

Med-Checklist Notulae, 24

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WERNER GREUTER & THOMAS RAUS (ed.)

Med-Checklist Notulae, 24

Abstract

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Continuing a series of miscellaneous contributions, by various authors, where hitherto unpublished data relevant to the Med-Checklist project are presented, this instalment deals with the families *Amaranthaceae*, *Apocynaceae*, *Basellaceae*, *Boraginaceae*, *Cabombaceae*, *Campanulaceae*, *Che-nopodiaceae*, *Compositae*, *Cruciferae*, *Euphorbiaceae*, *Labiatae*, *Leguminosae*, *Onagraceae*, *Pri-mulaceae*, *Scrophulariaceae*, *Solanaceae*, *Thymelaeaceae*; *Cyperaceae*, *Gramineae*, *Juncaceae* and *Liliaceae*. It includes new country and area records, taxonomic and distributional considerations. A new combination is validated in *Soldanella*, and a new subspecies is described in *Eragrostis*.

Key words: Mediterranean area, vascular plants, distribution, taxonomy.

Notice

The notations for geographical areas and status of occurrence are the same that have been used throughout the published volumes of Med-Checklist and are explained in the Introduction to that work (see Greuter & al., Med-Checklist 4: XI-XIII. 1989). The previous instalment was published in Willdenowia 35: 55-64. 2005.

Amaranthaceae

Amaranthus palmeri S. Watson

N Gr: Greece, Sterea Ellas, Nomos of Evvia, Eparchia of Chalkis: NW Kastella (38°34'13"N, 23°36'16"E), roadside and edge of field, 10 m, 4.10.2005, *Willing & Willing 145329* (pistillate specimen), *145330*, *145332* (staminate specimens); *ibid.*, Nomos and Eparchia of Fthiotis, SW Achladi (38°53'11"N, 22°47'41"E), roadside in olive grove, 20 m, 15.10.2005, *Willing & Willing 148260* (pistillate specimen), *148265*, *148267* (staminate specimens); *id.*, Peloponnisos, Nomos of Argolis, Eparchia of Argos: Argos (37°38'25"N, 22°44'28"E), weed along road to Neo Ireo, near the railroad crossing, 20 m, population with male and female plants, 3.10.2005, *Raabe*; *ibid.*, Nomos of Lakonia, Eparchia of Lakedemon, Paleologio (37°04'13"N, 22°24'02"E) between Sparti

and Mistras, road margins and cultivated ground, 250 m, population with male and female plants, 2.10.2005, *Raabe* (all B; det. Raus). – A xenophyte from SW North America and Mexico (for total primary range see Sauer in *Evolution* 11: 12. 1957), in the Med-Checklist area previously known as naturalized in Israel (Danin, *Distr. Atlas Pl. Fl. Palaest.* Area: 70. 2004) and in the Nile valley of Egypt (Boulos, *Fl. Egypt* 1: 136. 1999), as a casual in Spain (Carretero in *Castroviejo, Fl. Iber.* 2: 559. 1990) and extra-Mediterranean France (Alsace; Hegi, *Ill. Fl. Mitteleur.* ed. 2, 3(2): 510. 1959; Kerguelen, *Index Synon. Fl. France*: 13. 1993). New to Greece; at least the population near Sparti is fully established, stable on the same spot for several years and with vigorous mixed stands of staminate and pistillate plants (*Raabe, obs.*).

Th. Raus & U. Raabe

Amaranthus watsonii Standl.

A Gr: Greece, Peloponnisos, Nomos of Lakonia, Eparchia of Jithio: S of Jithio (36°45'47"N, 22°32'47"E), roadside in rocky *Quercus coccifera* shrub, 10 m, 8.10.2003, *Willing & Willing 121283* (B; det. Raus). – Pistillate specimen, bracts short (to 2.5 mm long only), with distinctive though scattered glandular pubescence on outer side as is typical for this taxon, tepals scarcely 2 mm long, all broadly spatulate (for diagnostic features see Sauer in *Madroño* 13: 38. 1955). A xenophyte from S California and NW Mexico (for total primary range see Sauer in *Evolution* 11: 12. 1957), invading irrigated fields and *Citrus* plantations in California and Arizona, previously not recorded in the Med-Checklist area.

Th. Raus

Apocynaceae

Catharanthus roseus (L.) G. Don

A Cr: Greece, Crete, Nomos of Chania, Eparchia of Kidonia: Chania (35°30'56"N, 24°01'18"E), in a crack in the base of a wall in the commercial area of the city, a big plant in full flower, 26.8.1992, *Yannitsaros obs. & photo*; *ibid.*, peninsula of Akrotiri, Moni Gouvernetou (35°35'03"N, 24°08'26"E), many subspontaneous individuals growing on a flat in the yard of the monastery, only one of them in flower, 15.4.2004, *Yannitsaros obs. & photo*. – A xenophyte originating from Madagascar, cultivated for ornament and medicinal purposes (c. 45 cultivars in three cultivar groups) and naturalised in most tropical and subtropical countries. The plants observed and photographed in Crete had rose-pink flowers, thus belonging to the 'Roseus' Group, and obviously were escapes from cultivation. To my knowledge there are no records of this species as an adventive from any other territories of the Med-Checklist area.

