* Agios Georgios Pegeias, serpentine rocks at the N end of Lara beach, alt. c. 10 m, 8.3.1998, *Hand 1891;* Kissonerga, striking serpentine hill c. 1.5 km N, near military area, alt. c. 150 m, 22.3.1998, *Hand 1985;* Chlorakas, steep serpentine slope E of E 701 road c. 1.5 km NNE of the Tombs of the Kings, alt. c. 50 m, 23.3.1998, *Hand 1996;* Agia Marinouda, c. 1 km NNE, in geologically varied valley below rubbish-tip, alt. c. 150 m, 9.4.1998, *Hand 2126.*

+ Division 3: Episkopi (near Pafos), c. 3 km SSE, small gorge below E 606 road, alt. c. 300 m, 4.3.1998, *Hand 1848;* Nata, c. 2 km SW of the village, serpentine area W of the road to Anarita, alt. c. 200 m, 14.3.1999, *Hand 2562;* Agia Varvara (near Acheleia), rocky slope E of river Ezousa c. 2 km upstream the village, alt. c. 110 m, 29.3.1999, *Hand 2671*. (ed.)

***Alyssum simplex*** Rudolphi (Syn.: *Alyssum minus* (L.) Rothm.)

+ Divisions 1/3: Kannaviou, serpentine rock between road and river Ezousa half-way towards Melamiou junction, alt. c. 350 m, 24.3.1998, *Hand 2002.*
Another site at the border of division 3 (to 2) near Koilani is mentioned by Alziar (2000). (ed.)

***Alyssum strigosum*** Banks & Sol.

+ Division 1: Empa, serpentine quarry at the road to Tala, alt. c. 150 m, 7.3.1998, *Hand 1874;* Kannaviou, serpentine rock between road and river Ezousa half-way towards Melamiou junction (exactly at the border between divisions 1 and 3), alt. c. 350 m, 24.3.1998, *Hand 2000.* (ed.)

***Arabis purpurea*** Sm.

+ Division 3: Filousa, chalk rocks by the roadside W of river Diarizos c. 200-400 m downstream the road bridge, alt. c. 400 m, 26.3.1998, *Hand 2027.*
Alziar (2000) mentions another site at the border between the divisions 2 and 3 "Ayia Mavri, Kilani". (ed.)

***Nasturtium officinale*** R. Br.

+ Division 1: Tala, Mavrokolympos brook c. 300 m below Baths of Adonis, alt. c. 275 m, 16.4.1998, *Hand 2191;* Agios Georgios Pegeias, in brook between coast and Avgas gorge, alt. c. 30 m, 29.4.1997, *Hand 1207.* (ed.)

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***Cistaceae***

***Helianthemum obtusifolium*** Dunal

+ Division 2: Agios Ioannis, SW slope of mountain SE of the village, phrygana, alt. c. 800 m, 4.5.1999, *Hand 3059.* (ed.)

***Caryophyllaceae***

***Dianthus tripunctatus*** Sm.

+ Division 3: Episkopi (near Pafos), c. 3 km SSE, small gorge below E 606 road, grassy slope, alt. c. 300 m, 7.5.1998, *Hand 2424.* (ed.)

***Silene gemmata*** Meikle

This endemic of the Troodos mountains is locally common in the vicinity of its type locality near Platres at the southern edge of that range (Meikle 1969). There is only one collection from the southwestern edge of the Troodos: "Khrysorroyiatissa, in garigue on chalk, 8 May 1941, Davis *3361*". As expected by Meikle (1969), the plant has been found in further sites "at or near the junction of igneous rocks and chalk" not far from this locality.

Division 2: Kannaviou, slope of way N of road to Panagia, not far from Agia junction, alt. c. 350 m, 5.5.1998, *Hand 2400.*

+ Division 3: Kannaviou, serpentine rocks c. 400 m below village on the left bank of the river Ezousa, alt. c. 350 m, 6.5.1999, *Hand 3094.* (ed.)

