Willdenowia 37 - 2007

WERNER GREUTER & THOMAS RAUS (ed.)

Med-Checklist Notulae, 25

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Continuing a series of miscellaneous contributions, by various authors, where hitherto unpublished data relevant to the Med-Checklist project are presented, this instalment deals with the families *Aizoaceae, Amaranthaceae, Compositae, Fagaceae, Labiatae, Rosaceae, Rutaceae, Saxifragaceae, Umbelliferae, Verbenaceae;* and *Gramineae*. It includes new country and area records, taxonomic and distributional considerations. A new name in *Quercus* and a new combination in *Aegilops* are validated, and two new subspecies are described in *Arrhenatherum*.

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 36: 719-730. 2006.

Aizoaceae

Galenia pubescens (Eckl. & Zeyh.) Druce

P IJ: Israel, Sharon Plain, Glilot junction, 4 km W of Ramat HaSharon, crevices of a side walk, 23.4.2007, *Danin*; id., Judean Mts., Jerusalem, 15.5.2007, *Danin* (both B, HUJ; det. Raus). – An alien of S African origin, not previously recorded for Israel, where its degree of naturalisation is still unclear. In Australia (Prescott in Robertson & al., Fl. Australia 4: 49-50. 1984), California (Vivette in Fl. N. Amer. 4: 79. 2004), Chile and Spain (Leuenberger & Eggli in Bot. Jahrb. Syst. 123: 442-443. 2002), *Galenia pubescens* is locally fully established. Diagnostic photographs of *G. pubescens* are shown on Australian (http://www.weeds.crc.org.au/), Californian

(http://calphotos.berkeley.edu/) and now Israeli Web sites (http://flora.huji.ac.il/). All 27 species of *Galenia* are S African in distribution (generic range mapped in Hartmann, Ill. Handb. Succ. Pl., Aizoaceae F-Z: 28. 2001). So far, only two became aggressive weeds in other continents, viz. *G. pubescens* and *G. pubescens* (L. f.) Sond., two distinct species neatly keyed out in the three works (by Prescott, Vivette, and Leuenberger & Eggli) just cited: *G. pubescens* is grey-green to glaucous, covered with closely appressed hair-like scales <1 mm long; *G. pubescens* is greywhite, with a villous indumentum of up to c. 1.5 mm long, loosely appressed hairlike scales. Th. Raus & A. Danin

Galenia secunda (L. f.) Sond.

Hs, IJ: Having revised relevant herbarium specimens (B, HUJ), we conclude that all records of *Galenia secunda* from Spain (Galiano & Silvestre in Lagascalia 5: 94. 1975; Molesworth Allen in Lagascalia 6: 239. 1976; Arvidsson & Lidén in Bot. Not. 130: 130. 1977; Greuter & al., Med-Checklist 1: 43. 1984; Smithies in Englera 3: 23. 1984; Pastor in Valdés & al., Fl. Vasc. Andalucía Occ. 1: 167. 1987; Castroviejo, Fl. Iber. 2: 76. 1990; Webb in Tutin & al., Fl. Eur., ed. 2, 1: 135. 1993; Lambinon in Bull. Soc. Échange Pl. Vasc. Eur. Occid. Bassin Médit. 26: 44. 1997, etc.) and Israel (Danin, Distr. Atlas Pl. Fl. Palaest. Area: 35. 2004) are based on misidentified material of *G. pubescens* (see previous entry and the taxonomic and nomenclatural discussion by Leuenberger & Eggli in Bot. Jahrb. Syst. 123: 442-443. 2002).

Th. Raus & A. Danin

Amaranthaceae

Amaranthus bouchonii S. Watson

P AE: Greece, Nomos of Lesvos, Eparchia of Mithimni: c. 3 km SW of Kalloni (39°13'N, 26°11'E), 30 m, 10.7.2000, *Snogerup 17117* (LD). – Several plants were observed in a harvested water melon field. On hasty inspection the species is easily mistaken for the common *A. hybridus* L., but has an elongated central spike, bracteoles at least twice as long as the flowers and an indehiscent fruit. It should be looked for in other irrigated cultures. According to Raus (in Strid & Tan, Fl. Hellen. 1: 142. 1997), *A. bouchonii* is a "homeless" weed of uncertain status and origin, known so far from only one Greek locality on Kriti.

