BioOne COMPLETE

Euro Med-Checklist Notulae, 6

Authors: Raab-Straube, Eckhard Von, and Raus, Thomas

Source: Willdenowia, 46(3) : 423-442

Published By: Botanic Garden and Botanical Museum Berlin (BGBM)

URL: https://doi.org/10.3372/wi.46.46310

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

Willdenowia
Annals of the Botanic Garden and Botanical Museum Berlin-Dahlem

ECKHARD VON RAAB-STRAUBE[1*] & THOMAS RAUS[1] (ed.)

Euro+Med-Checklist Notulae, 6

Version of record first published online on 30 November 2016 ahead of inclusion in December 2016 issue.

Abstract: This is the sixth of a series of miscellaneous contributions, by various authors, where hitherto unpublished data relevant to both the Med-Checklist and the Euro+Med (or Sisyphus) projects are presented. This instalment deals with the families *Amaranthaceae*, *Asparagaceae* (incl. *Hyacinthaceae*), *Callitrichaceae* (*Plantaginaceae* s.l.), *Caryophyllaceae*, *Chenopodiaceae*, *Compositae*, *Convolvulaceae*, *Crassulaceae*, *Cruciferae*, *Cucurbitaceae*, *Elatinaceae*, *Gramineae*, *Iridaceae*, *Liliaceae*, *Malvaceae* (incl. *Sterculiaceae*), *Martyniaceae*, *Onagraceae*, *Orobanchaceae*, *Palmae*, *Polygonaceae*, *Scrophulariaceae* s.l. (incl. *Plantaginaceae* p.p.) and *Tamaricaceae*. It includes new country and area records, taxonomic and distributional considerations for taxa in *Alternanthera*, *Amaranthus*, *Ambrosia*, *Brachychiton*, *Callitriche*, *Centaurea*, *Cochlearia*, *Convolvulus*, *Crassula*, *Digitalis*, *Elatine*, *Enarthrocarpus*, *Iris*, *Lagenaria*, *Oenothera*, *Orobanche*, *Patellifolia*, *Phelipanche*, *Phoenix*, *Poa*, *Proboscidea*, *Rhaponticoides*, *Sagina*, *Tamarix*, *Telephium*, *Verbascum*, *Veronica* and *Washingtonia*, new combinations in *Drimia*, *Fritillaria* and *Polygonum*, and a new subspecies of *Orobanche* from the Russian Caucasus.

Key words: Euro+Med PlantBase, Med-Checklist, Europe, Mediterranean, vascular plants, distribution, taxonomy, new record, new combination, new subspecies

Article history: Contributions received 17 November 2015 to 21 Ocober 2016; peer-review completed 29 October 2016; received in revised form 2 November 2016; accepted for publication 3 November 2016.

Citation: Raab-Straube E. von & Raus Th. (ed.) 2016: Euro+Med-Checklist Notulae, 6 [Notulae ad floram euro-mediterraneam pertinentes No. 35]. – Willdenowia 46: 423–442. doi: http://dx.doi.org/10.3372/wi.46.46310

Notice

A succinct description of the Euro+Med project, with a list of recognized territories and their abbreviations, and the conventions used to indicate the status and presence of taxa, can be found in the introduction to the first instalment of the Euro+Med Notulae (Greuter & Raab-Straube 2005: 223–226) and on the Euro+Med PlantBase website (Euro+Med 2006+). For the previous instalment of the Euro+Med-Checklist Notulae, see Raab-Straube & Raus (2015).

The following have contributed entries to the present instalment: D. Albach, M. A. Alonso, Ö. Boz, M. Chasapis, Ch. S. Christodoulou, E. Di Gristina, M. N. Doğan, G. Domina, R. El Mokni, E. Eleftheriadou, Ö. Eren, L. Gallo, Th. Giannakis, Ya. M. Golovanov, Th. Gregor, D. Iamonico, G. Kamari, B. Kreinsen, H. Leschner, V. Löki, L. Meierott, A. Molnár Veszprém, R. Murtazaliev, R. Özcan, U. Raabe, S. Rätzel, Th. Raus, M. Ristow, L. Ryff, S. V. Saksonov, F. Scafidi, S. Svirin, Yu. Z. Tabuldin, A. Takács, K. Theodoropoulos, S. Türkseven, H. Uhlich, P. Uotila, V. M. Vasjukov, J. L. Villar, D. Vokou, A. Yena and A. Zeddam.

Amaranthaceae

Alternanthera tenella Colla

A **Si(S):** Italy, Sicily: Palermo city, Via Paolo Balsamo, 38°06'16"N, 13°22'06"E, 22 m, public flowerbed adjacent to new tram line, 21 Dec 2015, *Scafidi* (PAL 102712). – *Alternanthera tenella* is indigenous in large parts of the New World (Clemants 2003) and has invaded some tropical regions of the Old World (Robertson 1981; Eliasson 1987). In Europe, it has been recorded as a casual alien in Belgium (Verloove 2006). In Italy, a single

1 Botanischer Garten und Botanisches Museum Berlin, Freie Universität Berlin, Königin-Luise-Str. 6–8, 14195 Berlin, Germany; *e-mail: e.raab-straube@bgbm.org (author for correspondence), t.raus@bgbm.org

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

specimen from the beginning of the 20th century, collected by A. Fiori in Florence, identified by Iamonico (2011) as *A. sessilis* (L.) DC. and later revised as *A. tenella* (Iamonico & Sánchez-del Pino 2014, 2015), indicates the historical occurrence of this species in Italy.

F. Scafidi, E. Di Gristina & G. Domina

Amaranthus palmeri S. Watson

N **Tu(A):** Turkey: İzmir: İzmir-Çanakkale main road, between Menemen and Yeni Foça, Helvacı village, 16 m, margin of cornfields, populations with male and female plants, 20 Sep 2015, *Doğan 23/2015 & al.* [pistillate specimen] (AYDN); ibid., 20 Sep 2015, *Doğan 24/2015 & al.* [staminate specimen] (AYDN); ibid., Buruncuk village, 13 m, roadsides, 20 Sep 2015, *Doğan & al.* (*obs*.); Adana: Ceyhan, Mustafabeyli village, 25 m, 22 Jul 2014, *Doğan 36/2014 & al.* [pistillate specimen] (AYDN); ibid., 22 Jul 2014, *Doğan 37/2014 & al.* [staminate specimen] (AYDN); Osmaniye: Toprakkale, 120 m, roadside, 23 Jul 2014, *Doğan & al.* (*obs*.); Hatay: Erzin, 160 m, field margins, 19 Aug 2014, *Doğan & al.* (*obs*.). – In recent field surveys, we found *Amaranthus palmeri* for the first time in Turkey. This species is native to North America (Sauer 1955), but it has greatly expanded its range, becoming one of the most economically damaging glyphosate-resistant (Beckie 2011) invasive species in many parts of the world. Recently, it has also been recorded from N Italy (Iamonico & al. 2015). The species also occurs in most neighbouring countries, e.g. Greece (Raus & Raabe 2006; Strid 2016a, b), Cyprus (Hadjikyriakou & al. 2004) and Israel (Danin 2004). *Amaranthus palmeri* is the type species of *A.* sect. *Saueranthus* Mosyakin & K. R. Robertson, which includes three more dioecious species: *A. arenicola* I. M. Johnst., *A. greggii* S. Watson and *A. watsonii* Standl. The members of *A.* sect. *Saueranthus* are characterized by 5 (rarely 4) spathulate tepals (2–3.5 mm long, apex rounded, truncate or acuminate) and usually dehiscent fruits (Mosyakin & Robertson 1996). *Amaranthus palmeri* can easily be distinguished from other amaranths in Turkey by the sectional characters mentioned above. In addition, its dioecious habit, long petioles, which often exceed the length of leaf blade, long terminal spikes, and spiny tipped bracts (in female plants), which are much longer than the tepals, can be helpful for its recognition. For a full description of *A. palmeri* see Mosyakin & Robertson (2003).

In Turkey, *Amaranthus palmeri* was certainly introduced by humans, probably by contamination of imported seeds or animal manures. So far, this species is known only from İzmir, Adana, Osmaniye and Hatay provinces, where it has become naturalized, but it may have been overlooked in other parts of Turkey as well. The abundance and ecological impacts of some invasive plant species are much greater in their non-native ranges than in their native ranges (Hierro & al. 2006, 2013). Our preliminary field observations showed that this species is an extremely aggressive, fast-growing species that has the potential to occupy large areas in Turkey. Therefore, the spread of this species, its potential impacts on agriculture and natural vegetation and its resistance to herbicides should be explored in Turkey, too. Since hybridization among different species has been widely reported within *Amaranthus* (Sauer 1955), future investigations should also concentrate on detecting possible hybrids of *A. palmeri* with other species in Turkey. *Amaranthus palmeri* hybridizes more readily with *A. spinosus* L. than with other amaranth species (Gaines & al. 2012). Therefore, the hybrid of *A. palmeri* and *A. spinosus* should be looked for in Adana, where both species occur. The new record brings the total number of *Amaranthus* species known from Turkey to 15, including two hybrids (Aellen 1967; Tuğ 2012).

Ö. Eren, M. N. Doğan, Ö. Boz, S. Türkseven & R. Özcan

Asparagaceae (incl. *Hyacinthaceae*)

Drimia glaucophylla (Bacch., Brullo, D'Emerico, Pontec. & Salmeri) Raus, **comb. nov.** ≡ *Charybdis glaucophylla* Bacch., Brullo, D'Emerico, Pontec. & Salmeri in Phytotaxa 69: 18. 2012.

For this SW Sardinian endemic squill recently named under *Charybdis* Speta (Bacchetta & al. 2012), a name in *Drimia* Jacq. is required, because, according to Euro+Med (2006+), the inclusion of the former into the latter applies – a taxonomic concept followed by, e.g., Dimopoulos & al. (2013) and Hand & al. (2015+). Th. Raus

Callitrichaceae (*Plantaginaceae* s.l.)

Callitriche hermaphroditica L. subsp. ***hermaphroditica***

+ **Fe:** Finland: South Häme, Hattula, Lake Lehijärvi, E shore, eutrophic clear-watered lake, shallow water, sand bottom, grid 27°E 6773:356, 9 Sep 1985, *Uotila 34697a* (H 717326); Sodankylä Lapland, Sodankylä, Sattanen, Kitinen River, 17 Aug 1927, *Cajander* (H 396654).