A. Yannitsaros

Basellaceae

Basella rubra L.

A Gr: Greece, Ionian Islands, Nomos of Kefallinia, Eparchia of Kranea: Island of Kefallinia, Lakithra (38°07'35"N, 20°30'52"E), in phrygana by the outskirts of the village, 14.9.2004, *Vassiliades* (herb. Yannitsaros); *id.*, Peloponnisos, Nomos of Argolis, Eparchia of Ermionis: Ermioni (37°23'09"N, 23°14'52"E), locality called Mandrakia, in flower-beds and flower-pots in the harbour, 9.2004, *Bazos obs.* – A species with small reddish flowers in short spikes (nomenclature according to Sperling & Bittrich in Kubitzki & al., *Fam. Gen. Vasc. Pl.* 2: 143-146. 1993), often considered conspecific with, or a variety of, the white-flowered *Basella alba* L. (e.g. by Steenis, *Fl. Males.*, Ser. 1, 5: 300. 1957; Walters & al., *Eur. Gard. Fl.* 3: 177. 1989). Probably native to Africa and SE Asia but now pantropical, widely cultivated for ornament, as a vegetable and pot herb in S Europe (Tutin & al., *Fl. Eur.* ed. 2, 1: 138. 1993) and in the tropics

(Hanelt, Encycl. Agric. Hortic. Crops: 229. 2001). The Greek records most likely represent escapes from cultivation. A. Yannitsaros, D. Vassiliades & I. Bazos

Boraginaceae

Paramoltkia doerfleri (Wettst.) Greuter & Burdet

- + **Gr:** Greece, Epirus, Nomos of Ioannina, Eparchia of Konitsa: c. 1 km NW of Elefthero (40°04'N, 20°50'E), small river valley, in a pine forest, 900 m, 26.6.2005, *Snogerup & Snogerup 21294* (LD). – Previously only recorded from former Yugoslavia and Albania (Greuter & al., Med-Checklist 1: 111. 1984). Generic delimitation according to Valdés (in Willdenowia 34: 60. 2004), corroborated by Hilger & al. (in Willdenowia 35: 45. 2005). B. Snogerup & S. Snogerup

Cabombaceae

Cabomba caroliniana A. Gray

- **Gr:** This is an American species reported once from irrigation canals or drains in Nomos Karditsa in Thessaly (Greece), as an escape from aquaria (Lolas, Parousia tou eidous *Cabomba caroliniana* sta ardeutika-stragistika kanalia stên Ellada. 7. Epistmêmoniko Sunedrio Ellinikês Zizaniologikês Etaireias. Perilipseis Anakoinoseôn, Athêna: 12. 1990). However, Greece must be excluded from the distribution area of this xenophyte because the above record is based on a misidentification. I have seen photographs of the plant and found that it belongs to a white-flowered species of *Ranunculus*. A. Yannitsaros

Campanulaceae

Campanula merxmülleri Phitos

- + **AE:** Greece, E Aegean Islands, Nomos & Eparchia of Chios: Island of Psara, Kimisis Theotokou Monastery (38°36'N, 25°35'E), on stone walls, 335 m, 5.6.2005, *Sideris* (herb. Sideris; det. Kit Tan). – A *Campanula* with conspicuous calyx appendages and characteristic large-toothed leaves, described from, and only previously known on, the W Aegean island of Skiros. Endemic to Greece. Kit Tan

Chenopodiaceae

Polycnemum arvense L.

- + **RK:** Ukraine, Crimea: Kerchensky Peninsula, Akmonaysky isthmus, 2 km W of the village of Frontovoye, remnants of steppe with dominating *Festuca valesiaca* Gaudin, *Elytrigia repens* (L.) Nevski and *Artemisia taurica* Willd., 40 m, 20.7.2006, *Yena & Kish* (CSAU, UU). – The species is not given for Crimea in either Jalas & Suominen (Atlas Fl. Eur. 5: 10. 1980) or Tutin & al. (Fl. Eur. ed. 2, 1: 110. 1993). The Manual of Ukrainian Higher Plants (Prokudin, Opred. Vysš. Rast. Ukrainy: 85. 1999) notes “throughout the country” without further precision. However, the presence of this taxon in Crimea has long been doubted or denied in basic floras of the region (Vul'f, Fl. Kryma 2(1): 87. 1947; Rubcova, Opred. Vysš. Rast. Kryma: 124. 1972; Golubev; Biol. Fl. Kryma. 1996). Vul'f (l.c.) even maintained that “all records of *P. arvense* for the Crimean flora are erroneous referring mainly to old authors”. These old authors are Schmalhausen (Fl. Sredn. Južn. Rossii 2: 360. 1897) and Pallas (Tabl. Phys. Topogr. Tauride. 1795). Their data on *P. arvense* have recently been accepted again in Russian Floras (Cvelev, Fl. Vost. Evropy 9: 70. 1996). Our collection confirms the occur-

rence of *P. arvense* on the Crimean peninsula. In general, *P. arvense* has been scantily collected in E European countries (see mapping gaps in Jalas & Suominen, l.c.: map 480). Collectors seem often to overlook this inconspicuous, autumnal plant.