Compositae

Bidens radiata Thuill.

A It: A casual alien in Friuli-Venezia Giulia, not naturalised as the entry in Conti & al. (Annot. Checkl. Ital. Vasc. Fl.: 61. 2005) suggests. F. Conti

Bombycilaena erecta (L.) Smoljan

? Sa: Given for the Isola di San Pietro 4 km off SW Sardinia (Bertoloni, Fl. Ital. 9: 506. 1853; De Marco & Mossa in Ann. Bot. (Rome) 32: 199. 1973). The record, however, needs confirmation.
P. V. Arrigoni

Carduus nutans subsp. taygeteus (Boiss. & Heldr.) Hayek

- Sa: Recorded for Sardinia with doubt by Pignatti (Fl. Italia 3: 145. 1982, under *Carduus macrocephalus* subsp. *inconstrictus* (O. Schwarz) Kazmi), followed by Conti & al. (Annot. Checkl. Ital. Vasc. Fl.: 69. 2005, under *Carduus nutans* subsp. *inconstrictus* O. Schwarz), but absent from that island.

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Carthamus carduncellus L.

BI: Reported from Ibiza without precise locality by Pau (in Actas Soc. Esp. Hist. Nat. 29: 228-231. 1900). This record has never been confirmed, and there is no supporting evidence that *C. carduncellus* exists in the Balearic archipelago. L. Sáez

Carthamus pinnatus Desf.

? Bl:Balearic records of this species (see Bonafè Barceló, Fl. Mallorca 4: 304. 1980) require confirmation.L. Sáez

Coreopsis lanceolata L.

A It: According to Galasso and Poldini (pers. comm.), this xenophyte is not naturalised in Friuli-Venezia Giulia as the entry in Conti & al. (Annot. Checkl. Ital. Vasc. Fl.: 80. 2005) suggests. F. Conti

Cota tinctoria subsp. australis (R. Fern.) Oberpr. & Greuter

A Sa: Observed by Atzei (pers. comm.) in the Mt. Limbara area as a casual road-side alien. P. V. Arrigoni

Crepis sancta subsp. nemausensis (P. Fourn.) Babc.

? Bl: Babcock (in Univ. Calif. Publ. Bot. 22: 733. 1947) cites a specimen from Mallorca (*Edwards1929*, K), but the presence of this taxon on the Balearic Islands has never since been confirmed.
L. Sáez

Crepis vesicaria L. subsp. vesicaria

- Sa: Two subspecies of *Crepis vesicaria* occur in Sardinia, subsp. *hyemalis* (Biv.) Babc. and subsp. *taraxacifolia* (Thuill.) Thell., but the presence of a third, subsp. *vesicaria*, indicated by Sell (in Tutin & al., Fl. Eur. 4: 356-357. 1976), Zangheri (Fl. Ital. 1: 807 1976), Pignatti (Fl. Italia 3: 281 1982) and Conti & al. (Annot. Checkl. Ital. Vasc. Fl.: 82. 2005), cannot be confirmed.

Eclipta prostrata (L.) L.

A It,A casual alien anywhere in Italy, not naturalised as the entry in Conti & al. (Annot.Sa, Si:Checkl. Ital. Vasc. Fl.: 61. 2005) suggests.F. Conti

Gnaphalium americanum Mill.

A It: A casual alien in Tuscany, not naturalised as the entry in Conti & al. (Annot. Checkl. Ital. Vasc. Fl.: 61. 2005) suggests. F. Conti

Gnaphalium uliginosum L.

 ? Sa: The record of this species from the shores of Lago di Bidighinzu near Sassari by Mossa & al. (in Rendic. Semin. Fac. Sci. Univ. Cagliari 73, Suppl. 2: 25. 2003) requires confirmation.
P. V. Arrigoni

Hypochaeris laevigata (L.) Ces. & al.