+ **Rf(C):** Russia: Vladimir province, Pokrov district, flood plain of Kirzhach River near Starkovo village, in a small lake, 2 Aug 1913, *Nazarov* (H 1673210).

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

Callitriche hermaphroditica subsp. ***macrocarpa*** (Hegelm.) Lansdown

+ **Fe:** Finland: Ostrobothnia australis, Vaasa archipelago, Långskär, 2 m-deep water, 4 Sep 1949, *Malmberg* (H 162555); Sodankylä Lapland, Sodankylä, Ylikitinen, Lake Järvijärvi, 5 Sep 1959, *Ulvinen* (H 396651).
+ **No:** Norway: Finnmark, Porsanger, Lakselv, Lakselv River, old river bed, 26 Aug 1997, *Alm & Often* (H 1695422).
+ **Rf(N):** Russia: Murmansk Region, Lapponia Petsamoënsis, Petsamo, Haukilampi Pond, E of Pilgujoki river mouth, 24 Aug 1930, *Kontuniemi* (H 396659); Arkhangel Prov., Arkhangel, 4 Sep 1880, *Enwald & Knabe* (H 1299514).

Schotsman (1958) paid attention to the considerable variability of the fruits of *Callitriche hermaphroditica* and to its large, broad-winged fruits in the N part of its area. Martinsson (1991) pointed out that the fruit size variation in *C. hermaphroditica* has a clear geographical pattern in Nordic countries: plants with large fruits are found in the northernmost parts as well as in brackish waters of the gulfs of Bothnia and Finland, and plants with small fruits are found in S Denmark, Sweden, Norway, Finland and adjacent Russia. As to the plants with large fruits, both Schotsman and Martinsson referred to Hegelmaier's (1867) *C. autumnalis* L. β [var.] *macrocarpa*, but they did not draw taxonomic conclusions from their observations. Lansdown (2006, 2008) studied this variation mainly in the British Isles and recognized plants with large fruits and broad wings as *C. hermaphroditica* subsp. *macrocarpa*, which he found to have a more northern distribution than *C. hermaphroditica* subsp. *hermaphroditica*. Karlsson & Agestam (2013) accepted both subspecies for Sweden. Tzvelev (1997) also realized the existence of two taxa with different wings of fruits and some differences in ecology and distribution in NW Russia, but named the narrow-winged one *C. hermaphroditica* subsp. *exalata* Tzvelev and the broad-winged one *C. hermaphroditica* subsp. *hermaphroditica*. The subspecific treatment following Lansdown is accepted in Euro+Med PlantBase. Based on herbarium specimens in H, the presence of both subspecies is confirmed for some Nordic and Russian territories. P. Uotila

Caryophyllaceae

Sagina apetala Ard.

N **Cm:** Crimea: Simferopol, Kuybysheva Square, 7 Aug 2007, *Yena* (CSAU); Sevastopol, 11 Apr 2014, *Svirin* (CSAU); Balaklava, Naberezhnaya Str., 21 Apr 2014, *Ryff* (YALT); Yalta, Chekhova Str., 26 May 2010, *Ryff* (YALT); Nikitsky Botanical Garden, 4 Jun 2013, *Bagrikova* (YALT); Gurzuf, 2 Jul 2011, *Ryff* (YALT); Alushta, bus station, 11 May 2014, *Ryff* (YALT); Feodosiya, Naberezhnaya Str., 8 Jun 1996, *Yena* (CSAU); all between concrete slabs. – Adventive for Crimea in cities and towns of the Crimean foothills and the S coast. This species is restricted to places paved with slabs, where it often grows together with *Sagina procumbens* L. *Sagina apetala* may have arrived at those localities together with the sand that is put as a base layer under slabs. Altogether, three species of *Sagina* are now known in Crimea, only *S. maritima* Don being indigenous (Yena 2012).
A. Yena, L. Ryff & S. Svirin

Telephium orientale Boiss. (≡ *Telephium imperati* subsp. *orientale* (Boiss.) Nyman)

+ **Rf(CS):** Russia: Dagestan, Akhtynsky District, near village of Midzhakh, left bank of river Akhtytchai, 1600 m, dry stony slopes, 16 Aug 2013, *Murtazaliev* (DAG, LE). – New to Russia. Only a few specimens of *Telephium orientale* were found in this locality, which is at the N border of its geographical range. The nearest occurrences of this species are in the NE part of Azerbaijan.
R. Murtazaliev

Chenopodiaceae

Patellifolia procumbens (C. Sm.) A. J. Scott & al. (= *Beta patellaris* Moq. = *Tetragonia pentandra* Balf. f.)

+ **Tn:** Tunisia: Monastir, 35°46'13"N, 10°46'18"E, 4 m, ruderal, roadsides, gardens, 16 Jan 2016, *El Mokni* (HFLA); ibid., 35°46'40"N, 10°48'68"E, 26 m, *El Mokni* (HFLA). – As part of the ongoing revision of the family *Amaranthaceae* s.l. in Tunisia (see, e.g., Sukhorukov & al. 2016), a population identified as *Patellifolia procumbens* was found in anthropogenic habitats of the Monastir area. *Patellifolia procumbens* is a W Mediterranean species recorded in Sicily, the Iberian peninsula, the Balearic and Canary islands, the Madeira and Selvagens archipelagos, Morocco, Algeria and Libya (Thulin & al. 2010; Uotila 2011). The recent *Catalogue synonymique commenté de la Flore de Tunisie* (Le Floc'h & al. 2010), the *Index synonymique de la flore d'Afrique du Nord* (Dobignard & Chatelain 2011) and the online African Plant Database (African Plant Database 2012) also do not record this species in Tunisia. Our discovery is the first for the flora of Tunisia and is represented by two populations, the first one located on roadsides (town of Monastir) and below some olive trees, while the second one is c. 8 km distant, also in ruderal habitat and on roadsides within halophytic vegetation. Each population occupies an area of about 1 km^2 and both are threatened by human activities, mainly

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

the construction of buildings, and biological invasions by exotic species such as *Cortaderia selloana* (Schult. & Schult. f.) Asch. & Graebn., *Gazania rigens* (L.) Gaertn., *Lantana camara* L. and *Myoporum insulare* R. Br.

D. Iamonico & R. El Mokni

Compositae (Asteraceae)

Ambrosia psilostachya DC. (= *A. coronopifolia* Torr. & A. Gray)

A **Gr:** Greece: Central Makedonia, Nomos of Thessaloniki, Periurban Forest of Thessaloniki "Kedrinos Lofos", S of village of Exochi, 40°37'35.8"N, 23°01'77"E, 455 m, roadside, 16 Sep 2015, *Giannakis* (TAUF); ibid., 21 Oct 2015, *Giannakis & al.* (TAUF); ibid., 17 Nov 2015, *Eleftheriadou* (TAUF). – A xenophyte originating from North America, introduced to and sometimes naturalized in many countries in Europe (Hansen 1976), Asia (Kazakhstan), Africa (Mauritius) and Australia (Bassett & Crompton 1975; Valkenburg & al. 2015+). It has not been recorded previously from Greece (Dimopoulos & al. 2013) nor from adjacent countries, viz. Albania, the former Yugoslav Republic of Macedonia, Bulgaria and Turkey (Greuter 2006+). Approximately 300 stems were found, which may be produced from one or a few branched rhizomes and therefore can hardly be counted as individuals. According to Fernald (1950: 1470), Greek specimens belong to *Ambrosia psilostachya* var. *coronopifolia* (Torr. & A. Gray) Farw. ex Fernald. However, infraspecific variability in *A. psilostachya* hardly deserves taxonomic recognition (Flora of North America Editorial Committee 2006: 18).

Th. Giannakis, E. Eleftheriadou, K. Theodoropoulos & D. Vokou

Centaurea kotschyana Heuff.

+ **Gr:** NC Greece: Central Makedonia, Nomos of Pella, Mt Tzena, 41.151956°N, 22.171624°E, 1930 m, grassy subalpine ledge, parent rock andesite, 31 Jul 2012, *Chasapis 2226* (TAUF). – *Centaurea kotschyana* occurs in Albania, Bosnia and Herzegovina, Bulgaria, Montenegro, Poland, Romania, Serbia and Ukraine (Dostál 1976; Greuter 2006+). It has not been recorded from Greece previously (Dimopoulos & al. 2013). A small population of approximately 50 individuals was found just S of the N border of the country on a steep slope, at an altitude between 1900 m and 2000 m on volcanic substratum. On Mt Tzena, *C. kotschyana* coexists with the similar *C. grbavacensis* (Rohlena) Stoj. & Acht. Both species share the dark brownish purple colour of the florets, but are easily distinguished by a combination of stem and leaf characters. *Centaurea kotschyana* exhibits leafy stems and undivided basal leaves. By contrast, *C. grbavacensis* has the stem always leafless above and the basally crowded leaves pinnatisect to bipinnatisect, with numerous 3-dimensionally arranged linear or linear-lanceolate ultimate segments, so that the habit of the plant is quite similar to a species of *Jurinea* Cass.

M. Chasapis, K. Theodoropoulos, E. Eleftheriadou & Th. Raus

Rhaponticoides razdorskyi (Karjagin) M. V. Agab. & Greuter (≡ *Centaurea razdorskyi* Karjagin)

+ **Rf(CS):** Russia: Dagestan, near village of Talgi, on top of left crest of Talginskoe gorge, 450 m, rocky slopes of S exposure, 3 Jun 2010, *Murtazaliev* (DAG, LE). – New to Russia. It has been considered a local endemic (Aghababyan 2008), growing on the low foothills of the Caucasus in Azerbaijan (near the city of Sumgait, stantsiy Nasosnaja, Mt Ag-Burun). In Dagestan, it was discovered in the suburbs of the village of Talgi, SW of the city of Makhachkala. The population there is quite large, of some 600–700 individuals, and occupies an area of 2–3 km^2.

R. Murtazaliev

Convolvulaceae

Convolvulus erinaceus Ledeb.