***Sagina apetala*** Ard.

+ Division 3: Episkopi (near Lemessos), Apollo temple, close to the reconstructed pillars, alt. c. 130 m, 8. 5. 1998, *Hand 2427.* (ed.)

***Illecebraceae***

***Paronychia echinulata*** Chater

Not previously known to occur in Cyprus but in neighbouring countries, e.g. Israel (Zohary 1967) and Turkey (Davis 1967).

+ Division 2: Kannaviou, Argaki tis Agias valley upstream the road to Panagia, on rocks somewhat above second bridge, alt. c. 450 m, 21.4.1998, *Hand 2253.* (ed.)

***Pteranthus dichotomus*** Forssk.

According to Meikle (1977: 285) "rather rare" and collected only in the eastern half of the island. In W Cyprus locally very common on cretaceous clays.

+ Division 1: Kissonerga, c. 1 km below Mavrokolympos dam, eroded clay on serpentine ridge S of the river, alt. c. 100 m, 22.3.1998, *Hand 1983;* Agia Marinouda, c. 1 km NNE, in geologically varied valley below rubbish-tip, alt. c. 150 m, 9.4.1998, *Hand 2128;* Marathounta, geologically varied valley 1 km S to SE, alt. c. 200 m, 24.4.1998, *Hand 2291;* Armou, valley between church and road to Pafos, eroded slopes, alt. c. 250 m, 25.4.1999, *Hand 2896;* Pano Arodes, 1 km above the upper end of the Avgas gorge, on eroded clay below striking slope on the way to Pano Arodes, alt. c. 250 m, 8.5.1999, *Hand 3149.*

Division 3: Kouklia, coastal slopes c. 2 km WNW of Petra tou Romiou, near isolated serpentine rocks, alt. c. 10 m, 14.3.1998, *Hand 1931;* Pano Archimandrita, c. 2 km WNW, eroded clay slopes in valley, alt. c. 300 m, 12.4.1999, *Hand 2808.* (ed.)

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***Elatinaceae***

***Elatine macropoda*** Guss.

In Cyprus known from only two sites in the Akamas area (Meikle 1977: 293). Two further localities can be added.

Division 1: Pegeia, SW of the village, vernal pools in rocks at the edge of the plateau above road junction near Agia Paraskevi, alt. c. 120 m, 16.3.1998, *Hand 1944;* Drouseia, vernal pools in rocks at the coastal track c. 2.5 km NNW of Panagia tou Flou, alt. c. 20 m, 2.5.1997, *Hand 1229.* (ed.)

***Zygophyllaceae***

***Zygophyllum album*** L.f.

+ Division 1: Pegeia, rocks in the Sea Caves area W of Agia Paraskevi, alt. c. 5 m, 12.3.1998, *Hand 1910.*

+ Division 2: Gialia, sandy beach W of the village, W of the coastal road, alt. c. 3 m, 10.4.1999, *Hand 2785.* (ed.)

***Leguminosae***

***Trifolium argutum*** Banks & Sol.

According to Meikle (1977: 464) a rare species of "old stabilized sand-dunes". Obviously underrecorded and occurring also quite common on rocky pastures, waste ground and at roadsides but never far from the coast. The only exception is a record for divison 3 by Alziar (2000) from the Diarizos valley near Kidasi.

Division 1: Agios Georgios Pegeias, fields NE of restaurant SE Akrotiri Lara, alt. c. 5 m, 17.3.1998, *Hand 1953;* Pafos, grassy hill c. 200 m away from harbour castle, alt. c. 15 m, 10.4.1998, *Hand 2157* (cf. *Meikle 4033*); Pafos, fields and wasteland c. 500 m ENE of the Tombs of the Kings, alt. c. 10 m, 5.4.1999, *Hand 2729;* Agios Georgios Pegeias, at the rock tombs, alt. c. 30 m, 26.4.1999, *Hand 2906.*

+ Division 2: Gialia, sandy beach W of the village, W of the coastal road, alt. c. 3 m, 10.4.1999, *Hand 2784.*

Division 3: Kouklia, along way in valley SE of Palaia Pafos, alt. c. 40 m, 12.4.1999, *Hand 2793;* Kouklia, roadside S of Palaia Pafos, alt. c. 50 m, *Hand 2801;* Agia Varvara (near Acheleia), c. 1.5 km NNE, slopes above citrus plantations, alt. c. 120 m, 17.4.1999, *Hand 2838.* (ed.)