? Sa: Records for Sardinia by Falqui (Contr. Fl. Sardegna, 1905) and Mola (Cat. Piante Animali Reg. Bosa, 1916) require confirmation supported by herbarium material.

P. V. Arrigoni

Inula helenium L.

? **Sa:** The species was mentioned for Sardinia by Barbey (Fl. Sard. Comp.: 39. 1884), based on unpublished information by Reverchon, but its occurrence has never since

been confirmed. Pignatti (Fl. Italia 3: 45. 1982) treats it as doubtfully native, but its occurrence in Sardinia is altogether doubtful. P. V. Arrigoni

Launaea cervicornis (Boiss.) Font Quer & Rothm.

Hs: The record from the Iberian Peninsula (Province of Almería, Sierra de Gádor) by Smythies (in Englera 3: 172. 1984) has never been confirmed, and there is no evidence that *L. cervicornis* exists in peninsular Spain.

Leontodon balansae Boiss.

Ma: This species is only known from its locus classicus Ghar Roubane, a locality situated in Algeria close to the border of Morocco. It was mentioned from there, but as if it were a member of the Moroccan flora, by Jahandiez & Maire (Cat. Pl. Maroc: 835. 1934), and cited in the same way by Fennane & Ibn Tattou (Bocconea 8: 41. 1998). No concrete data are known to prove its effective occurrence in Morocco itself. The Moroccan area close to Ghar Roubane has been the object of recent survey, e.g. in 1994 in the frame of my own thesis work on the Debdou Massif. The region of Chekhar and the Jbel Mahser were found to host an important contingent of Algero-Moroccan endemics, but *L. balansae* was not among them. Until such time as search in that border area confirms its presence, the occurrence of *L. balansae* in Morocco remains hypothetical.

Leucanthemum ircutianum DC.

C Sa: This species, indicated for Sardinia by Pignatti (Fl. Italia 3: 93. 1982, under *Leucan-themum vulgare* Lam. var. *vulgare*), exists only in cultivation on that island.

P. V. Arrigoni

Leucanthemum vulgare (Vaill.) Lam.

C Sa: This species, indicated for Sardinia by Pignatti (Fl. Italia 3: 92. 1982, under *Leucanthemum praecox* Horvatić var. *praecox*) and Conti & al. (Annot. Checkl. Ital. Vasc. Fl.: 121. 2005), exists only in cultivation on that island. P. V. Arrigoni

Lonas annua (L.) Vines & Druce

D Sa: Reported by Manunta (in Inform. Bot. Ital. 12: 344. 1982) from Olbia, on the east coast of the Gulf of Cugnana, without indication of status. The species is probably not indigenous on Sardinia. P. V. Arrigoni

Micropus supinus L.

? Sa: Its occurrence in Sardinia was mentioned by Moris (Stirp. Sard. Elench. 1: 28. 1827), who subsequently omitted that record (Moris, Fl. Sard. 2. 1840-43). A recent report from Monte Limbara (Veri & Bruno in Ann. Bot. (Roma) 33: 117. 1974) could not be confirmed by subsequent field work.

Picnomon acarna (L.) Cass.

 ? Sa: An old Sardinian record, communicated by De Notaris to Moris (Fl. Sard. 2: 462. 1840-43), could never be confirmed subsequently.
P. V. Arrigoni

Picris hieracioides L.

Sa: Although mentioned by Sell (in Tutin & al., Fl. Eur. 4: 317.1976), Pignatti (Fl. Italia 3: 248-249. 1982) and Conti & al. (Annot. Checkl. Ital. Vasc. Fl.: 143. 2005), this species is in fact absent from Sardinia.
P. V. Arrigoni

Senecio macedonicus Griseb.

? Tu: The presence of this species in the European part of Turkey, as given by Chater & Walters (in Tutin & al., Fl. Eur. 4: 1976), needs to be confirmed. There are no concrete records from this area.

Tagetes erecta L.