+ **Rf(CS):** Russia: Dagestan, Chechen Island, 1.5 km NE of village of Chechen, sands, 10 Jun 2011, *Teimurov* (DAG, LE). – New to Russia. About ten individuals in total were observed in a small area. This is the second locality of *Convolvulus erinaceus*, a predominantly C Asian species, in the Caucasus region. This species has been recorded earlier from the E Transcaucasian region, the suburbs of the village of Sangachaly in Azerbaijan (Grossgejm 1967). Another species of this genus, new for the Caucasian flora, has been recently detected in Azerbaijan: *C. fruticosus* Pall. (Karimov & al. 2016).

R. Murtazaliev

Crassulaceae

Crassula multicava Lem. subsp. ***multicava*** – Fig. 1.

N **Lu:** Portugal: District of Lisboa, Sintra, Parco de Palácio Nacional de Pena, 450 m, widely naturalized under forest along path to Palácio, 26 Jul 2016, *Gallo GL-8578* (FI). – A South African species, new for continental Portugal (not given in Castroviejo 1997; Euro+Med 2006+; Menezes de

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use



Fig. 1. *Crassula multicava* subsp. *multicava* – Portugal, District of Lisboa, Sintra, Parco de Palácio Nacional de Pena, 26 Jul 2016, photograph by L. Gallo.

Sequeira & al. 2011; Dominguez de Almeida & Freitas 2012; Sociedade Portuguesa de Botânica 2012–2016), naturalized in the same habitat with *Aichryson laxum* (Haw.) Bramwell. Its spread is favoured by the breaking-off of branches, which root very easily, and by the adventitious buds that develop in the axils of the bracts (Toelken 1977: 208). *Crassula multicava* is widely naturalized in California, U.S.A. (Kartesz 2015), New Zealand (Breitwieser & al. 2016), Australia (Atlas of Living Australia 2016+), the Azores (Universidad dos Açores 2008+), Madeira (Euro+Med 2006+), the Canary Islands (Sanz Elorza & al. 2004; Gil González 2015), Spain (Laguna Lumbreras & al. 2014) and Britain, on the Isles of Scilly (Botanical Cornwall Group 2012: photo at http://www.botanicalcornwall.co.uk/isles-of-scilly/), where it has not been previously reported (cf. Clement & al. 2005; DAISIE 2008+; Stace 2010; BSBI & BRC 2016).

L. Gallo

Cruciferae (Brassicaceae)

Cochlearia danica L.

+ **Hu:** Hungary: Biharkeresztes, roadside verge of E60 (only 7 km from Romanian border), 47.13529°N, 21.69858°E, abundant, 29 Mar 2016, *Molnár V. & Löki* (DE). – No previous records are known from Hungary. The spread of this salt-tolerant, coastal species along motorways and trunk roads in Europe has been widely observed during the last decades, e.g. in Germany (Dunkel 1987), Belgium and the Netherlands (Mennema 1986; Koch 1996), Scotland (Welch 2001) and Austria (Hohla & Raabe 2012). The discovery of more populations both in Hungary and Romania is to be expected.

A. Molnár Veszprém & V. Löki

Enarthrocarpus lyratus (Forssk.) DC. – Fig. 2.

+ **Jo:** Jordan: 2.3 km W of New Dana, 30°40'N, 35°37'E, grazed sandstone hill, 22 Mar 2015, *Gregor* (*photo* – Fig. 2) *& Meierott*, det. H. Leschner. – This species is extremely rare in the Arabian peninsula (Miller 1996: 399–400, map 540) and has also been recorded from Israel (Danin 2004: 115), but not yet from Jordan.

Th. Gregor, H. Leschner & L. Meierott

Cucurbitaceae

Lagenaria siceraria (Molina) Standl.

A **Rf(E):** Russia: Bashkortostan, Sterlitamak, abandoned vegetable garden, 10 Aug 2015, *Golovanov* (UFA, det. Saksonov, Rakov & Vasjukov). – A new adventive species for the flora of E and SE European Russia, previously recorded as cultivated and sometimes casual from the southernmost parts of E Europe (Tzvelev 2012: 361). Two flowering individuals with set fruits were found in the above-mentioned location among weed vegetation. Ya. M. Golovanov, S. V. Saksonov & V. M. Vasjukov

Elatinaceae

Elatine hexandra (Lapierre) DC.

– **Hu:** The first record of *Elatine hexandra* in Hungary, from the surroundings of Tokaj (NE Hungary), was given by Hazslinszky (1866). After that, national floras (e.g. Jávorka 1925; Simon 1992) as well as European works (Cook 1968; Uotila 2009) have indicated this taxon as present in Hungary. Duplicates of the voucher specimen collected by Hazslinszky in Tokaj are stored in B, BP and PRC. There is one more specimen in BP ("com. Szatmár, in Oryzetis ad Kölcse", 9 Oct 1959, *Boros*) determined as *E. hexandra*. All these sheets represent shoots with 3-merous flowers, with 3 stamens and short (<3 mm) pedicels. Hazslinszky's specimen in BP was revised by G. Moesz in 1908 as *E. ambigua* Wight; on the other hand, the duplicate in PRC was erro-

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use



Fig. 2. *Enarthrocarpus lyratus* – Jordan, 2.3 km W of New Dana, 22 Mar 2015, photograph by Th. Gregor.

neously confirmed as *E. hexandra* by J. Prančl in 2014. The specimen collected by Boros was revised as *E.* cf. *ambigua* by P. Uotila in 2010. However, the above-mentioned characters suggest that all those specimens belong to the terrestrial form of *E. triandra* Schkuhr, as defined by Molnár Veszprém (2009). Despite intensive field surveys (Molnár Veszprém & Pfeiffer 1999) and revision of herbarium material (B, BP, BPU, BRA, DE, PR, PRC, SAV and W), no findings of *E. hexandra* from Hungary have been revealed; we therefore suggest to exclude *E. hexandra* from the flora of Hungary.

A. Takács & A. Molnár Veszprém

Gramineae (Poaceae)

Poa botryoides (Griseb.) Kom. (≡ *Poa attenuata* subsp. *botryoides* (Griseb.) Tzvelev)

+ **Rf(E):** Russia: Orenburg province, Akbulak district, 7 km NE of Novopavlovka village, 51°11'58.2"N, 55°34'18.6"E, chalk hills, calciphytic steppe, 11 Jun 2014, *Golovanov* (UFA, det. M. S. Knjazev). – New to the flora of S Ural and the Orenburg region, this is also the first record of this Siberian species for European Russia and the Euro+Med area (see Tzvelev 1976: 473; Olonova 1990: 181–183; Czerepanov 1995: 385).

Ya. M. Golovanov

Iridaceae

Iris glaucescens Bunge – Fig. 3.

+ **Rf(E):** Russia: Orenburg province, Perevolozk district, between villages of Rodnichnoe and Dolinovka, tract of Sipan, 52°19'46.2"N, 54°27'33.7"E, top of hill, 13 May 2014, *Tabuldin* (PVB, det. Yu. Pirogov, conf. V. Vasjukov & V. Doron'kin); ibid., 2.5 km NE of village of Pretoria, hills near tract of Lyubimovka, 52°15'28.8"N, 54°21'45.1"E, 6 Jul 2014, *Tabuldin* (PVB); ibid., near village of Gabdrafikovo, 52°20'30.1"N, 54°23'33.6"E, hills, 6 Jun 2014, *Tabuldin* (PVB); ibid., between villages of Kamyshovka and Stepanovka, hills 3 km NE of tract of Gusiha, 52°14'11.2"N, 54°27'46.5"E, 29 May 2014, *Tabuldin* (PVB). – *Iris glaucescens* is distributed in S Siberia, Kazakhstan and NW China (Tzvelev 1979: 307; Doron'kin 1987: 117) and the S Urals in the basin of the Ural river (Muldashev 2001, as *I. scariosa* s.l.; Kulikov 2005; Ryabinina & Knyazev 2009, as *I. scariosa* s.l.; Kryukova & Abramova 2015, as *I. scariosa* s.l.). It is a new species for the flora of the Volga basin, where it

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use



Fig. 3. *Iris glaucescens* – Russia, Orenburg province, Perevolozk district, 28 Apr 2016, photograph by Yu. Tabuldin.

reaches its W limit of distribution. *Iris glaucescens* is sometimes erroneously included as a synonym in the NW Caspian lowland endemic species *I. scariosa* Willd. ex Link (Shevchenko & Rodionenko 2008).

Yu. Z. Tabuldin & V. M. Vasjukov

Liliaceae

Fritillaria ionica subsp. ***reiseri*** (Kamari) Kamari, **comb. nov.** ≡ *Fritillaria thessala* subsp. *reiseri* Kamari in Strid & Tan, Mount. Fl. Greece 2: 682. 1991.

Fritillaria ionica subsp. ***thessala*** (Boiss.) Kamari, **comb. nov.** ≡ *Fritillaria graeca* var. *thessala* Boiss., Fl. Orient. 5: 182. 1882 ≡ *Fritillaria thessala* (Boiss.) Kamari in Strid & Tan, Mount. Fl. Greece 2: 680. 1991.

The combinations are needed when adopting conspecificity of *Fritillaria thessala* (Kamari 1991: 680) with the earlier *F. ionica* (Halácsy 1904: 219). Nomenclatural advice by W. Gutermann (Flora Ionica Working Group 2016+) is gratefully acknowledged. G. Kamari

Malvaceae (incl. *Sterculiaceae*)

Brachychiton discolor F. Muell.

A **Si(S):** Italy, Sicily: Palermo city, Via Archirafi, near entrance of "Museo di Zoologia P. Doderlein", 38°06'45"N, 13°22'43"E, 16 m, along sidewalk, 11 Jan 2016, *Di Gristina* (PAL 102710).

Brachychiton diversifolius R. Br.

A **Si(S):** Italy, Sicily: Palermo city, Via Archirafi, near entrance of "Museo di Zoologia P. Doderlein", 38°06'45"N, 13°22'16"E, 16 m, along sidewalk, 11 Jan 2016, *Di Gristina* (PAL 102711).

The genus *Brachychiton* Schott & Endl. (bottle-tree) is cultivated for ornament outside Australia for its habit, bark, foliage, and showy trusses of brilliantly coloured flowers (Huxley & al. 1992). *Brachychiton discolor* and *B. diversifolius* are two Australian (Queensland and New South Wales) trees (Huxley & al. 1992) widely used as ornamentals in Sicily. No previous records of naturalization for Italy or Sicily have been found in relevant standard sources (from Bertoloni 1854 to Celesti-Grapow & al. 2010). The newly discovered juvenile individuals (at least two years old) in the city of Palermo, where different species of *Brachychiton* are commonly used for ornament, have originated by dissemination of cultivated plants along Archirafi street. F. Scafidi, E. Di Gristina & G. Domina

Martyniaceae

Proboscidea louisianica (Mill.) Thell.