A. V. Yena & R. Y. Kish

Compositae

Artemisia scoparia Waldst. & Kit.

A IJ: This species was recorded from Israel by Heller & Heyn (Consp. Fl. Orient. 8: 62. 1993, with unspecified status) and myself (Danin, Distr. Atlas Pl. Fl. Palaest. Area: 349. 2004). It occurs as a casual on disturbed ground, rather than as an established alien as the symbol applied in Danin (l. c.: 14) suggests. A. Danin

Bidens frondosa L.

N RK: Ukraine, Crimea, Simferopol, river Salgir close to KIM Str., riverside vegetation, 220 m, 12.8.2006, Yena (CSAU). – Not previously given for the Crimean peninsula. The species, a native of North America, has been reported from the Ukrainian mainland (Prokudin, Opred. Vysš. Rast. Ukrainy: 331. 1987; Cvelev, Fl. Evr. Časti SSSR 7: 38. 1994). On the same day I observed *B. frondosa*, without collecting additional specimens, in many additional locations along the Salgir river growing together with the native *B. tripartita* L. along with *Persicaria maculosa* Gray, *Ambrosia artemisiifolia* L. and *Nasturtium officinale* R. Br. Presumably it arrived in recent years along the N Crimean irrigation canal bringing the Dnjepr waters into the Ukrainian mainland, where *B. frondosa* was first found in 1970 (Protopopova & al., Pl. Invasions Ukraine. 2002). This find corroborates our observation that adventive species may reach the Ukrainian mainland much ahead of the Crimean peninsula. A. V. Yena

Cirsium arvense (L.) Scop. subsp. *arvense*

A IJ: Israel, Shefela: Eshtaol, roadside sprayed with herbicides, 11.5.2006, Danin (B, HUI; confirm. Greuter & Wagenitz). – Previously not recorded from the Flora Palaestina area, represented in the above location by many individuals and accompanied by another introduced species, *Misopates calycinum* (see entry below). I cannot yet assert that they are fully established. In the *C. arvense* population of Eshtaol the leaves are green abaxially, not tomentose as in *C. arvense* subsp. *vestitum* (Wimm. & Grab.) Petr. (see Davis, Fl. Turkey 5: 410. 1975). A. Danin

Cotula anthemoides L.

A IJ: I collected this plant once in Israel in the 1960s, which was the basis for its entry in Feinbrun-Dothan (Fl. Palaest. 3: 347. 1978). As it was not found again since, I suggest its occurrence in the Flora Palaestina area is (or was) casual. A. Danin

Delairea odorata Lem. [= *Senecio mikanioides* Walp.]

– **Sa:** Suite à une vérification des échantillons d'herbier correspondants, il s'avère que les données de Pignatti (Fl. Ital. 3: 130. 1982) sur la présence en Sardaigne de *Senecio mikanioides* Walp. (i.e., *Delairea odorata* Lem.) sont erronées. En réalité elles concernent *S. angulatus* L. f., espèce dont Viegi (in Boll. Soc. Sarda Sci. Nat. 29: 207. 1993) a depuis lors signalé la présence sur l'île. P. V. Arrigoni

Lactuca viminea (L.) J. Presl & C. Presl

N Li: Libya: Tarhuna about 95 km SE of Tripoli, 4.1.2006, Abuhadra & Almagabri 640 (ULT). – Collected for the first time in Libya. It is rare, so far only known from the locality given above, where it has become naturalised. M. Abuhadra

Symphotrichum squamatum (Spreng.) G. L. Nesom

- N Li:** Libya: Wadi-kaam about 120 km E of Tripoli, 12.9.2005, *Abuhadra & Almagrabi* 600; Tripoli, 18.10.2005, *Abuhadra & Almagrabi* 630; Tarhuna, 28.12.2005, *Abuhadra & Almagrabi* 638 (all ULT). – A xenophyte widespread in the Med-Checklist area, often referred to as *Aster squamatus* (Spreng.) Hieron. or *Conyzanthus squamatus* (Spreng.) Tamamsch. in basic floras and checklists (for generic concept see Greuter in Willdenowia 33: 46. 2003). The species was scarce in Tripoli but plentiful in Wadi-kaam, and is apparently naturalised in Libya. M. Abuhadra

*Cruciferae**Coronopus didymus* (L.) Sm.

- P Cy:** Cyprus: Nicosia, the area of “Field Club”, 4.2004, *Georgiadis* (herb. Yannitsaros). – This species has been observed in the above cited locality in Nicosia at least since April 2002. Since then it has expanded to man-made habitats in other places of the town and is apparently in the process of naturalisation.

A. Yannitsaros & Ch. Georgiadis

*Euphorbiaceae**Euphorbia maculata* L.