***Astragalus pelecinus*** (L.) Barneby

Meikle (1977: 493) supposed a recent arrival of this distinctive plant, because it has been collected only once at Salamis in 1967 (reported again 1998, Perring 1999). However, in the hills east of Pafos this species occurs in semi-natural habitats (rocky phrygana) and there is no sign of a recent introduction.

+ Division 1: Agia Marinouda, c. 1 km NNE, in geologically varied valley below rubbish-tip, alt. c. 150 m, 9.4.1998, *Hand 2133.*

+ Division 3: Agia Varvara (near Acheleia), c. 3 km NE, geologically varied valley W of E 606 road, alt. c. 200 m, 4.4.1998, *Hand 2058;* Agia Varvara (near Acheleia), c. 1.5 km NNE, slopes above citrus plantations, alt. c. 150 m, 17.4.1999, *Hand 2840.* (ed.)

***Astragalus epiglottis*** L.

+ Division 1: Agia Marinouda, c. 1 km NNE, in geologically varied valley below rubbish-tip, rocky phrygana, alt. c. 150 m, 9.4.1998, *Hand 2132.* (ed.)

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***Astragalus hamosus*** L.

+ Division 3: Agia Varvara (near Acheleia), c. 3 km NE, geologically varied valley W of E 606 road, rocky phrygana, alt. c. 200 m, 4.4.1998, *Hand 2061;* Agia Varvara (near Acheleia), c. 1.5 km NNE, slopes above citrus plantations, rocky phrygana, alt. c. 150 m, 17.4.1999, *Hand 2841.*
A record from Kato Lefkara (Alziar 2000) is close to the border of the divisions 2 and 3. Furthermore reported from Amathus (3) without cited specimen (Alziar 1985). (ed.)

***Vicia cypria*** Kotschy

Apart from a dubious record from Cape Greco, in Cyprus restricted to the northern range and until now unknown from the Troodos mountains (Meikle 1977: 557). The following collections are all from the Panagia summit, the only chalk mountain at the western edge of the Troodos range exceeding 1000 m.

+ Division 2: Pano Panagia, serpentines from the picnic area near Moni Chrysorrogiatissa towards summit of Panagia, lower part, alt. c. 820 m, 30.4.1998, *Hand 2363;* Pano Panagia, vicinity of summit Panagia, shady slopes, alt. c. 1000 m, 30.4.1998, *Hand 2379*; Pano Panagia, slope SW of Moni Chrysorrogiatissa, below picnic site, *Pinus brutia* forest, alt. c. 800 m, 6.4.1999, *Hand 2741.* (ed.)

***Vicia lunata*** (Boiss. & Bal.) Boiss.

In Cyprus not restricted to the higher elevations of the Troodos mountains (cf. Meikle 1977: 557) but descending to the NW coast. Already recorded by Viney (1994: 218) from Vouni Palace near the coast.

Division 2: Pomos, Livadi valley c. 800 m above, side of track, alt. c. 100 m, 20.3.1998, *Hand 1966.* (ed.)

***Lens orientalis*** (Boiss.) Hand.-Mazz.

+ Division 2: Pano Panagia, serpentines from the picnic area near Moni Chrysorrogiatissa towards summit of Panagia, lower part, alt. c. 820 m, 30.4.1998, *Hand 2361;* Agios Ioannis, SW slope of mountain SE of the village, phrygana, alt. c. 800 m, 4.5. 1999, *Hand 3058.* (ed.)

***Crassulaceae***

***Crassula vaillantii*** (Willd.) Roth

Collected only twice in Cyprus (Meikle 1977: 642).