A **Gr:** Greece: Peloponnisos, Nomos of Argolis, Eparchia of Nafplio, SSW of Arachneo alongside road to Gatzia, 37°40'19"N, 22°56'54"E, 570 m, scattered individuals in cereal fields, 24 Oct 2015, *Raabe* (MSTR 163398). – This is the first confirmed record for Greece of this xenophyte of North American origin. A previous report from the East Aegean island of Lesvos (Hecht-Markou 1999) turned out to refer to misidentified plants of *Ibicella lutea* (Lindl.) Van Eselt. (Yannitsaros & Bazos 2001). When the infraspecific taxonomy of Bretting (1983) is adopted, the Greek population can be allocated to *Proboscidea louisianica* subsp. *louisianica*. By the end of October the plants were in flower, some of them already exhibiting young fruits, but it is not known whether the fruits mature under the prevailing agricultural impact. The dry, hooked fruits of *P. louisianica* attach to animals and may disperse by means of zoochory. The above-cited locality previously harboured a rich flora of cereal weeds including rare species such as *Silene longipetala* Vent. (see Strid & Tan 1997: 260 & map 495). The plant diversity there is now

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

rapidly declining due to intensive application of commercially supplied fertilizer and grazing by sheep and goats. The original source of the seeds of the Greek population of *P. louisianica* may be imported forage from the United States, where it is also found in pastures and as a weed of fields, in particular of cotton. It is resistant to many herbicides used in cotton, and control options include hoeing by hand (Riffle & al. 1988). The latter method is also reported for the control of *Ibicella* by local farmers on Lesvos island (Hecht-Markou 1999: 76). *Proboscidea louisianica* is introduced elsewhere in the Euro+Med area and is for the most part established in Portugal, Spain, S France, Italy, S Russia and Caucasia (Czerepanov 1995: 315; Greuter & al. 1989: 240; Paiva & al. 2001: 24). Th. Raus & U. Raabe

Onagraceae

Oenothera lindheimeri (Engelm. & A. Gray) W. L. Wagner & Hoch (≡ *Gaura lindheimeri* Engelm. & A. Gray)

A **Gr:** Greece: Sterea Ellas, Nomos of Attiki, Kalivia Thorikou, Lagonisi, Leoforos Souniou between the roads Nimfon and Okeanidon, 37°46'56"N, 23°53'23"E, 8 m, c. 10 individuals at roadside and on adjacent vacant lot, 5 May 2016, *Raabe* (ATHU, B, MSTR 73719). – No previous non-cultivated populations of this alien hemicryptophyte, which is native to Louisiana and Texas, U.S.A. (Munz 1965: 187), have been recorded in Greece. *Oenothera lindheimeri*, in horticulture better known under its synonym *Gaura lindheimeri*, is now placed within *Oenothera* sect. *Gaura* (L.) W. L. Wagner & Hoch based on recent molecular findings (Hoggard & al. 2004; Wagner & al. 2007). It is nowadays frequently cultivated as an ornamental in many European countries, and there are several records of escapes from cultivation. It was recently reported from Portugal (Verloove & Sánchez Gullón 2012), Spain (Sánchez Gullón & Verloove 2015) and Belgium (Rostański & Verloove 2015) and seems to be locally on the verge of naturalization. In the Greek locality of Lagonisi, there are actually no cultivated plants of *O. lindheimeri* in the vicinity. However, the observed population of several individuals may have originated from the local seedbank, since there was a small nursery nearby, which was closed several years ago. U. Raabe & Th. Raus

Orobanchaceae

Orobanche flava subsp. ***cicerbitae*** Uhlich & Rätzel (≡ *O. cicerbitae* (Uhlich & Rätzel) Tzvelev) – Fig. 4A, B.

\+ **Ab(A):** Azerbaijan: Greater Caucasus, NE side, near Ilisu (NE of Qakh), 41°27'43.4"N, 47°04'09.5"E (WGS 84), 1360 m, dry ravine above town, parasitic on *Senecio* cf. *propinquus* Schischk. (root attachment verified, new host record), large population, 11 Jun 2013, *Rätzel & al.* (*photos* – Fig. 4A, B). – New to Azerbaijan. *Orobanche flava* subsp. *cicerbitae* was so far known only from the type locality (Russia, Republic of Adygea, NW Greater Caucasus, Thač region; Rätzel & Uhlich 2004; see also Otte & al. 2007: p. 224, fig. A2-33, p. 247). The host plant there was *Cicerbita* cf. *petiolata* (K. Koch) Gagnidze. Tzvelev (2015: 210) elevated *O. flava* subsp. *cicerbitae* to specific rank, without further explanation. We do not agree with this opinion, because there is no elementary new knowledge about the relationship between the two taxa, even after comparing material from Azerbaijan with the type collection of *O. flava* subsp. *cicerbitae* and Caucasian and European collections of *O. flava* subsp. *flava*. The matter needs further study. S. Rätzel, M. Ristow & H. Uhlich

Orobanche reticulata subsp. ***agigensis*** Rätzel & Uhlich, **subsp. nov.** – Fig. 4C, D.

Holotype: Russia, Krasnodarskiy Kray, NW Greater Caucasus, Thač region, Mt Agige (S part), 43°58'32.4"N, 40°30'01.5"E, 2085 m, moist tall forb community, loam above Triassic limestone, populated area, on *Carduus acanthoides* s.l., 8 Sep 2015, *Kreinsen & Rätzel* (B 100673157; isotypes: B 100673156, GLM, LE, WU, herb. Rätzel).

Diagnosis — *Orobanche reticulata* subsp. *agigensis* differs from *O. reticulata* Wallr. subsp. *reticulata* in the following characters: stigma always yellow, even in otherwise darker reddish-purple-coloured plants [*O. reticulata* subsp. *reticulata*: usually reddish purple, very rarely yellow in otherwise aberrant yellow-coloured plants, e.g. *O. reticulata* f. *kirantha* Beck]; filaments mostly inserted (1–)1.5–2 mm above base of corolla tube, adaxial pair inserted only slightly higher than abaxial one [*O. reticulata* subsp. *reticulata*: insertion of abaxial filaments 2–2.5 mm and adaxial filaments 3–4 mm above base of corolla tube]; filaments and corolla basally ± hairy, filaments in lower ⅓ or ½ distally scattered, below anthers often densely shortly glandular hairy [*O. reticulata* subsp. *reticulata*: filaments and corolla glabrous or very sparsely hairy at base and below anthers]; apical mucro of anthers mostly yellowish-white-coloured to a length of 0.25–0.4 mm, mucro therefore seeming enlarged [*O. reticulata* subsp. *reticulata*: apical mucro only partly yellowish-white-coloured to a length of 0.15–0.25 mm, mucro therefore not seeming enlarged]; ovary in distal part (especially ventrally) and style along whole length scattered to densely glandular hairy [*O. reticulata* subsp. *reticulata*: ovary usu-

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use



Fig. 4. A, B: *Orobanche flava* subsp. *cicerbitae* – Azerbaijan, Greater Caucasus, near İlisu, 11 Jun 2013; A: habit of typical plant, with host (*Senecio* cf. *propinquus*); B: typical plant, detail. – C, D: *Orobanche reticulata* subsp. *agigensis* – Russia, Krasnodarskiy Kray, Greater Caucasus, Mt Agige (type locality); C: plant detail, 26 Aug 2013; D: plant detail, more pale colour form, 8 Sep 2015. – All photographs by S. Rätzel.

ally glabrous, style glabrous or (especially below stigma) scattered shortly glandular hairy].

Distribution — Russia, NW Caucasus: known only from the broader Thač region on Triassic limestone, but scattered there; a small distribution area without any known transitions to the nominate subspecies.

Ecology and hosts — *Orobanche reticulata* subsp. *agigensis* grows in perennial mesic to moist tall forb vegetation at an altitude of 1700–2100 m. The main host is *Carduus acanthoides* L. s.l. and in one case very probably *Cirsium pugnax* Sommier & Levier. *Orobanche reticulata* subsp. *agigensis* is a late-blooming plant, flowering from the beginning of July to the beginning of September. The plant is mostly associated with *O. grossheimii* Novopokr.

Etymology — The subspecific epithet is derived from Mt Agige, a rock massif in the NW part of the Greater Caucasus, the type locality of the plant, and its surroundings.

Remarks — *Orobanche reticulata* Wallr. is a rare species in Russia. During field work from 2001–2015, we found remarkable plants belonging to this species, but differing in several characters, which we here describe as *O. reticulata* subsp. *agigensis*. The new subspecies should be seen as an example of convergent evolution with *O. alba* subsp. *xanthostigma* Rätzel & Uhlich (Rätzel & Uhlich 2004; Piwowarczyk 2015b: 107; Uhlich & al. 2015). In both cases, taxa with obligate yellow stigma, additional quantitative differences and their own distribution areas have presumably evolved from species with red or purple stigmas. As in *O. alba*, forms of *O. reticulata* with yellow stigmas have been described in the literature, but they do not match entirely with the subspecies described here. In our opinion, all those cases merely represent anomalous colour forms within populations of otherwise typically developed and normally coloured plants. Concerning the infraspecific classification of *O. reticulata*, we follow the argumentation of Pusch (2009: 45) and propose two subspecies: subsp. *reticulata* and subsp. *agigensis*, with the former containing two varieties: var. *reticulata* and var. *pallidiflora* (Wimm. & Grab.) Beck (the latter variety including in synonymy *O. procera* W. D. J. Koch ≡ *O. reticulata* var. *procera* (W. D. J. Koch) Beck).