A It: According to Poldini (pers. comm.), this xenophyte is not naturalised in Friuli-Venezia Giulia, contrary to what the entry in Conti & al. (Annot. Checkl. Ital. Vasc. Fl.: 172. 2005) suggests. F. Conti

Tolpis virgata subsp. grandiflora (Ten.) Arcang.

+ Sa: According to corolla characters and the number of pappus setae, all Sardinian populations of *Tolpis virgata* belong to subsp. *grandiflora*. P. V. Arrigoni

Tragopogon porrifolius L. subsp. porrifolius

Sa: While *Tragopogon porrifolius* subsp. *australis* (Jord.) Nyman is native to Sardinia, the typical subspecies (given as introduced by Pignatti, Fl. Italia 3: 231. 1982 and as indigenous by Conti & al., Annot. Checkl. Ital. Vasc. Fl.: 176. 2005) is absent from that island.

Tyrimnus leucographus (L.) Cass.

? Sa: Mentioned for Sardinia in Fiori (Nuova Fl. Anal. Italia 2: 755. 1927), probably based on a manuscript note of Reverchon cited by Barbey (Fl. Sard. Comp.: 41. 1884), but never since confirmed for that island.
P. V. Arrigoni

Xeranthemum cylindraceum Sm.

+ Ma: Morocco, Jbel Bou Slimane, within the National Park of Talassemtane (Central Rif). M. Ibn Tattou

Zinnia elegans Jacq.

A It: A casual alien in Abruzzo, not naturalised as the entry in Conti & al. (Annot. Checkl. Ital. Vasc. Fl.: 185. 2005) suggests. F. Conti

Fagaceae

Quercus ×campitica Hadjik. & Hand, **nothosp. nov.** – Holotype [details in Willdenowia 36: 793. 2006]: *Hand 4449 & Hadjikyriakou* (B, isotypes: CYP, herb. Hadjikyriakou). – Media inter *Quercum alnifoliam* et *Q. cocciferam* subsp. *calliprinon*, ad illam foliis superne nitidis atroviridibus infra stellato-pilosis, ad hanc foliis margine valide spinosis basi plerumque cordatis accedens.

The new hybrid is in every respect identical with the taxon we earlier described under the designation "Quercus × campitica nothosubsp. hylatis" (Hadjikyriakou & Hand in Willdenowia 36: 793-796. 2006), which we failed to publish validly because the nothospecific name itself was not validly published (ICBN, Art. 43.1; our error was due to a misinterpretation of Art. H.5.2 of the ICBN). The new hybrid corresponds to the cross between the Cypriot endemic Q. alnifolia Poech and the Mediterranean Q. coccifera subsp. calliprinos (Webb) Holmboe, but the nothospecific name is applicable to all hybrid progeny between the parent species. As long as no hybrids are known between other subspecies of the same species, there is no justification, or indeed option, to use nothosubspecific names under Q. × campitica.

G. Hadjikyriakou & R. Hand

Labiatae

Hyssopus officinalis subsp. aristatus (Godron) Briq.

+ Gr: Greece, W Makedonia, Nomos & Eparchia of Florina: SE of Psarades (40°49'N, 21°03'E), by the road ascending from the sandy spit between the Prespa lakes to a small pass, rocky limestone slopes with woodland of Juniperus foetidissima Willd. and Quercus trojana Webb, 900-1000 m, 14.10.2006, Strid 56179 (ATH, G, LD, herb. Kit Tan, herb. Strid). - The species was not given for Greece in Greuter & al. (Med-Checklist 3: 285. 1986). Published records of Hyssopus officinalis L. from Greece are questionable (Quézel & Contandriopoulos in Candollea 23: 32. 1968, from "pelouses dolomitiques du Falakro" at 1600 m), or likely represent cultivated material (Authier in J. Bot. Soc. Bot. France 14: 23. 2001, from the Timfi area, "début du sentier pour le monastère avant Skamneli", at 1000 m). Material at ATH collected by Goulimis at an unidentified locality in the Nomos of Drama may also be of cultivated plants. At the locality near Lake Prespa the plants were in full flower - a brilliant blue - in mid-October. Hyssopus officinalis subsp. aristatus appears to be scattered in the Mediterranean area, reaching eastwards to the western Balkan Peninsula. Its occurrence in the F.Y.R. Makedonija was confirmed by Drenkovski (in Fragm. Balcan. 8: 129-134. 1971). A. Strid

Rosaceae

Saguisorba minor Scop. subsp.minor

+ Li: Libya: The city of Garian, about 80 km W of Tripoli, *Abuhadra & Al-Ahmer* (ULT). – No previous records of this subspecies from Libya are known. M. Abuhadra

Rutaceae

Ruta montana (L.) L.