- P RK:** Ukraine, Crimea: Yalta municipality, Nikita (44°32'N, 34°14'E), Nikitsky botanical garden, on a flower-bed in front of the administrative building, 12.10.1954, *Kozhevnikova* (YALT; det. Geltman); id.: Simferopol, the Salgir embankment, between concrete slabs, 230 m, 18.10.2004, *Yena* (CSAU); ibid., Detsky Park, central lane, between concrete slabs, 230 m, 22.8.2005, *Yena* (CSAU). – There are no previous published records of this xenophyte from North America for the Crimean peninsula. It has been reported as a rare alien from the Danube delta area on the Ukrainian mainland (Dubyna & Protopopova in *Ukrains'k. Bot. Žurn.* 3: 33-36. 1984) and Lviv (Geltman in *Cvelev, Fl. Vost. Evropy* 9: 286. 1996). *E. maculata* has escaped the attention of Crimean botanists until now because it often grows together with the superficially similar *Polygonum aviculare* L. In Simferopol, the plant was probably introduced with sand that served as a base layer to slabs when the Salgir embankment was consolidated, in the mid 1980s (the Detsky Park's slabs are of that same period). The similar *E. chamaesyce* L. also grows in Simferopol in some places paved with concrete slabs. The distribution and degree of naturalisation of *E. maculata* in the Crimea is yet uncertain. A. V. Yena

Euphorbia oblongata Griseb.

- A IJ:** Israel, Judean Mts: Jerusalem, near San Simon monastery, weed in an ornamental plot, flowering, 6.5.2006, *Danin*; ibid., Talpiot industrial zone (31°45'N, 35°13'E), weed in a poorly kept flower bed, fruiting, 29.5.2006, *Danin* (both HUJ; det. Raus). – A species native to the southern Balkan Peninsula and islands of the Aegean (Tutin & al., *Fl. Eur.* 2: 218-219. 1968), extending to the northwest to reach Asia Minor, S of the Marmara Sea (Davis, *Fl. Turkey* 7: 587. 1982), here first recorded from Israel where it occurs as a casual weed. Its further possible spread and establishment in Israel should be monitored (see <http://flora.huji.ac.il/> for colour photographs of the cited collections). A. Danin & Th. Raus

*Labiatae**Teucrium microphyllum* Desf.

- + An:** Endemic to the central and S Aegean islands plus Tilos (not on Rodos) and SW Anatolia (Datça Peninsula: three gatherings by H. Runemark and three by A. Carlström). The Anatolian finds were published in Carlström (Surv. Fl. Phytogeogr. Rodhos: 106, 238. 1987), too late for inclusion in Davis (Fl. Turkey 7: 68. 1982) and Greuter & al. (Med-Checklist 3: 372. 1986), so that many are unaware of their existence.
Kit Tan & H. Runemark

*Leguminosae**Astragalus suberosus* subsp. *haarbachii* (Boiss.) V. A. Matthews

- + AE:** Greece, E Aegean Islands, Nomos & Eparchia of Chios: Island of Psara, Limnos (38°32'25"N, 25°34'52"E), in phrygana, 6.2004, *Sideris* (herb. Sideris; det. Kit Tan); id., Nomos of Dodekanisos, Eparchia of Rodos: Island of Rodos, Lindos (36°05'10"N, 28°05'16"E), by the shore, 0-5 m, 26.3.1970, *Wennerberg* (GB). – An annual or short-lived perennial distinct by its prostrate to ascending, hairy stems and appressed black calyx hairs, occurring in mainland Greece, the F.Y.R. Makedonija, Bulgaria, NW Turkey and S Anatolia but not previously known from the Greek islands.

Kit Tan

*Onagraceae**Epilobium adenocaulon* Hausskn.

- + Gr:** Greece, E Makedonia, Nomos & Eparchia of Drama: c. 1 km S of Paranestion (41°16'N, 24°31'E), flood plain habitats of the Nestos river, tall herb vegetation on river banks, on alluvial deposits, 100 m, 23.5.2001, *Schuler* 623 (herb. Schuler; det. S. Snogerup). This species is an introduction from America. It is best told apart from the indigenous Greek *Epilobium* species by its seeds with a short neck and a testa ornamentation of longitudinal crests. The dense, mainly glandular pubescence of the plant's upper parts and the crowded fleshy turions formed in late summer are also diagnostic. It has become an aggressive invader in N and Central Europe, to be looked for elsewhere in Greece, especially in the neighbourhood of the lower Nestos river. Another probably introduced element in this place is *Rumex stenophyllus* Ledeb., for which it is the second Greek locality (see Snogerup in Strid & Tan, Fl. Hellen. 1: 100. 1997).

A. Schuler & S. Snogerup

Oenothera indecora Cambess. subsp. *indecora*

- A Gr:** Greece, W Makedonia, Nomos & Eparchia of Pieria: NE Paralia Katerinis (40°16'53"N, 22°36'05"E), wet meadow near the coast, 5 m, 13.4.2002, *Willing & Willing* 99790; id., Nomos and Eparchia of Kilkis, E Kilkis (41°00'03"N, 22°54'15"E), roadside slope with grassland in deciduous scrub, 250 m, *Willing & Willing* 131444, 131459; id., Nomos of Serres, Eparchia of Sindiki, WNW Rodopoli (41°16'31"N, 22°58'56"E), mosaic of *Pteridium* heath, deciduous scrub and abandoned fields, scattered singly all over the place, 155 m, 27.4.2006, *Willing & Willing* 155144; ibid., SW Rodopoli (41°15'18"N, 22°E58'11"E), singly in herb community among deciduous scrub by a *Populus* plantation, 110 m, 27.4.2006, *Willing & Willing* 155145 (all B; det. Raus). – *Oenothera indecora* is a xenophyte from temperate South America (NW Argentina to SE Brazil), not previously mentioned from Greece and, in the Med-Checklist area, only given as locally naturalized in Portugal, France and Italy (Tutin & al., Fl. Eur. 3: 194. 1972). The Greek populations are uniform in showing a dense, chiefly villous