Division 1: Pegeia, SW of the village, vernal pools in rocks at the edge of the plateau above road junction near Agia Paraskevi, alt. c. 120 m, 16.3.1998, *Hand 1946* and 13.3. 1999, *Hand 2542.* (ed.)

***Sedum cyprium*** A. K. Jacks. & Turrill

+ Division 3: Filousa, chalk rocks by the roadside W of river Dhiarizos c. 200-400 m below road bridge, alt. c. 400 m, 26.3.1998, *Hand 2026.* (ed.)

***Telmissa microcarpa*** (Sm.) Boiss.

There are apparently contrary opinions on the ecology of this annual: subaquatic plant versus plant of dry rocks (Meikle 1977: 654). As a matter of fact *Telmissa microcarpa* often indicates vernal pools, rock hollows and crevices which have been flooded by the winter rains and dry out quickly in early spring.

Division 1: Chlorakas, waste ground with rocks W of road to Lempa above slope to the coastal plain, alt. c. 75 m, 19.2.1998, *Hand 1742;* Pegeia, SW of the village, ver-

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nal pools in rocks at the edge of the plateau above road junction near Agia Paraskevi, alt. c. 120 m, 13.3.1999, *Hand 2541.* (ed.)

***Umbelliferae***

***Orlaya daucoides*** (L.) Greuter

+ Division 1: Akoursos, c. 2.5 km SSW, slopes and gorge at the road, alt. c. 100 m, 2.3.1998, *Hand 1826;* Neo Chorio, SW of fire lookout Smigies at the main track, alt. c. 320 m, 19.4.1998, *Hand 2230;* Drymou, fields at the N edge of the village, alt. c. 500 m, 3.5.1999, *Hand 3044.* (ed.)

***Bifora testiculata*** (L.) DC.

+ Division 1: Neo Chorio, fields c. 1.3 km N of Agios Minas, alt. c. 200 m, 19. 4. 1998, *Hand 2208.* (ed.)

***Synelcosciadium carmeli*** (Labill.) Boiss.

Following Meikle (1977: 759) very rare in Cyprus and collected only once at Ktima [= Pafos] by Haradjian in 1913. The species is actually locally very common in division 1 and the adjacent parts of divisions 2 and 3 from sea-level to c. 750 m preferring eutrophic habitats especially along roads. Surprisingly it has escaped the attention of Sibthorp, Holmboe and other collectors who visited the Pafos-Polis area in May. Perhaps this striking umbellifer is spreading in W Cyprus.

Division 1: Agios Georgios Pegeias, at the rock tombs, alt. c. 30 m, 26.4.1999, *Hand 2913;* Drouseia, WNW edge of the village, by the way to the new chapel, alt. c. 600 m, 29.4.1999, *Hand 2982;* Kato Akourdaleia, W edge of the village, roadside, alt. c. 320 m, 29.4.1999, *Hand 2988;* Evretou, on the way S of the river c. 2 km above Evretou dam, alt. c. 150 m, 2.5.1999, *Hand 3028;* Drymou, roadsides at the N edge of the village, alt. c. 500 m, 3.5.1999, *Hand 3041;* Pano Arodes, by the roadside to the Avgas gorge 2-3 km SW of the village, alt. c. 400 m, 8.5.1999, *Hand 3145;* Mesogi, side of the road to Polis 1.3 km above Trimithousa junction, alt. c. 300 m, 19.5.1999, *Hand 3313.*

+ Division 2: Asprogia, side of the road to Panagia c. 1.4 km above chapel, alt. c. 750 m, 16.5. 1999, *Hand 3281;* Nea Dimmata, roadside at S edge of the village, SE of the chapel, alt. c. 20 m, 18.5.1999, *Hand 3311.*

+ Division 3: Kannaviou, 200 m SW of the junction to Agia, roadside, alt. c. 320 m, 13.5.1998, *Hand 2449;* Kannaviou, by the roadside near the serpentine rocks c. 400 m below the village on the left bank of the river Ezousa, alt. c. 320 m, 6.5.1999, *Hand 3097.* (ed.)