Specimens examined (all GPS coordinates WGS 84) — Russia, NW Greater Caucasus: Republic of Adygea, Thač region, Poljana Knjaževskaja N of Mt Bol'šoj Thač, 44°02'33"N, 40°25'20"E, 1700 m, tall forb community dominated by thistles, with *Orobanche grossheimii*, 8 Aug 2001, *Rätzel* (herb. Rätzel); Republic of Adygea/Krasno-

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

darskiy Kray, Thač region, SW flank below summit of Mt Agige, 43°58'32.9"N, 40°28'14.2"E, 1890 m, slopes with tall forb community under older pines (*Pinus sylvestris* L.), with *O. grossheimii*, on *Carduus acanthoides* s.l., 11 Sep 2015, *Kreinsen & Rätzel* (herb. Rätzel); ibid., a little S of "Devils Gate" (Schertowuij Worota), S of Atschekbok, 43°58'17.3"N, 40°28'18"E, 2080 m, S-exposed slopes with moist tall forb community, with *O. grossheimii*, on *C. acanthoides* s.l., 9 Sep 2015, *Rätzel* (herb. Rätzel); Krasnodarskiy Kray, Thač region, Mt Malyj Thač, 44°01'51.5"N, 40°25'53.5"E, 1980 m, E-slope, moist tall forb community, directly in *C. acanthoides* s.l., 11 Sep 2015, *Kreinsen & Rätzel* (herb. Rätzel); ibid., Mt Agige (S part), 43°58'32.4"N, 40°30'01.5"E (type locality), 2085 m, moist tall forb community, loam above limestone, on *C. acanthoides* s.l., 26 Aug 2013, *Rätzel* (*photo* – Fig. 4C); ibid., Mt Agige (SSE part), SW of Mt Synbyka, 43°58'28"N, 40°30'20.8"E, 2000 m, tall forb community above limestone, on *Cirsium pugnax* (no other potential host nearby), with *O. grossheimii*, 8 Sep 2015, *Rätzel* (herb. Rätzel).

S. Rätzel, B. Kreinsen & H. Uhlich

Orobanche zajaciorum Piwow.

+ **Rf(CS):** Russia, NW Greater Caucasus: Republic of Adygea, Thač region, 1.8 km ESE of Novoprohladnoe (= Sachrai), Mt Šibaba, 44°08'07"N 40°18'44"E (WGS 84), 700 m, Triassic limestone, open and sunny place (S-exposed, formerly grazed), parasitic on perennial *Scutellaria* species (root attachment verified, on *S.* cf. *polyodon* Juz.), small population, 30 Jun 2002, *Rätzel* (herb. Rätzel); Krasnodarskiy Kray, Thač region, Maly Bambak (S part), 43°56'42.1"N 40°38'20.3"E, 1640 m, S-exposed rocky outcrop (Triassic limestone), on *Scutellaria* sp., 24 Aug 2013, *Rätzel* (herb. Rätzel). – *Orobanche zajaciorum* was previously known only from the type locality in the Lesser Caucasus, Georgia (Piwowarczyk 2015a), and from a second location in Armenia (Piwowarczyk 2016). The information in Piwowarczyk (2015: 215) about the ecology and the associated vegetation corresponds fairly well to the situation at the new location near Sachrai. The host plants, *Scutellaria sosnowskyi* Takht. reported by Piwowarczyk (2015: 215), and *S. polyodon*, both belong to the *S. orientalis* L. aggregate. The location near Sachrai is very rich in plant species, including different *Orobanche* taxa, three of which were described by Rätzel & Uhlich (2004). The type collection of *O. zajaciorum* is distinguished by a distinctive flower morphology with almost geniculate corolla (see Piwowarczyk 2015a: fig. 1, 2), a character that may only occasionally be observed in supposedly closely related species, such as *O. caryophyllacea* Sm. and *O. teucrii* Holandre. By contrast, this feature seems always to be present in *O. zajaciorum*; the material from Armenia (see Piwowarczyk 2016) and our plants from the Greater Caucasus also have such arcuate corollas. S. Rätzel & H. Uhlich



Fig. 5. *Phelipanche olbiensis* (≡ *Orobanche olbiensis*), flowering plant, habit. – Greece, Rodos, near Vrisia, 25 Apr 2016, photograph by B. Kreinsen & S. Rätzel.

Phelipanche olbiensis (Coss.) Carlón & al. (≡ *Orobanche olbiensis* (Coss.) Nyman) [Editors' note: *Phelipanche* Pomel is currently treated as a synonym of *Orobanche* L. in the Euro+Med PlantBase (Domina & Raab-Straube 2010)]. – Fig. 5.

+ **AE(G):** Greece: Rodos, c. 1.5 km W of Vrisia, N of the Vrisia-Pasthida road, 36°22'10.9"N, 28°10'34.2"E (WGS 84), 70 m, small hill, S-exposed, open and sunny, on loose siliceous grit (serpentine), parasitic on perennial *Helichrysum stoechas* subsp. *barrelieri* (Ten.) Nyman and *Phagnalon rupestre* (L.) DC. (for both hosts root attachment verified), 25 Apr 2016 (in flower), *Kreinsen & Rätzel* (B, herb. Rätzel); ibid., 27 May 2014 (in fruit), *Rätzel & al.* (herb. Rätzel).

+ **Cy:** Cyprus: Akamas peninsula (W part of island), Smigies to Agia Paraskevi, 35°01'10.9"N, 32°19'49.21"E (WGS 84), 325 m, slope with open *Pinus brutia* Ten. forest and sparse phrygana (serpentine) mainly with *Cistus*, host not verified (*Helichrysum* and *Phagnalon* growing in wider area), 21 Apr 2013, *Christodoulou* (B, det. S. Rätzel). – For *Phelipanche olbiensis*, the shape of the corolla and calyx and the intense lilac-blue,

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use



Fig. 6. *Phoenix canariensis*, spontaneous individual on roadside. – Algeria, Wilaya of Blida, Commune of Blida, 27 Sep 2014, photograph by A. Zeddam.

sometimes white, colour of the corolla are characteristic. The species can be further distinguished from other taxa of its group by having only very sparsely hairy, white bosses and acute, tapering corolla lobes (for further details see Carlón & al. 2008). *Phelipanche olbiensis* was not mentioned in Dimopoulos & al. (2013), but it has been reported from different regions of Greece, e.g. Attiki, the Ionian Islands (Atokos, Ithaki, Kefallinia and Lefkada), the Kiklades (Milos) and Kriti (Carlón & al. 2005: 67, as "*Orobanche rosmarina* sensu Beck"; Sánchez Pedraja & al. 2005; Carlón & al. 2008: 83; Trigas & al. 2012: 86, as *O. nana*; Flora Ionica Working Group 2016). At the Rodos location, *P. olbiensis* is associated with dwarf shrubs such as *Centaurea cariensis* subsp. *maculiceps* (O. Schwarz) Wagenitz, *Thymus cilicicus* Boiss. & Balansa and the Rodos endemic *Anthemis rhodensis* subsp. *pulvinalis* Rätzel & Ristow (see Kleinsteuber & al. 2016, vegetation relevé p. 565, "*Phelipanche* spec.").

S. Rätzel, Ch. S. Christodoulou, B. Kreinsen & H. Uhlich

Palmae (Arecaceae)

Phoenix canariensis H. Wildpret – Fig. 6.

N **Ag:** Algeria: Wilaya of Algiers, Daira of Hussein-Dey, Commune of Hussein-Dey, Le Caroubier, adult individuals spontaneous and certainly not planted at metal door of garage, 19 Sep 2014, *Zeddam* (B & *photo*): ibid., at foot of wall close to train station, fruiting for first time, 24 Jul & 15 Sep 2016, *Zeddam* (B); ibid., Hussein-Dey, sapling growing in crack of wall in neighbourhood of planted fruiting individual in abandoned garden, 7 Nov 2013 (*photo*); ibid., spontaneous adult individual behind small building near hospital, 25 Sep 2014 & 27 Jul 2016, *Zeddam* (B); ibid., Hai el Badr, spontaneous adult individual in abandoned area near *Washingtonia* individual, 19 Sep 2014 (*photo*); ibid., Commune of Magharia, young individual at foot of old *Platanus* tree, 6 Oct 2015 & 27 Jul 2016, *Zeddam* (B); ibid., sapling of 1–1.5 m at broken wall near vegetable market, 15 Oct 2016 (*photo*); ibid., Commune of Kouba, young individual in crack of wall, 7 Nov 2013 & 31 Oct 2015 (*photo*); ibid., Vieux Kouba, four locations, adult on top of slope above stadium, under electric pylon and in cracks of walls, 4 Apr 2014 (*photo*); ibid., young individuals in waste ground near old *Phoenix* dating from end of 1940s by École Nationale Supérieure, 3 Sep 2016 (*photo*); ibid., Christian cemetery, numerous seedlings and saplings (1.5–2 m) among and on graves, frequency of seedlings obviously linked to old *Cupressus* trees (frequently planted in Christian cemeteries, favourable to perching birds, which spread the seeds in sunny gaps), 16 Aug 2016 (*photo*); ibid., Ben Omar, Muslim cemetery, two locations, one adult and one seedling on grave, another one outside cemetery under electric pylon, 19 Sep 2014 (*photo*); Commune of Belouizdad, Ruisseau, seedlings in irrigated beds, 11 Jul 2016 (*photo*); ibid., Daira of El Harrach, Commune of El Harrach, two locations on side of railway, 19 Sep 2014 (*photo*); ibid., one adult on edge of Oued El Harrach, 20 Jul 2016 (*photo*); ibid., Daira of Sidi M'Hamed, Commune of Sidi M'Hamed, Place 1er Mai, near Ministère de la Jeunesse et des Sports, at foot of old *Platanus* tree, 11 Jul 2016 (*photo*); Commune of El Madania, seedlings in areas among buildings close to old adults planted more than 50 years ago, 11 Jul 2016 (*photo*); ibid., Christian cemetery of Diar Essaâda, adults and numerous seedlings among and on graves, also seedling in hole of tarmaced place surrounded by old *Cupressus* and a few *Phoenix* trees, 17 Aug 2016 (*photo*); ibid., Commune of El Mouradia, Place Addis Abeba, seedling against wall, 12 Jul 2016 (*photo*); ibid., in neighbourhood of El Djazair hotel, adult and seedling in irrigated beds, 17 Aug 2016 (*photo*); ibid., Commune of Alger-Centre, Tafoura, spontaneous adult against wall in waste area, 11 Aug 2016 (*photo*); Daïra of Bab El Oued, commune