indumentum of three types of hairs: long patent eglandular, medium patent glandular and short appressed strigulose. They therefore key out as *O. indecora* subsp. *indecora* (Dietrich in Ann. Missouri Bot. Gard. 64: 517. 1977; Rostański in Bol. Soc. Brot., ser. 2, 64: 12. 1991; Burkart & Bacigalupo, Fl. Il. Entre Rios 4b: 536 & fig. 253. 2005). *O. indecora* subsp. *bonariensis* W. Dietr., naturalized in the Tejo estuary of SW Portugal (Dietrich in Castroviejo, Fl. Iber. 8: 97. 1997), differs in its very short indumentum lacking patent villous hairs (“apparently glabrous when viewed without a lens”; Dietrich l.c.: 519).
Th. Raus

Oenothera laciniata Hill

A Gr: Greece, E Makedonia, Nomos of Serres, Eparchia of Sindiki: SW Rodopoli (41°15'18"N, 22°58'11"E), grassland among deciduous scrub, by a *Populus* plantation, 110 m, 27.4.2006, *Willing & Willing 155170, 155174* (B; det. Raus). – No previous Greek records exist of this xenophyte (sometimes referred to as *O. sinuata* L.), easily recognised by its deeply incised, laciniate leaves. It originates from open, usually sandy sites and disturbed habitats of Central and Atlantic North America (Dietrich & Wagner in Syst. Bot. Monogr. 24: 43-44. 1988) and is a rare casual in the Med-Checklist area, only reported once from Catalonia (Castroviejo, Fl. Iber. 8: 95. 1997), from extra-Mediterranean France (Issler & al., Fl. Alsace: 357. 1965; Guinochet & Vilmorin, Fl. France: 1801. 1984), several places in NW Italy (Pignatti, Fl. Ital. 2: 1523. 1982) and coastal Israel (Danin, Distr. Atlas Pl. Fl. Palaest. Area: 220. 2004).
Th. Raus

Primulaceae

Soldanella chrysosticta Kress subsp. *chrysosticta*

+ Bu, Ju; This subspecies is confined to Bulgaria, just extending into adjacent E Serbia (Zhang & Kadereit in Nordic J. Bot. 22: 143-144. 2003, and in Taxon 53: 744. 2004, as *S. chrysosticta*). Presumed occurrences in northernmost Greece (Mt Belles/Kerkini; Raus in Willdenowia 16: 336. 1987, under *S. cyanaster* O. Schwarz) have not been confirmed (Zhang & Kadereit, l.c.). See also the next entry.
Th. Raus

Soldanella chrysosticta subsp. *pelia* (Raus) Raus, **comb. & stat. nov.** ≡ *Soldanella pelia* Raus in Willdenowia 16: 337. 1987.

Molecular evidence points to a close relationship between *S. chrysosticta* (E Serbia, Bulgaria) and *S. pelia* (E Central Greece) and does not support their distinctness at species rank (Zhang & Kadereit in Nordic J. Bot. 22: 133, 143. 2003, and in Taxon 53: 744. 2004, with incorrect bibliographic citation for *S. pelia*). However, mere synonymy as advocated by Zhang & Kadereit (l.c.) neglects the difference in density and length of the glandular indumentum of pedicels, illustrated and keyed out by Raus (in Willdenowia 16: 339, 341. 1987). This, in combination with a clear-cut geographical isolation, justifies subspecific level for the Greek taxon. *S. chrysosticta* subsp. *pelia* is of major nature conservation concern (Vulnerable, according to the 2006 IUCN Red List – Categories & Criteria, version 3.1); at the most, a few hundred individuals are known to exist (Raus in Phitos & al., Red Data Book Greece: 474-475. 1995; Bauermann in Fisis 79: 5-6, 49. 1997).
Th. Raus

Scrophulariaceae

Misopates calycina (Vent.) Rothm.

A IJ: Israel, Shefela: Eshtaol, roadside sprayed with herbicides, 11.5.2006, *Danin* (B, HUI; det. Danin & Valdés). – A white-flowered annual xenophyte with a native range from Portugal to SE Italy and Tunisia (Sutton, Rev. Antirrhineae: 150. 1988), not previ-

ously recorded from the Flora Palaestina area (see <http://flora.huji.ac.il/> for a colour photograph of the cited collection). Represented in the above location by many individuals and accompanied by another introduced species, *Cirsium arvense* (see that entry above).
A. Danin & B. Valdés

Solanaceae

Lycium chinense Mill.