***Ainsworthia trachycarpa*** Boiss.

+ Division 1: Baths of Aphrodite, upper part of the gorge c. 1.3 km SSE of Pyrgos tis Rigenas, between bushes, alt. c. 280 m, 5.4.1998, *Hand 2089.*

+ Division 2: Agios Ioannis, SW slope of mountain SE of the village, phrygana, alt. c. 800 m, 4.5.1999, *Hand 3060.* (ed.)

***Valerianaceae***

***Valerianella muricata*** (Stev.) Baxt.

+ Division 2: Kannaviou, Argaki tis Agias valley above the road to Panagia, downstream the second bridge, alt. c. 450 m, 21.4.1998, *Hand 2238.* (ed.)

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***Compositae***

***Aster subulatus*** Michx. (Syn.: *Aster squamatus* (Spreng.) Hieron., cf. Jones 1984)

+ Division 1: Neo Chorio, Aphrodite Beach hotel c. 1.1 km E of Baths of Aphrodite, established common garden weed, 10 m, 8.10.1998, *Buttler 32408*.
Reported from Pafos without cited specimen (Della & Iatrou 1995). K. P. Buttler

***Evax contracta*** Boiss.

+ Division 2: Agios Ioannis, SW slope of mountain SE of the village, phrygana, alt. c. 800 m, 4.5.1999, *Hand 3068.*
+ Division 3: Kouklia, coastal slopes c. 2 km WNW of Petra tou Romiou, alt. c. 20 m, 14.3. 1998, *Hand 1930;* Pissouri, 3 km E of Petra tou Romiou, phrygana E of the road, alt. c. 75 m, 24. 3. 1999, *Hand 2637.* (ed.)

***Pallenis spinosa*** (L.) Cass.

+ Division 2: Kannaviou, phrygana N of the road to Panagia W of the Agia valley junction, alt. c. 350 m, *Hand 2411;* Omodos, by the roadside N of Apostolos Filippos Moni, alt. c. 950 m, 14.5.1999, *Hand 3243.* (ed.)

***Anthemis tomentosa*** L.

Taxonomy and distribution of this species in Cyprus have been summarized by Oberprieler & Vogt (2000).

+ Division 3: Kouklia, gravelly beach 2.5 km W of Petra tou Romiou, ca. 2 m, 10.4.1998, *Hand 2147*, det. Vogt. R. Hand & R. Vogt

***Taraxacum aphrogenes*** Meikle

This still insufficiently known endemic of the Cypriot W coast occurs locally common between the Baths of Aphrodite (4 km NW) and Petra tou Romiou (at view points above, mostly observations of sterile plants). It could not be located anywhere east of these sites. Most populations are growing on rocks (mainly chalk, sometimes serpentine) but the species is found also on sand and gravel. At least in some years the flowering season is extended until March (or even April, cf. Wittzell 1999). Meikle (1985: 1921) gives "fl. Oct.-?Dec.".

Division 1: Pafos, coast SW of the lighthouse, alt. c. 2 m, 5.3.1998, *Hand 1868;* Agios Georgios Pegeias, rocky coast S of Toxeftra beach, alt. c. 5 m, 8.3.1998, *Hand 1881.*
Division 3: Kouklia, coast c. 2 km WNW of Petra tou Romiou, alt. c. 2 m, 14.3.1998, *Hand 1926.* (ed.)

***Prenanthes triquetra*** Labill.

The rarely collected species was looked for in the Limassol Forest and seems to occur only locally. It was reconfirmed above Gerasa (cf. Meikle 1985: 1031). Promising for further research are small valleys with summer-dry rivulets in the serpentine area.