+ Li: Libya: The city of Garian, about 80 km W of Tripoli, *Abuhadra & Al-Ahmer* (ULT). – New to Libya. M. Abuhadra

Saxifragaceae

Ribes odoratum H. L. Wendl. [= *R. aureum* var. *villosum* DC.].

A **Gr:** Greece, Ipiros, Nomos of Ioannina, Eparchia of Dodona: Zitsa (39°45'09"N, 20°38'50"E), ruderal areas in the village, 610 m, 13.10.2006, *Willing & Willing 79446* (B, det. Raus). – No previous Greek records of this xenophyte of central North American origin are known. The young shoots of the specimen are densely hairy, which distinguishes it from the similar *Ribes aureum* Pursh from Pacific North America (Cronquist & al., Intermountain Fl. 3A: 24. 1997). Both species are cultivated for their golden-yellow, fragrant flowers and delicious berries, and both escape easily from cultivation. In Atlantic North America (E of the Great Lakes), *R. odoratum* is found as a weed along railroad slopes, roadsides and fences, associated with other pioneer species (Swink & Wilhelm, Pl. Chicago Reg., ed. 4: 639. 1994). Its possible naturalisation and spread in Greece should be monitored locally.

Th. Raus

Umbelliferae

Pimpinella cretica Poir.

+ Li: Libya: The city of Garian, about 80 km W of Tripoli, *Abuhadra & Al-Ahmer* (ULT). M. Abuhadra

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Seseli montanum subsp. tommasinii (Rchb. f.) Arcang.

+ Gr: Greece, Ipiros, Nomos of Ioannina, Eparchia of Konitsa: Near the bridge over the Sarandaporos river NNE of Pirgos (40°11°N, 20°48'E), rocky road embankment, serpentine, 900 m, 13.10.2006, *Strid 56162* (G, herb. Strid); id., W Makedonia, Nomos & Eparchia of Florina: SE of Psarades (40°49'N, 21°03'E), by the road ascending from the sandy spit between the Prespa lakes to a small pass, rocky limestone slopes with woodland of *Juniperus foetidissima* Willd. and *Quercus trojana* Webb, 900-1000 m, 14.10.2006, *Strid 56181* (LD, herb. Strid). –This taxon, previously known from Italy and the western parts of the Balkan Peninsula, belongs to a group of late-flowering *Seseli* species. Another such mid-October flowering taxon, probably a new species related to *S. campestre* Besser, is common along the main road north and east of Ioannina, growing on rocky limestone embankments and roadside gravel (*Strid 56137, 56155*, etc.). It is characterised by densely hairy ovaries and young fruits, but mature fruits are needed for positive identification. A. Strid

Verbenaceae

Aloysia citriodora Palau

P Gr: Greece, Peloponnisos, Nomos of Argolis, Eparchia of Nafplio: Nafplio (37°34'33"N, 22°48'10"E), semiruderal herbaceous vegetation in the city, 2 m, 3.10.2003, Willing & Willing 119887 (B, det. Raus). – A xenophyte of southern South American origin, commonly cultivated for ornament around the Mediterranean and given as naturalised in adjacent Albania by Tutin (in Tutin & al., Fl. Eur. 3: 123. 1972, under *"Lippia triphylla"*), but not mentioned for Greece in previous literature. The degree of its establishment in Greece is not yet known. For synonymy see, e.g., Zuloaga & Morrone (Cat. Pl. Vasc. Rep. Argentina 2(2): 1137. 1999). Th. Raus

Gramineae

Aegilops contracta (Eig) H. Scholz, **comb. & stat. nov.** \equiv *Aegilops triaristata* subsp. *contracta* Eig in Repert. Spec. Nov. Regni Veg. Beih. 55: 141 1929 \equiv *Aegilops neglecta* subsp. *contracta* (Eig) H. Scholz in Willdenowia 19: 105. 1989.