A Gr: Greece, Peloponnisos, Nomos of Argolis, Eparchia of Argos: SW Nea Kios (37°34'56"N, 22°44'28"E), in coastal grassland, 1 m, 3.10.2003, *Willing & Willing 119929, 119939* (B; det. Raus). – A xenophyte from E Asia (Pakistan to Japan and Thailand), cultivated in Europe as an ornamental shrub and hedge plant for 300 years (introduced before 1709: Krüssmann, *Handb. Laubgehölze* 2: 93. 1961), in the Med-Checklist area given as locally naturalised in Portugal, France and Italy (Tutin & al., *Fl. Eur.* 3: 194. 1972). There are no previous records from Greece where the species is not naturalised, according to the collectors' observation in the field. The Greek specimens key out as *Lycium chinense* var. *chinense* (leaf blade rhombic-ovate, corolla lobes densely ciliate, stamens slightly shorter than the corolla; see Wu & Raven, *Fl. China* 17: 303. 1994).
Th. Raus

Solanum pseudocapsicum L.

A Cr: Greece, Crete, Nomos of Rethimno, Eparchia of Agios Vasilios: Dimos Lappas, Spili (35°13'N, 24°32' E) between Rethimno and Ag. Galini, small (0.2 m) open space between a wall and concrete steps in the village, one c. 0.6 m tall plant growing from below the stairs, stem diameter at base c. 3 cm, "crown" c. 0.5 m across, fruiting (seeds well developed), 400 m, 5.1.2000, *Böhling 10650* (B, herb. Böhling). – A spontaneous occurrence in Crete of this poisonous ornamental from South America known as "Jerusalem cherry". It is unknown whether it arose from seed or spread vegetatively from previous cultivation. According to Hawkes & Edmonds (in Tutin & al., *Fl. Eur.* 3: 198. 1972), the species is locally naturalized in SW Europe. It is a noxious weed in New Zealand, Australia and North America. In fruit it can be confused with cherry cultivars of the peppers *Capsicum annuum* L. and *C. frutescens* L., but the leaves are narrower, the calyx is deeply incised and the small globose fruits are held upright (see drawing under <http://www.anbg.gov.au/poison-plants/s-poison.html>).
N. Böhling

Thymelaeaceae

Thymelaea gussonei Boreau

+ Gr: Greece, Ionian Islands, Nomos & Eparchia of Kerkira: Island of Kerkira, S Liapades, östlich über der Akr. Iliádoros, 1-2 km südlich der Ortschaft, 180-200 m, 9.11.1991, *Hörandl & Gutermann 26570*; *ibid.*, Akr. Kefali (Akr. Ag. Stefanos) bei Ag. Stefanos, 4 km SW Avlioties, 50-70 m, 5.11.1991, *Hörandl & Gutermann 26471* (all herb. Gutermann; confirm. Kit Tan). – New to Greece. Distributed mainly in coastal areas of S Europe, Turkey, Cyprus, W Syria, Algeria and Tunisia. Often with reddish purple, white-pilose stems and a peak flowering period later than that of *T. passerina* (L.) Cosson & Germ. The latter is a wide ranging steppic annual with all flowers hermaphrodite, apparently adapted to inbreeding, with a low production of almost homomorphic pollen and a mechanism ensuring self-pollination. *T. gussonei* is the only andromonoecious species in the genus, having hermaphrodite and staminate flowers in the same plant. In other plants, pistillate, staminate and hermaphrodite flowers occur.
W. Gutermann & Kit Tan

Cyperaceae

Carex umbrosa Host subsp. *umbrosa*

- + Gr:** Greece, W Makedonia, Nomos of Pella, Eparchia of Almopia: c. 8 km NNW of Loutraki (41°02'N, 21°54'E), large shallow depression near the border known as Dobro Polje, open swampy meadows with *Sphagnum* and stagnant water, 1650–1700 m, 11.6.2005, *Strid* 55605 (ATH, B, G, GB, LD). – The plants belong to *C. umbrosa* subsp. *umbrosa* rather than to subsp. *huetiana* (Boiss.) Soó, which has been reported from elsewhere in the Balkans. The Dobro Polje locality is unique, being home to many Central European or boreal species otherwise rare in the Balkans, including *Carex lasiocarpa* Ehrh., *C. limosa* L. and *C. rostrata* Stokes. A. Strid

Gramineae

Alopecurus arundinaceus Poir.

- + Gr:** Greece, Thrace, Nomos of Evros, Eparchia of Soufli: 1 km E Thimaria (40°59'30"N, 26°17'E), cereal field on alluvial loam, 30 m, 12.5.1991, *Raus & Schiers* 17480 (B); *ibid.*, 2 km from the village of Lefkimi along road to hill 552 (41°02'N, 26°10'E), seasonally wet place at the edge of a cultivated field by an arid outcrop of igneous rocks, 200 m, 18.6.2005, *Strid* 55737 (GB). – This species was reported with doubt from Greece by Clarke (in Tutin & al., *Fl. Eur.* 5: 241. 1980), perhaps based on the imprecise indication “Thr[acia]” in Hayek's *Prodromus* (in *Repert. Spec. Nov. Regni Veg. Beih.* 30(3): 338. 1932, as *A. ventricosus* Pers.). Our records confirm the occurrence of *A. arundinaceus* in Greece, close to known localities in Bulgaria (Andreev & al., *Opred. Visš. Rast. Bălg.*: 585. 1992) and the Istanbul area (Davis, *Fl. Turkey* 9: 376. 1985). *A. arundinaceus* is a widespread species occurring in E Europe and extending through Turkey to Afghanistan, Kashmir and Mongolia, with isolated localities in Spain and Portugal (Doğan in *Türk Bot. Derg.* 23: 251–252. 1999).