Division 3: Gerasa, valley above road to Kalo Chorio 1.2 km N of Apsiou junction, alt. c. 470 m, small population on steep rocky slope c. 5 m above river-bed, local clearing in pine forest, 12.10.1998, *Buttler 32460;* Dierona, 5.3 km S of the village on road to Akrounta, alt. 590 m, large population among shrub and on large boulders in river-bed, 12.10.1998, *Buttler 32466* and 28.4.1999, *Hand 2939*. K. P. Buttler

***Reichardia tingitana*** (L.) Roth

+ Division 3: Kouklia, coastal slopes c. 2.5 km WNW of Petra tou Romiou, phrygana, alt. c. 10 m, 14.3.1998, *Hand 1922.* (ed.)

***Scorzonera jacquiniana*** var. ***subintegra*** Boiss.

+ Division 3: Kouklia, coastal slopes c. 2.5 km WNW of Petra tou Romiou, phrygana, alt. c.

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10 m, 14.3.1998, *Hand 1925;* Pissouri, 3 km E of Petra tou Romiou, phrygana E of the road, phrygana, alt. c. 75 m, 24.3.1999, *Hand 2636.* (ed.)

***Campanulaceae***

***Campanula peregrina*** L.

+ Division 1: Tala, along Mavrokolympos brook c. 300 m below Baths of Adonis, alt. c. 275 m, 16.4.1998, *Hand 2190.* (ed.)

***Plumbaginaceae***

***Limonium sinuatum*** (L.) Mill.

The otherwise strictly coastal species occurs quite common on inland rocks in the serpentine strip between the rivers Ezousa and Xeros Potamos E of Pafos.

Division 3: Episkopi (near Pafos), c. 3 km SSE, small gorge below E 606 road, alt. c. 300 m, 7.5.1998, *Hand 2417.* (ed.)

***Gentianaceae***

***Blackstonia acuminata*** (Koch & Ziz) Domin

+ Division 1: Neo Chorio, c. 400 m SW of Smigies at main track, phrygana, alt. c. 310 m, 19.4. 1998, *Hand 2228.* (ed.)

***Solanaceae***

***Lycium schweinfurthii*** U. Dammer

Meikle (1985: 1187) discussed the taxonomy of the Cypriot *Lycium* species with elongated corolla tube. There is some confusion about the colour of the fruits in Cyprus. At Episkopi and many other sites along the S and W coast of Cyprus they proved to be black and not red. The final colour develops from green without any orange intermediate stages (personal observations). Dammer (1913) does not give any information on the colour of the type specimen from Egypt. The confusion may have arisen by the fact that *L. schweinfurthii* and the superficially similar following species grow sometimes in mixed populations along the coast.

Division 3: Episkopi (near Lemessos), rocks at the coast SW of Apollo temple, alt. c. 40 m, 18.3.1999, *Hand 2586;* Lemessos, Amathous, coastal slope c. 500 m E of Armenochori junction, 3 m, 11.10.1998, *Buttler 32471.* K. P. Buttler & R. Hand

***Lycium ferocissimum*** Miers

Fully ripe fruits from the following three sites were vivid orange red. In *Buttler 32445* they turned dark during drying, some remaining reddish brown, some reaching the black colour of *L. schweinfurthii* (cf. Meikle 1985: 1188).

+ Division 1: Chlorakas, rocky coast 200 m S of fishermen's harbour below the old village, naturalized, alt. c. 2 m, 21.2.1998, *Hand 1759;* Pafos, steep slope between cemetery and bishopric in Ktima, naturalized, alt. c. 60 m, 19.5.1999, *Hand 3314.*

+ Divison 3: Akrotiri, road to Kolossi 650 m S of Trachoni junction, alt. 0 m, planted as hedge along the road, 11.10.1998, *Buttler 32445.* K. P. Buttler & R. Hand

***Nicotiana glauca*** Graham

+ Division 1: Pafos, near the ruins of Saranda Kolones, originally planted but naturalizing, alt. c. 10 m, 10.5.1998, *Hand 2436.* (ed.)