Differs from *Aegilops neglecta* Bertol. (tetraploid and hexaploid, 2n = 28, 42) by its more contracted spikes, constantly two-awned lower and upper glumes of the lower fertile spikelet, with one awn 1.5-2.5 mm wide at the base, and tricuspidate to triaristate lemmas; from *A. columnaris* Zhuk. (tetraploid, 2n = 28), with a somewhat similar awn configuration, it differs by distinctly shorter spikes and (5-)6-7 mm (not 7-11 mm) long glumes. H. Scholz

Libya: Shahat, 6.5.1978, Faruqui 1778 (B). – Eig (in Repert. Spec. Nov. Regni Veg. Beih. 55. 1929) described his new subspecies from a single locality in S Turkey. Van Slageren (Wild Wheats: 271. 1994), who failed to locate Péronin's holotype in G-BOIS, reduced the taxon to synonymy of Aegilops neglecta. A. contracta may well be the donor of the second genome of A. columnaris Zhuk., unknown so far (Badaeva & al. in Pl. Syst. Evol. 246: 71. 2004).

Arrhenatherum album subsp. *cypricola* H. Scholz, **subsp. nov.** – Holotype: Cyprus, Kaminaria, Platys valley, at the picnic site Komititzi, W of the summit Agios Ilias, dry open slope, 700 m, 5.5.2005, *Hand 4809* (B). – Ab *Arrhenathero albo* (Vahl) W. D. Clayton subsp. *albo* differt rhachilla 0.4 mm (nec 1-2 mm) longa et lemmate flosculi superioris dorso pilis brevioribus (ad 2 mm nec 2.5 mm longis) dense vestito. – Fig. 1.

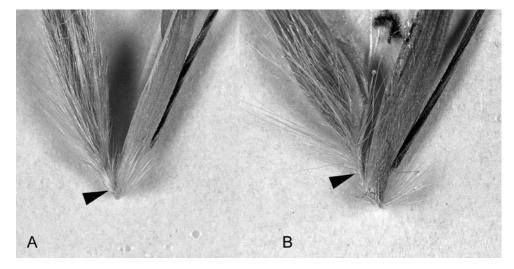


Fig. 1. Arrhenatherum album, spikelets – A: A. album subsp. cypricola, with short rhachilla internode (from the holotype); B: A. album subsp. album, with long rhachilla internode (Portugal, Büscher, B).