Th. Raus & A. Strid

Anisantha rubens subsp. *kunkelii* (H. Scholz) H. Scholz [= *Bromus kunkelii* (H. Scholz) H. Scholz]

- D Gr:** Greece, Sterea Ellas, Nomos of Fokis, Eparchia of Parnassis: the bay of Ag. Pangalos E of Cape Makrinikolas (38°17'N, 22°34'E), sandy beach and S-exposed sandstone slope facing the sea, with *Pistacia lentiscus* L., *Coridothymus capitatus* (L.) Rchb. f. and some *Juniperus phoenicea*, 2–40 m, 14.4.2002, *Constantinidis & Evergetis* 9940 (B; det. Scholz). – This W Mediterranean-Macaronesian taxon (see Scholz in *Willdenowia* 25: 578. 1996), with larger spikelets than *A. rubens* (L.) Nevski subsp. *rubens* (lemmas 13–15 mm vs. 10–13 mm long), surprisingly turned up in Greece, far to the east of its main distribution range, having so far been overlooked, or perhaps recently introduced?

Th. Constantinidis & H. Scholz

Arundo mediterranea Danin

- + AE:** Greece, E Aegean Islands, Nomos of Dodekanisos, Eparchia of Rodos: Island of Rodos, Salakos, c. 45 km SW of Rodos town, stony slope near the road, 28.9.2005, *Danin*; *ibid.*, Kalavarda, c. 35 km SW of Rodos town, near a dry watercourse, on soil with numerous limestone pebbles, 26.9.2005, *Danin* (B, BM, G, HUJ, K, PAL). – The first E Aegean record of this species (see Danin in *Willdenowia* 34: 362–364. 2004 for taxonomic details) is the catchment area of a wadi on Rodos starting at Salakos and reaching the sea near Kalavarda. A. Danin

Avena barbata subsp. *lusitanica* (Tab. Morais) Romero Zarco

- + **Gr:** Greece, Aegean, Nomos of Kiklades, Eparchia of Kea: island of Kithnos, W Apokrisi, 60 m, grazed phrygana, 28.5.2005, *Biel BB-WK05.056* (herb. Biel; det. Scholz). – Reported from Crete (Böhling & Scholz in Ber. Inst. Landschafts-Pflanzenökol. Univ. Hohenheim, Beih. 16: 27. 2003), but not so far from elsewhere in Greece.
B. Biel & H. Scholz

Bromus hordeaceus subsp. *thominei* (Hardouin) Braun-Blanq.

- + **Gr:** Greece, Makedonia, Nomos & Eparchia of Thessaloniki: Ormos (40°24'24"N, 22°53'45"E), sandy coast and salt marshes, 15.5.1996, *Jogan Gr-646a* (herb. Jogan; det. Scholz). – No previous published records from Greece of this rarely collected subspecies, which settles mainly on maritime sands from W Europe to the Black Sea coast of N Anatolia (Smith in Tutin & al., Fl. Eur. 5: 187. 1980; Davis, Fl. Turkey 9: 279. 1985). In the Med-Checklist area it is also known from Sardinia and mainland Italy. The subspecific combination by Braun-Blanquet (Orig. Dévelop. Fl. Massif Central: 113. 1923; "*Thominii*") antedates the identical combinations by Hylander (in Uppsala Univ. Årsskr. 1945: 84. 1945) and Maire & Weiller (Fl. Afr. Nord 3: 256. 1955) as cited by Kerguelen (in Lejeunia, ser. 2, 75: 104. 1975) and Smith (l.c.), respectively.
H. Scholz & N. Jogan

Eragrostis minor subsp. *angusta* H. Scholz & Raus, **subsp. nov.** (Fig. 1). – Holotype: Greece, Thessalien, Nomos Larisa, Eparchia Agia: Agiokambos, Meeresstrand, Feinkies bis Grobsand, Standort betreten und leicht ruderalisiert, 1-3 m, 24.9.1980, *Binder & al. 737* (B).

Ab *Eragrostide minore* Host subsp. *minore* differt panicula anguste contracta c. 1 cm lata, ramis dense spiculatis erectis.

Other specimens seen: Greece, W Makedonia, Nomos of Pieria, Eparchia of Elasona: Vorberge des Pieria-Massifs nördlich von Sarandoporon, therophytenreiche Brachäcker über Kalkgestein, 950 m, 29.8.1983, *Hagemann & al. 1558* (B, with *E. minor* subsp. *minor*); id., Peloponnisos, Nomos of Arkadia, Eparchia of Gortinia, N Panajitsa (37°46'39"N, 22°13'15"E), felsiger Straßenrand, *Quercus coccifera*-Gebüsch, 560 m, 30.9.2003, *Willing & Willing 119161* (B); ibid., Eparchia of Mandinia: Mt Artemisio, c. 0.6 km NW of Neastani village (37°37'N, 22°28'E), hill of the ancient acropolis, by the chapel of Analipsis, wet places around a spring, 740 m, 23.7.2005, *E. Paraskevopoulos 951* (B); id., Nomos of Messinia, Eparchia of Kalamata: Aj. Nikolaos (36°49'04"N, 22°17'39"E), küstennahe Krautfluren und Flussbett, 2 m, 11.10.2003, *Willing & Willing 122038* (B). – The specimens cited are very homogeneous in all morphological features except *Hagemann & al. 1558*, which deviates in being densely covered with glandular pits on the uppermost internodes below the inflorescence. Probably the new subspecies recently arose all of a sudden, polytopically, in Greece (and perhaps elsewhere?), from *E. minor* subsp. *minor*.
H. Scholz & Th. Raus