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

of La Casbah, Place des Martyrs, adult in abandoned garden, 19 Jul 2016 (*photo*); ibid., commune of Bologhine, Christian cemetery, adults of 1–2 m with fruits, 16 Aug 2016 (*photo*); Daira de Dar El Beida, commune de Bab Ezzouar, El Alia cemetery, numerous seedlings and adults with fruits among and on graves mainly in sunny areas surrounded with trees such as *Cupressus sempervirens* L., *Schinus molle* L., *Robinia pseudoacacia* L. etc., 25 Aug 2016 (*photo*); ibid., Wilaya of Blida, Commune of Blida, spontaneous individual on roadside at road sign, 27 Sep 2014 (*photo* – Fig. 6); all photographs by A. Zeddam. – *Phoenix canariensis* (for correct nomenclature see Rivera & al. 2013a, 2013b; Applequist 2014: 1367) is endemic to the Canary Islands and is reported to reproduce easily by seeds in urban environments of S Spain (Valdés & al. 1987: 205; Euro+Med 2006+). It has been introduced to littoral areas of Algeria probably by the Spanish before the French colonization, as testified by engravings of old Algiers dating back to c. 1830, where adult trees of *P. canariensis* are documented together with *Agave americana* L. and *Opuntia ficus-indica* (L.) Mill. (Zeddam & Raus 2010). In Algeria, *P. canariensis* did not produce viable seeds before this last decade, and the recent occurrence of seedlings in locations where conditions appear rather unfavourable could highlight a new behaviour in population dynamics of the species, perhaps linked to changing climatic conditions. Deep and moist soils in gardens, cemeteries or green spaces seem to promote the germination of seeds and the relatively fast growth of seedlings to adult individuals producing fruits and constituting a danger for walls and graves. The fruits seem to be spread mainly by birds, the seeds perhaps also by ants, which could explain the occurrence of seedlings in wall cracks. Different sources classify the species as a weed, being invasive in areas of winter-rain climates in Australia, Chile (Institute of Pacific Islands Forestry 2013), California, U.S.A. (California Invasive Plant Council 2016+) and Tunisia (Brandes 2001: 11; Le Floc'h & al. 2010). *Phoenix canariensis* "has also been documented as displacing native species and altering habitats" (Global Invasive Species Database 2005+). In Algeria, we consider the species as naturalized on the basis of the definitions by Pyšek & al. (2004). A. Zeddam & Th. Raus



Fig. 7. *Washingtonia robusta*, advanced seedling at foot of wall. – Algeria, Wilaya of Algiers, Daïra of Sidi M'Hamed, Commune of El Madania, Diar El Mahçoul, 11 Jul 2016, photograph by A. Zeddam.

Washingtonia robusta H. Wendl. – Fig. 7.

N **Ag:** Algeria: Wilaya of Algiers: Daïra of Hussein-Dey, Commune of Hussein-Dey, Cité Amirouche, under and around old adult individuals planted before 1962, numerous seedlings mainly in now-and-then irrigated beds and in moist cracks of sidewalks, at foot of walls, 18 Sep 2014 & 25 Apr 2016 (*photo*); ibid., seedling under *Ficus* tree at market place, 1 Oct 2014 (*photo*); ibid., in hospital garden, young individual against old adult, 25 Sep 2014 (*photo*); ibid., seedling in crack of external hospital wall, 26 Jul 2016 (*photo*); ibid., Hai El Badr, spontaneous adult near electric pylon, 19 Sep 2014 & 20 Jul 2016 (*photo*); ibid., commune of Kouba, young seedling at foot of old *Platanus* tree in front of Mosque, 6 Dec 2012 & 7 May 2016 (*photo*); ibid., seedling in waste ground facing military barracks, 24 May 2016 (*photo*); Daïra of Sidi M'Hamed, Commune of El Madania, Diar El Mahçoul, advanced seedling at foot of wall (Fig. 7) and young seedlings along sidewalk gutter, 11 Jul 2016, *Zeddam* (B & *photos*); ibid., outside commercial centre of Riadh El Feth, spontaneous adult individual at foot of stair conspicuously rooting in accumulation of earth and dust, 11 Jul 2016 (*photo*); ibid., seedling in crack among stones, 11 Jul 2016 (*photo*); Daira of Bab El Oued, Commune of La Casbah, seedlings close to adult individual in irrigated beds in front of National Theatre, 11 Aug 2016 (*photo*);

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

ibid., seedlings under *Washingtonia* adults in irrigated bed in front of Direction Générale de la Sûreté Nationale (*photo*); all photographs by A. Zeddam. – Native to NW Mexico, planted in Algiers decades ago as an ornamental tree along avenues, seaside promenades and in parks, the offspring nowadays easily establishing, particularly in the neighbourhood of adults. In Algeria, *Washingtonia robusta* seems to propagate only by seeds, as seedlings and saplings are generally located under or close to adult individuals except when seeds are taken and transported by birds. The species is naturalized in California and Arizona, U.S.A. (Flora of North America Editorial Committee 2000: 106) and is invasive in certain oceanic island groups (Hawaii and La Réunion; Institute of Pacific Islands Forestry 2013). On the basis of the actual locations of young individuals of *W. robusta* in Algeria, the species prefers habitats with sufficient available water, such as irrigated beds or moist cracks in sidewalks, where the seedlings survive regular weeding without any difficulty. Also Danin (2000: 313) noted that in Israel *W. robusta* is "established in disturbed ground with low competition and sufficiently wet ground" and "is expected to grow at a wide range of elevations in Israel as well". Euro+Med (2006+) gives only continental Spain as an area of introduction of the species, without specified status. On the basis of the observation of non-planted advanced saplings and fertile adults, we consider *W. robusta* as naturalized in Algeria.

A. Zeddam & Th. Raus

Polygonaceae

Polygonum excelsius (Karlsson) Uotila, **comb. & stat. nov.** ≡ *Polygonum aviculare* subsp. *excelsius* Karlsson in Nordic J. Bot. 19: 386. 1999.

Polygonum excelsius is probably an endemic taxon of the Scandinavian coast of the North Sea (Karlsson 2000: 267). It has a strictly erect habit with few branches, and all flowers in branchless axils of reduced leaves in spike-like inflorescences. In these characters it resembles *P. bellardii* All. and *P. patulum* M. Bieb., but the nuts are similar to those of *P. aviculare* L. A good illustration is available in Karlsson (2000: fig. 95). I here propose a new combination, needed for the treatment of the *P. aviculare* group at species level in Euro+Med PlantBase.

The *Polygonum aviculare* group is the most intricate complex in the genus, and it has been dealt with in various ways in Floras and checklists and in different parts of the Euro+Med area. Most treatments cover only a single country or group of countries, and a proper comparison between the taxa in, for instance, E Europe and in other parts of Europe has never been made. Original distribution patterns in the area have been obscured by extensive anthropogenic spreading of many taxa. Karlsson (2000), in his thorough treatment of the group in N Europe, accepted the members of the group at subspecific level, discussed their variability and synonymized several taxa that were traditionally treated as separate entities. This has been followed in several recent W European Floras and checklists, with the exception that *P. aviculare* and *P. arenastrum* are often still both accepted as species. The narrow species concept was used for the group in E European and Caucasian Floras and checklists, which include fairly little discussion of the relationships between the taxa. For Euro+Med PlantBase purposes, it is appropriate to accept species level for most of the taxa in the *P. aviculare* group, except for the most challenging *P. neglectum* Besser, which has often been included in *P. aviculare* s.str. but seldom in other taxa. In Euro+Med PlantBase it is treated as a subspecies of *P. aviculare* s.str.

P. Uotila

Scrophulariaceae s.l. (incl. *Plantaginaceae* p.p.)

Digitalis nervosa Benth.

+ Rf(CS): Russia: Dagestan, near the city of Makhachkala, Narattyubinsky ridge, E slope, 560 m, oak and hornbeam forest (peak Druzhba), 1 Jul 2011, *Jarovenko & Murtazaliev* (DAG, LE, LENUD). – The main distribution of *Digitalis nervosa* is in Azerbaijan (Akhundov 1957: 515), where the closest locality to our new finding is near the village of Nyugedi in the Kubinskiy district. In Dagestan, it grows in oak and hornbeam-oak forests on N-exposed hill slopes with an inclination of 40–60° and at altitudes between 540 m and 625 m. The population consists of 89 individuals, 41 of which were in the vegetative and 48 in the generative state. They occur in two adjacent plots within an area of 200 m^2. The discovery of *D. nervosa* here is further evidence of the penetration of Hyrkan floristic elements through the foothills of the Caspian part of the Caucasus to the north, up to the city of Makhachkala.

R. Murtazaliev

Verbascum flavidum (Boiss.) Freyn & Bornm.

+ Rf(CS): Russia: Dagestan, near the city of Makhachkala, village of Talgi, Talginskoe gorge, E slope, 300 m, 13 May 2010, *Murtazaliev* (DAG). – New to Russia. There is verbal information that it grows also S of Makhachkala, in the foothills of the Kaytagskiy and Tabasaranskiy districts. There are also collections by E. V. Yarovenko in 2010 from the suburbs of the village of Arakul, Rutulskiy district, present in the herbarium of the Dagestan State University (LENUD). *Verbascum flavidum* also occurs in C, SW and S Transcaucasia (Budantsev 1998: 137). In S Dagestan it grows in grassy situations in the foothills.

R. Murtazaliev

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

Veronica amoena M. Bieb.

+ **Rf(CS):** Russia: Dagestan, Tabasaranskiy district, near the village of Maragha, 300 m, on dry clay slopes, E-exposed, 11 Apr 2010, *Murtazaliev* (DAG, LE). – New to Russia. *Veronica amoena* occurs in Azerbaijan, where the nearest locations to our finding are the foothills on the Absheron peninsula (Karjagin 1957: 488). At the time of discovery, the population in Dagestan consisted of a large number of plants, creating a dominant aspect in the spring vegetation there. R. Murtazaliev

Veronica kaiseri Täckh.