+ Cy: Other specimens seen: Cyprus, Trypilos, among Quercus alnifolia Poech, N slope in the Cedrus area, growing with Briza stricta Steud., 1158 m, 17.5.1941, Davis 3495 (B); id., Prasinoudi, Limnitis valley, stream bed, 700 m, 28.4.1998, Hadjikyriakou 3238 (herb. Hadjikyriakou); id., Pano Panagia, vicinity of the summit Panagia, shady slopes, c. 1000 m, 30.4.1998, Hand 2381 (B); id., Argaki tou Nourou, Limnitis valley, 950 m, 5.5.1998, Hadjikyriakou 3279 (herb. Hadjikyriakou); id., Platanoudi, Platys valley, gully with pine forest, 900 m, 11.5.1998, Hadjikyriakou 3348 (herb. Hadjikyriakou), id., Selladi tou Kaminarkoti W of Gerakias, roadside, 1000 m, 11.5.1989, Hadjikyriakou 3345 (herb. Hadjikyriakou); id., east of Madari, rocky places, 1400 m, 22.5.1998, Hadjikyriakou 4543 (herb. Hadjikyriakou); id., Stavros tis Psokkas, Cedar valley, above the picnic site, open Cedrus forest, c. 1100 m, 12.5.1999, Hand 3228 (B); id., Madari, opening among Quercus alnifolia, 1500 m, 1.6.2001, Hadjikyriakou 5294 (herb. Hadjikyriakou); id., Madari, screes, 1550 m, 1.6.2002, Hadjikyriakou 5426 (herb. Hadjikyriakou). - Cyprus plants of Arrhenatherum album (Vahl) W. D. Clayton (Bor in Meikle, Fl. Cyprus: 1765. 1985) are not identical with those from the W Mediterranean main area of the species (Portugal, Spain, Morocco, Algeria, Tunisia), 2000-3000 km to the W of Cyprus. The genus Arrhenatherum P. Beauv. comprises c. 8 closely related species and several subspecies, for which one of the principal diagnostic characters is the length of the rhachilla internode between the first (regularly male) and second (hermaphrodite) floret of the usually 2-flowered spikelets: 1-2(-2.5) mm in A. album s. str., A. kotschyi Boiss. and A. palaestinum Boiss., but <1 mm in A. elatius (L.) J. Presl & C. Presl (Paunero in Anales Inst. Bot. Cavanilles 17: 289. 1959; Holub in Tutin & al., Fl. Eur. 5: 216. 1980; Romero Zarco in Acta Bot. Malacit. 10: 126, 130. 1985; Doğan in Davis, Fl. Turkey 9: 314-315. 1985). Previously the Cyprus plants, perhaps because of the short rhachilla internode, were considered as bulbous variants of A. elatius. However, the A. elatius aggregate and A. palaestinum seem to be absent from Cyprus, where A. album subsp. cypricola is endemic. H. Scholz

Arrhenatherum palaestinum subsp. *macedonicum* H. Scholz, **subsp. nov.** – Holotype: Greece, W Macedonia, Nomos Kozani, Eparchia Askio, Mellia W flank, pass between Siatista and Galatini, 1120-1150 m, sparsely grazed *Stipa* steppe on calcareous substrate (terra fusca), 16.6.2006, *Böhling 13707* (B). – Ab *Arrhenathero palaestino* Boiss. subsp. *palaestino* differt spicularum gluma superiore 5-nervia (rarissime 3-nervia), c. 3 mm (nec c. 4 mm) lata, quam gluma inferior 1-nervia duplo longiore.

+ Gr, Ju: Other specimens seen: F.Y.R. Makedonija: Veles, Topolska-Schlucht, in rupestribus aridis, 16.5.1917, *Bornmüller 2205* (B); ibid., Babuna-Durchbruch, Kalkgeröll, 5.1918, *Burgeff 615* (B). – Authors of taxonomic compendia (e.g. Watson & Dallwitz, Grass Gen. World, ed. 2: 126. 1994) and Floras coincide in attributing 1-3-nerved glumes to *Arrhenatherum* (lower glume 1(-3)-nerved, upper glume 3-nerved). But the cited specimens of *A. palaestinum* subsp. *macedonicum* exhibit 5-nerved ones). Similar in this respect is *A. nebrodense* Brullo & al. (in Lagascalia 19: 903, 904, fig. 1. 1997) described from Sicily and said to belong to the "cycle of *A. elatius*". *A. elatius* differs from *A. palaestinum* extends from the Balkan peninsula and Crete to the Near East. Plants of *A. palaestinum* from W Turkey and the Aegean region share some features with subsp. *macedonicum* and need further study.

H. Scholz

Arundo mediterranea Danin

+ Tu: Turkey A1(E) Tekirdağ: 7 km E of Tekirdağ towards Istanbul, between the coastal road and the beach, 3.7.2007, *Danin* (B, E, HUJ, PAL). – New to Turkey. A dense population covering c. 2000-3000 m² on the coast sloping to the Marmara Sea, additional solitary tufts observed between the coastal highway and the beach, eastward as far as Silivri from the above site. The trip was made in search for the easternmost occurrences of *Arundo collina* Ten. The latter was reported from Greece by Danin & al. (in Willdenowia 32: 191. 2002, as *A. hellenica* Danin & al.). A large area of European Turkey (Trakya) was surveyed but not a single specimen of *A. collina* was found.

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