Eragrostis tef (Zuccagni) Trotter

- A IJ:** Israel, Shefela: 5 km W Kefar Menachem, roadside sprayed with herbicides, 11.5.2006, *Danin* (B, HUJ; confirm. Scholz). – *Eragrostis tef* is indigenous in Ethiopia and at the same time the major cultivated crop there, accounting for more than half of the grain production (Hanelt, Encycl. Agric. Hortic. Crops: 2604. 2001). Its occurrence in Israel is accidental. It is possible that the large community of citizens of Ethiopian origin assisted the advent of *E. tef* in Israel. Its habitat here is a strip of a few metres along a highway, sprayed with herbicides and almost freed of competitors. The plants were surrounded by many individuals of *Triticum aestivum* L. and *Hordeum vulgare* L. Seeds of several grain crops such as wheat, barley, oat, and flax, falling off



Fig. 1. Inflorescences of *Eragrostis minor* Host – A: *E. minor* subsp. *angusta* H. Scholz & Raus (*Paraskevopoulos* 951, B); B: *E. minor* subsp. *minor* (*Constantinidis* 8256b, B). – Scan: M. Rodewald.

from transport vehicles, establish themselves there in winter time (Danin, Distr. Atlas Pl. Fl. Palaest. Area: 416, 417, 423. 2004).

A. Danin & H. Scholz

Sesleria autumnalis F. Schultz

+ Gr: Greece, Epirus, Nomos of Ioannina, Eparchia of Konitsa: Aaos Gorge, path connecting Konitsa bridge to Stomiou Monastery, undergrowth of *Carpinus orientalis* Mill. and *Quercus coccifera* L. woodlands, 470 m, 21.4.2004, *Di Pietro & Viscosi* 2005/2

(B, RO, herb. Di Pietro; confirm. Scholz). – No previous published record of this species from Greece exists. The Department of Plant Biology, University of Rome, sent to B a duplicate specimen of *S. autumnalis*, determined by Di Pietro labelled with the remark “new species to the flora of Greece”.
R. Di Pietro & H. Scholz

Tripsacum floridanum Vasey

A Hs: Spain: Prov. de Oviedo, area NE of Avilés, Playa de Tenrero (43°E, 37°29"N, 05°E, 52°53"W), 5-15 m, 25.8.1998, *Dobeš & Vitek 98-7476* (LI, W, herb. Dobeš; det. Scholz). – Belonging to the subtribe *Tripsacinae* C. Presl, together with *Zea* L., this perennial, stoloniferous grass native to S Florida and Cuba (Barkworth & al., Fl. North Amer. 25: 696. 2003), closely related to *T. dactyloides* (L.) L. but commonly less than 1 m tall and with the terminal and axillary racemes usually solitary (Hitchcock & Chase, Man. Grasses U.S.: 792. 1951), seems not to have been observed previously in the Mediterranean area.
H. Scholz

Juncaceae

Juncus foliosus Desf.

+ Gr: Greece, Peloponnisos, Nomos of Messinia, Eparchia of Pilia: c. 2 km SSE of Methoni, phrygana and field margins, on seasonally wet clay, schist, 50 m, 19.4.1995, *Strid 38373* (ATH, G, LD, herb. Strid); *ibid.*, Nomos of Achaia, Eparchia of Patras: Kalogria, damp coastal meadows with scattered trees of *Pinus pinea* L. and *Quercus ithaburensis* subsp. *macrolepis* (Kotschy) Hedge & Yalt., 0-2 m, 26.4.1997, *Strid 41435* (G, herb. Strid). – New to Greece. Previous records of this slender annual are mostly from damp open habitats in W Europe and NW Africa (Tutin & al., Fl. Eur. 5: 107. 1980; Valdés & al., Cat. Pl. Vasc. N. Maroc: 739. 2002), extending eastwards to S Italy (Basilicata: Pignatti, Fl. Ital. 3: 434. 1982).
S. Snogerup & A. Strid

Liliaceae

Asparagus densiflorus (Kunth) Jessop

A Gr: Greece, Sterea Ellas, Periferia Protevousis: Athens, street margins, bases of walls, gutters, 2004 and 2005, *Yannitsaros obs.* – This species of S African origin is frequently cultivated in Athens as an ornamental in flower pots in streets, squares, on balconies, verandas, etc. During the last years I repeatedly observed isolated young plants growing as escapes from cultivation on street margins, at the base of walls, in gutters, etc. To my knowledge there are no previous Greek records of this alien species, which at present may be considered a casual only.
A. Yannitsaros

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