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***Chenopodiaceae***

***Noaea mucronata*** (Forssk.) Asch. & Schweinf.

+ Division 3: Gerasa, c. 2.9 km S of the village on road to Palodeia, stony summer-dry riverbed, alt. 270 m, 12.10.1998, *Buttler 32457*.
Reported from Skarinou and Amathous without cited specimens (Alziar 1985).
K. P. Buttler

***Euphorbiaceae***

***Euphorbia thompsonii*** Holmboe

+ Division 1: Pegeia, NE, at the old way to Kathikas, middle part, rocky slope, alt. c. 350 m, 3.3.1998, *Hand 1836;* Pegeia, river valley NE of crossing at Coral Bay, alt. c. 50 m, 21.3.1999, *Hand 2612;* Pano Arodes, by the roadside to the Avgas gorge, at the striking slope c. 1.5 km above gorge, alt. c. 275 m, 8.5.1999, *Hand 3147.* (ed.)

***Iridaceae***

***Gynandiris sisyrinchium*** (L.) Parl.

+ Division 2: Pano Panagia, by the path a few meters above Moni Chryssorrogiatissa, grassy slope, alt. c. 820 m, 6.4.1998, *Hand 2095.* (ed.)

***Liliaceae***

***Colchicum troodi*** Kotschy

+ Division 1: Neo Chorio, valley c. 1.5 km SW of Baths of Aphrodite, steep slope with scattered trees and bushes, alt. c. 220 m, 6.10.1998, *Buttler 32482*.
The population shows a wide range of variation already described by Meikle (1985: 1594). The perianth segments vary from narrowly oblong to almost obovate, their colour from white to vivid pink. K. P. Buttler

***Alismataceae***

***Damasonium alisma*** Mill.

+ Division 1: Drouseia, vernal pools in rocks at the coastal track c. 2.5 km NNW of Panagia tou Flou, alt. c. 20 m, 2.5.1997, *Hand 1227.* (ed.)

***Cyperaceae***

***Carex halleriana*** Asso

+ Division 1: Neo Chorio, trail c. 500 m SE of old magnesium mine near Smigies, *Pinus brutia* forest, alt. c. 300 m, 25.2.1998, *Hand 1779.* (ed.)

***Gramineae***

***Aegilops ×insulae-cypri*** H. Scholz, **nothosp. nova**

(*Aegilops geniculata* Roth × *A. peregrina* (Hack.) Maire & Weiller)
Habitu spicae *Aegilopi peregrinae* similis qua atque basim rhachidis 1 rare 2 (nec ca. 3) spiculis rudimentariis ac glumarum nervibus indistincte (nec manifeste) angusto-elevatis distat.

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Holotype: N Cyprus, "Höhenzug S Girne" (Kyrenia), 11.4.1990, *W. Lang 24* (B; 1993 det. van Slageren: *A. ovata* × *A. peregrina*).

Endemic to Cyprus. The hybrid formula was first published by Bor (in Meikle 1985: 1822). He comments that the two specimens cited *(Syngrassides 335, Meikle 2347)* "may, in the circumstances, be reasonably assumed to be hybrids between the two species". Later Slageren (1994: 65) succeeded in listing five collection sites and 10 specimens mostly from S Cyprus. Further records of this nothotaxon came to be known by J. Lambinon and his co-collectors J. Rouselle and Van Den Sande in 1993 (the exsiccata *Lambinon 92/Cy/174*, *92/Cy/226*, *92/Cy/385*, *92/Cy/427A*, partly with critical annotations, forwarded, under the name *A. peregrina*, by the "Sociéte pour l'Echange des Plantes Vasculaires de l'Europe et du Bassin Mediterranéen", Liège/Belgium; ditto *Lambinon 92/Cy/227C* as *A. geniculata* × *peregrina*). Although the parental species meet in several countries, the hybrid was never reported outside Cyprus (see map, fig. 3, in Slageren 1994: 44). Now (since when?) it is a well-established plant on this Mediterranean island.