+ **Jo:** Jordan: Upper Wadi Ghuweir, 30°36'N, 35°34'E, 4 Oct 2015, *Gregor 14208* (FR) – New to Jordan. This species was so far known only from Sinai, Egypt (Laurent-Täckholm & Drar 1943; El Hadidi & al. 1999; Boulos 2002). The determination was confirmed by D. Albach by ITS sequence (GenBank accession number KX768117).
Th. Gregor & D. Albach

Tamaricaceae

Tamarix mascatensis Bunge

– **Bl(M), Hs(S), Lu:** *Tamarix mascatensis* was originally described from Oman (Bunge 1852: 60), and its distribution was later extended to nearby countries such as Yemen, Somalia, Ethiopia, Saudi Arabia, Iran and Pakistan (Schiman-Czeika 1964; Baum 1978; Qaiser 1981). The first record for the Iberian Peninsula (De Martis & al. 1985) was based on a specimen collected near Elvas, Portugal, which, according to the morphological description given by the authors, may well be a specimen of *T. africana* Poir. The range of *T. mascatensis* was later extended to other parts of the Iberian Peninsula and the Balearic Islands (Cirujano 1991, 1993), with a modified morphological description that placed it close to *T. gallica* L., which is very common in the Iberian Peninsula and Balearic Islands. As a result, *T. mascatensis* has been reported in different articles and regional Floras (Gil & al. 1996; Salazar & Quesada 2009). The main morphological feature given as differential by De Martis & al. (1985) and Cirujano (1991, 1993) was the insertion of the staminal filaments on the lobes of the nectariferous disc: reported to be paralophic in *T. mascatensis* and synlophic in *T. africana* and *T. gallica* (see Baum 1978). However, we have found that both synlophic and paralophic disc configurations occur as phenotypic variations in *T. africana* and *T. gallica*, as has already been stated for different *Tamarix* species (Zohary 1972; Villar & al. 2012). The other morphological features mentioned by De Martis & al. (1985) and Cirujano (1991, 1993) more closely match the typical features of *T. africana* and *T. gallica* and include a larger size of sepals and petals than in *T. mascatensis*. In addition, *T. mascatensis* has very distinctive leaves with an amplexicaul base, almost clasping along one-third of their length, as is evident from the type collection (holotype at W; isotypes at G, K and P). This character was never mentioned in the publications that reported *T. mascatensis* for the Iberian Peninsula, nor has it been found in any studied specimen identified as *T. mascatensis* in the Iberian Peninsula and the Balearic Islands. All the Iberian and Balearic *T. mascatensis* we have examined (see below) were, in fact, misidentified specimens of *T. gallica*. Therefore, the presence of *T. mascatensis* in the Iberian Peninsula and the Balearic Islands should be discarded.

Specimens examined — Tamarix gallica: Spain: Almería, Desierto de Tabernas, Rambla de Tabernas, 310 m, 25 May 1995, *Cabello* (HUAL 16066); Huesca, Vedad de Fraga bords de l'Elie près de lanage, 200 m, 13 Jun 1985, *Charpin & al.* (G 287820); Murcia, Lorca, Bords des eaux, 2 May 1923, *Hno Jerónimo* (G 258046); Madrid, San Martín de la Vega, M-506 between km 38 and 39, 30TVK 501526, 560 m, 26 May 2011, *Meliá* (MA 846177); Madrid, Aranjuez, El Regajal, 30TVK 4828, 560 m, 13 Jun 1993, *González-Granados* (MA); Mallorca, Port de Sant Jordi, 5 May 2002, *Rita & al.* (herb. Universitat de les Illes Balears 55730); Sevilla, Aznalcázar, Coto de Doñana, Las Gangas, 29SQB 3306, 30 Mar 1988, *Cirujano & García-Murillo* (MA 486426).
J. L. Villar & M. A. Alonso

Acknowledgements

The editors thank Fabrizio Bartolucci, Luis Carlón, Gianniantonio Domina, Pertti Uotila and two anonymous reviewers for their comments on earlier versions of these contributions. The authors A. Molnár Veszprém, V. Löki and A. Takács thank the OTKA K108992 grant and NTP-EFÖ-P-15 project by the Human Capacities Grant Management Office and the Hungarian Ministry of Human Capacities for supporting their study.

References

Aellen P. 1967: *Amaranthus* L. – Pp. 340–344 in: Davis P. H. (ed.), Flora of Turkey and the East Aegean Islands **2.** – Edinburgh: Edinburgh University Press.

African Plant Database 2012: African Plant Database (version 3.4.0). – Genève: Conservatoire et Jardin botaniques de la Ville de Genève; Pretoria: South African National Biodiversity Institute. – Published at

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

http://www.ville-ge.ch/musinfo/bd/cjb/africa/index.php [accessed 22 Apr 2016].

Aghababyan M. V. 2008: *Rhaponticoides* (L.) Vaill. – Pp. 299–300 in: Takhtadžan A. L. (ed.), Konspekt flory Kavkaza **3(1).** – Sankt-Peterburg & Moskva: Tovariščestvo naučnykh izdanij KMK.

Akhundov G. F. 1957: *Digitalis* L. – Pp. 512–515 in: Karjagin I. I. (ed.), Flora Azerbajdžana **7.** – Baku: Akademii Nauk Azerbajdžanskoj SSR.

Applequist W. L. 2014: Report of the Nomenclature Committee for Vascular Plants: 66. – Taxon **63:** 1358–1371.

Atlas of Living Australia 2016+ [continuously updated]: Atlas of Living Australia. – Published at http://www.ala.org.au/ [accessed 21 Oct 2016].

Bacchetta G., Brullo S., D'Emerico S., Pontecorvo C. & Salmeri C. 2012: *Charybdis glaucophylla* (*Asparagaceae*), a new species from Sardinia. – Phytotaxa **69:** 16–26.

Bassett I. J. & Crompton C. W. 1975: The biology of Canadian weeds, 11. *Ambrosia artemisiifolia* L. and *A. psilostachya* DC. – Canad. J. Pl. Sci. **55:** 463–476.

Baum B. 1978: The genus *Tamarix*. – Jerusalem: Israel Academy of Sciences and Humanities.

Beck von Mannagetta G. 1890: Monographie der Gattung *Orobanche*. – Biblioth. Bot. **19.**

Beck von Mannagetta G. 1930: *Orobanchaceae.* – In: Engler A. (ed.), Das Pflanzenreich **96.** – Leipzig: Engelmann.

Beckie H. J. 2011: Herbicide-resistant weed management: focus on glyphosate. – Pest Manag. Sci. **67:** 1037–1048.

Bertoloni A. 1854: Flora italica sistens plantas in Italia et in insulis circumstantibus sponte nascentes **10.** – Bologna: Richardi Masii.

Botanical Cornwall Group 2012: Isles of Scilly. – Published at http://www.botanicalcornwall.co.uk/ [accessed 21 Oct 2016].

Boulos L. 2002: Flora of Egypt **3.** – Cairo: Al Hadara.

Brandes D. 2001. Urban flora of Sousse (Tunisia). – Botanisches Institut und Botanischer Garten der TU Braunschweig. – Published at http://www.digibib.tu-bs.de/?docid=00001189 [accessed 7 Jul 2016].

Breitwieser I., Brownsey P. J., Nelson W. A. & Wilton A. D. (ed.) 2016: Flora of New Zealand Online. – Published at http://www.nzflora.info [accessed 21 Oct 2016].

Bretting P. K. 1983: The taxonomic relationship between *Proboscidea louisianica* and *Proboscidea fragrans* (*Martyniaceae*). – S. W. Naturalist **28:** 445–450.

BSBI & BRC [Botanical Society of Britain & Ireland & Biological Records Centre] 2016: Online atlas of the British & Irish flora. – Published at http://www.brc.ac.uk/plantatlas/index.php [accessed 30 Oct 2016].

Budantsev A. L. 1998: Konspekt roda *Verbascum* (*Scrophulariaceae*) flory Kavkaza. A checklist of the genus *Verbascum* (*Scrophulariaceae*) of the flora of Caucasus. – Bot. Zhurn. (Moscow & Leningrad) **83(7):** 128–139.

Bunge A. 1852: Tentamen generis Tamaricum species accuratius definiendi. – Dorpati: J. C. Schuenmanni et C. Mattieseni.

California Invasive Plant Council 2016+: California Invasive Plant Inventory Database. – Published at http://www.cal-ipc.org/paf [accessed 7 Jul 2016]

Carlón L., Gómez Casares G., Laínz M., Moreno Moral G., Sánchez Pedraja Ó. & Schneeweiss G. M. 2005: Más, a propósito de algunas *Orobanche* L. y *Phelipanche* Pomel del oeste del Paleártico. – Doc. Jard. Bot. Atlántico **3:** 1–71.

Carlón L., Gómez Casares G., Laínz M., Moreno Moral G., Sánchez Pedraja Ó. & Schneeweiss G. M. 2008: Más, a propósito de algunas *Phelipanche* Pomel, *Boulardia* F. W. Schultz y *Orobanche* L. (*Orobanchaceae*) del oeste del Paleártico. – Doc. Jard. Bot. Atlántico **6:** 1–128.

Castroviejo S. (ed.) 1997: *Crassulaceae* – Pp. 97–160 in: Castroviejo S. & al. (ed.), Flora iberica. Plantas vasculares de la Penìnsula Ibérica e Islas Baleares **5.** *Ebenaceae – Saxifragaceae*. – Madrid: Real Jardín Botánico, C.S.I.C.

Celesti-Grapow L., Pretto F., Carli E. & Blasi C. (ed.) 2010: Flora vascolare alloctona e invasiva delle regioni d'Italia. – Roma: Università La Sapienza.

Cirujano S. 1991: Notas sobre *Tamarix* Ibéricos. – Anales Jard. Bot. Madrid **48:** 273–274.

Cirujano S. 1993: *Tamarix* L. – Pp. 437–443 in: Castroviejo S. & al. (ed.), Flora iberica. Plantas vasculares de la Penìnsula Ibérica e Islas Baleares **3.** *Plumbaginaceae* (partim) – *Capparaceae*. – Madrid: Real Jardín Botánico, C.S.I.C.

Clemants S. E. 2003: *Alternanthera* L. – Pp. 447–451 in: Flora of North America Editorial Committee (ed.), Flora of North America north of Mexico **4** (*Magnoliophyta*: *Caryophyllidae* 1. *Caryophyllales* 1). – New York & Oxford: Oxford University Press.

Clement E. J., Smith D. P. J. & Thirlwell I. R. 2005: Illustrations of alien plants of the British Isles. – London: Botanical Society of the British Isles.