*Aegilops* ×*insulae-cypri* varies to some degree, chiefly depending on the heritage components of the rather polymorphic *A. peregrina*. The reduced awns of *A. peregrina* var. *brachyathera* (Boiss.) Maire & Weiller as well as the well-developed awns of var. *peregrina* (like as usually in *A. geniculata,* formerly misnamed *A. ovata*) recur on different hybrid strains. Populations with well-developed awns but very hairy spikelets *(Lambinon 92/Cy/427A)* rarely occur. Both ancestral species, *A. geniculata* (genome formula MU) and *A. peregrina* (SU), have the chromosome number 2n = 2x = 28 in common, and the same is to be expected for *A.* ×*insulae-cypri*.

Additional specimen
Division 1: Pegeia, river bed NE junction to Coral Bay, alt. 50 m, 21.3.1999, *Hand 2615*. H. Scholz

***Catapodium marinum*** (L.) C. E. Hubb.

+ Division 1: Pafos, rocky phrygana at the coast N of Venus Beach Hotel, at the N edge of the town, alt. c. 10 m, 13.4.1998, *Hand 2163,* conf. Scholz.
+ Division 3: Kouklia, coastal track c. 2.7 km WNW of Petra tou Romiou, alt. c. 2 m, 10.4.1998, *Hand 2150,* conf. Scholz. R. Hand & H. Scholz

***Hordeum murinum*** L. *(H. murinum* L. subsp. *murinum)*

Probably the first Mediterranean record of *Hordeum murinum* L. s. str., "not yet been found in Cyprus" (Bor in Meikle 1985: 1833)!

Referring to the plants of the collection cited below, the pedicels of the lateral spikelets are much longer than the "pedicels" of the subsessile central florets with anthers about 1 mm long and awns as long as or only a little shorter than those of the lateral ones, thus matching well the circumscription of *H. murinum* given by many authors (e.g. Jacobsen & Bothmer 1995, "*H. murinum* subsp. *murinum*").

The lemma and awn scabrosity of the Cypriotic plants, in being more accentuated than usually in *H. murinum* of northern countries, may indicate remote affinities to the Mediterranean-Near East *H. leporinum* Link (*H. murinum* subsp. *leporinum* (Link) Arcang.) and supports arguments in favour for its indigenous, not alien status in Cyprus. Similar taxa occur in the Canary Islands (B). The close southern distribution borderlines of the genuine European *H. murinum* cross the Crimea, N Greece, central Italy and central Spain (see map, fig. 1, in Jacobsen & Bothmer 1995: 452).

+ Division 1: Neo Chorio, S slope Smigies, phrygana along track, upper part of this slope, alt. c. 375 m, 3.4.1999, *Hand 2713*. H. Scholz

***Sclerochloa dura*** (L.) P. Beauv.

+ Division 1: Melandra, on the track to Stavros tis Psokas at the NE edge of the village, alt. c. 600 m, 23.4.1998, *Hand 2280,* conf. Scholz; Evretou, on the track at the E end of

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the Evretou dam, alt. c. 150 m, 2.5.1999, *Hand 3033,* conf. Scholz.

+ Division 3: Kannaviou, way on the left bank of river Ezousa, a few meters downstream from the bridge to Lapithiou, alt. c. 320 m, 6.5.1999, *Hand 3102,* conf. Scholz.

R. Hand & H. Scholz

***Pteridophyta***

***Equisetaceae***

***Equisetum telmateia*** Ehrh.

+ Division 1: Tala, in Mavrokolympos brook c. 200 m below Baths of Adonis, alt. c. 275 m, 18.3.1998, *Hand 1956.* (ed.)

***Adiantaceae***

***Cheilanthes vellea*** (Aiton) F. Muell.

+ Division 3: Agia Varvara (near Acheleia), c. 3 km NE, chalk rocks in geologically varied valley W of E 606 road, alt. c. 200 m, 4.4.1998, *Hand 2071.* (ed.)

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Address of the editor:
Ralf Hand, Botanischer Garten und Botanisches Museum Berlin-Dahlem, Freie Universität Berlin, Königin-Luise-Str. 6-8, D-14191 Berlin; e-mail: rhand@zedat.fu-berlin.de

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