Cook C. D. K. 1968: *Elatine* L. – Pp. 295–296 in: Tutin T. G., Heywood V. H., Burges N. A., Moore D. M., Valentine D. H., Walters S. M. & Webb D. A. (ed.), Flora europaea **2.** – Cambridge: Cambridge University Press.

Czerepanov S. K. 1995: Vascular plants of Russia and adjacent states (the former USSR). – Cambridge: Cambridge University Press.

DAISIE [Delivering Alien Invasive Species Inventories for Europe] 2008+: Species factsheet: *Crassula multicava*. – Published at http://www.europe-aliens.org/speciesFactsheet.do?speciesId=8748 [accessed 6 Nov 2016].

Danin A. 2000: The inclusion of adventive plants in the second edition of Flora palaestina. – Willdenowia **30:** 305–314.

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

Danin A. 2004: Distribution atlas of plants in the Flora palaestina area. – Jerusalem: Israel Academy of Sciences and Humanities.

De Martis B., Loi M. C. & Polo M. B. 1985: *Tamarix mascatensis* Bge. (*Tamaricaceae*) in Portogallo, Nuova per la flora d'Europa. – Bol. Soc. Brot. **58:** 215–217.

Dimopoulos P., Raus Th., Bergmeier E., Constantinidis Th., Iatrou G., Kokkini S., Strid A. & Tsanoudakis D. 2013: Vascular plants of Greece: An annotated checklist. – Berlin: Botanic Garden and Botanical Museum Berlin-Dahlem; Athens: Hellenic Botanical Society. – [Englera **31**].

Dobignard A. & Chatelain C. 2011: Index synonymique de la flore d'Afrique du Nord **2.** *Dicotyledonae*, *Acanthaceae* – *Asteraceae*. – Genève: Conservatoire et Jardin botaniques de la Ville de Genève, publication hors-série **11a.**

Domina G. & Raab-Straube E. von 2010: *Orobanche*. – In: Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published at http://ww2.bgbm.org/EuroPlusMed/PTaxonDetail.asp?NameCache=Orobanche&PTRefFk=7500000 [accessed 9 Nov 2016].

Domingues de Almeida J. & Freitas H. 2012: Exotic flora of continental Portugal – a new assessment. – Bocconea **24:** 231–237.

Doron'kin V. M. 1987: *Iridaceae*. – Pp. 113–125 in: Krasnoborov I. M. (ed.), Flora Sibiri **4.** – Novosibirsk: Nauka, Sibirskoe Otdelenie.

Dostál J. 1976: *Centaurea* L. – Pp. 254–301 in: Tutin T. G., Heywood V. H., Burges N. A., Moore D. M., Valentine D. H., Walters S. M. & Webb D. A. (ed.), Flora europaea **4.** – Cambridge: Cambridge University Press.

Dunkel F. G. 1987: Das Dänische Löffelkraut (*Cochlearia danica* L.) als Straßenrandhalophyt in der Bundesrepublik. – Florist. Rundbr. **21:** 39.

El Hadidi M. N., Hosny A. I., El Husseini N. & Shamso E. 1999: – *Scrophulariaceae* in the flora of Egypt 1. Systematic revision of the indigenous taxa. – Taeckholmia **19:** 227–259.

Eliasson U. 1987: *Amaranthaceae*. – In: Harling G. & Anderson L. (ed.), Flora of Ecuador **28.** – Stockholm: Göteborg University and Museum of Natural History.

Euro+Med 2006+ [continuously updated]: Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published at http://ww2.bgbm.org/EuroPlusMed [accessed 15 Oct 2015 & 21 Oct 2016].

Fernald M. L. 1950: Gray's manual of botany, ed. 8. – New York, etc.: American Book Company.

Flora Ionica Working Group 2016+ [continuously updated]: Flora Ionica – An inventory of ferns and flowering plants of the Ionian Islands (Greece). – Published at https://floraionica.univie.ac.at [accessed 5 Apr 2016].

Flora of North America Editorial Committee (ed.) 2000: Flora of North America north of Mexico **22.** *Magnoliophyta*. *Alismatidae*, *Arecidae*, *Commelinidae* (in part), and *Zingiberidae*. – New York & Oxford: Oxford University Press.

Flora of North America Editorial Committee (ed.) 2006: Flora of North America north of Mexico **21.** *Magnoliophyta*: *Asteridae*, part 8: *Asteraceae*, part 3. – New York & Oxford: Oxford University Press.

Gaines T. A., Ward S. M.; Bekun B., Preston C., Leach J. E. & Westra P. 2012: Interspecific hybridization transfers a previously unknown glyphosate resistance mechanism in *Amaranthus* species. – Evol. Applic. **5:** 29–38.

Gil González M. L. 2015: Flora vascular de Canarias. – Published at http://www.floradecanarias.com/ [accessed 21 Oct 2016].

Gil Ll., Tébar F. J. & Boi M. 1996: Notes florístiques de les illes Balears (VIII). – Bol. Soc. Hist. Nat. Baleares **39:** 117–128.

Global Invasive Species Database 2005+: Species profile *Phoenix canariensis*. – Published at http://www.iucngisd.org/gisd/species.php?sc=864 [accessed 7 Jun 2016].

Greuter W. 2006+ [continuously updated]: *Compositae* (pro parte majore). – In: Greuter W. & Raab-Straube E. von (ed.), *Compositae*. Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published at http://ww2.bgbm.org/EuroPlusMed/PTaxonDetail.asp?NameCache=Compositae&PTRefFk=7000000 [accessed 18 May 2015].

Greuter W., Burdet H. M. & Long, G. 1989: Med-Checklist. A critical inventory of vascular plants of the circum-Mediterranean countries. **4.** – Genève: Conservatoire et Jardin botaniques de la Ville de Genève; Berlin: Secrétariat Med-Checklist, Botanischer Garten und Botanisches Museum Berlin-Dahlem.

Greuter W. & Raab-Straube E. von (ed.) 2005: Euro+Med Notulae, 1. – Willdenowia **35:** 223–239.

Grossgejm A. A. 1967: Flora Kavkaza **7.** – Leningrad: Nauka.

Hadjikyriakou G., Makris C., Christofides Y. & Alziar G. 2004: Additions to the flora of Cyprus. – J. Bot. Soc. Bot. France **27:** 31–46.

Halácsy E. von 1904: Conspectus florae graecae **3.** – Leipzig: Engelmann.

Hand R., Hadjikyriakou G. N. & Christodoulou Ch. S. 2015+ [continuously updated]: Flora of Cyprus — a dynamic checklist. – Published at http://www.flora-of-cyprus.eu/ [accessed 15 Oct 2016].

Hansen A. 1976: *Ambrosia* L. – Pp. 142–143 in: Tutin T. G., Heywood V. H., Burges N. A., Moore D. M., Valentine D. H., Walters S. M. & Webb D. A. (ed.), Flora europaea **4.** – Cambridge: Cambridge University Press.

Hazslinszky F. 1866: A Tokaj-Hegyalja viránya. – Math. Term. Közlem. **4:** 105–143.

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

Hecht-Markou P. 1999: Das Vorkommen der *Proboscidea louisianica* in Griechenland und zwar auf der Insel Lesbos. – Ann. Mus. Goulandris **10:** 73–78.

Hegelmaier F. 1867: Zur Systematik von *Callitriche*. – Verh. Bot. Vereins Prov. Brandenburg **9:** 1–41.

Hierro J. L., Eren Ö., Chiuffo M. N. & Villarreal D. 2013: Non-native conditions favor non-native populations of invasive plant: demographic consequences of seed size variation? – Oikos **122:** 583–590.

Hierro J. L., Villarreal D., Eren Ö., Graham J. M. & Callaway R. M. 2006: Disturbance facilitates invasion: the effects are stronger abroad than at home. – Amer. Naturalist **168:** 144–156.

Hoggard G. D., Kores P. J., Molvray M. & Hoggard R. K. 2004: The phylogeny of *Gaura* (*Onagraceae*) based on ITS, ETS, and *trnL-F* sequence data. – Amer. J. Bot. **91:** 139–148.

Hohla M. & Raabe U. 2012: *Cochlearia danica* – das Dänische Löffelkraut – kein überraschender Neuzugang der Flora von Oberösterreich. – Stapfia **97:** 206–209.

Huxley A., Griffiths M., Levy M. 1992: The new Royal Horticultural Society dictionary of gardening **1.** – London: MacMillan Press.

Iamonico D. 2011: Notula 56. *Alternanthera sessilis* (L.) DC. (*Amaranthaceae*). Notulae alla flora esotica d'Italia: 4. – Inform. Bot. Ital. **43:** 145.

Iamonico D., Ardenghi N. M. G. & Faggi G. 2015: *Amaranthus palmeri* S. Watson – Pp. 119–120 in: Raab-Straube E. von & Raus Th. (ed.), Euro+Med-Checklist Notulae, 4 – Willdenowia **45:** 119–129.

Iamonico D. & Sánchez-del Pino I. 2014: *Alternanthera tenella* Colla. – P. 288 in: Raab-Straube E. von & Raus Th. (ed.), Euro+Med-Checklist Notulae, 3. – Willdenowia **44:** 287–299.

Iamonico D. & Sánchez-del Pino I. 2015: Taxonomic revision of the genus *Alternanthera* (*Amaranthaceae*) in Italy. – Pl. Biosyst. **150:** 333–342.

Institute of Pacific Islands Forestry 2013: Pacific islands ecosystems at risk. Plant threats to Pacific ecosystems. *Phoenix canariensis*. – Published at http://www.hear.org/pier/species/phoenix_canariensis.htm [accessed 7 Jun 2016].

Jávorka S. 1925: Magyar Flóra (Flora hungarica). – Budapest: Studium.

Kamari G. 1991: *Fritillaria* L. – Pp. 672–683 in Strid A. & Tan K. (ed.), Mountain Flora of Greece **2.** – Edinburgh: Edinburgh University Press.

Karimov V., Yusifov E. & Murtazaliev R. 2016: Novye dlja flory Kavkaza vidy sosudistykh rastenij iz Azerbajdžana. Vascular plant species new to the flora of the Caucasus from Azerbaijan. – Bot. Zhurn. (Moscow & Leningrad) **101:** 592–594.

Karjagin I. I. 1957: Flora Azerbajdžana **7.** – Baku: Akademii Nauk Azerbajdžanskoj SSR.

Karlsson T. 2000: *Polygonum*. – Pp. 254–273 in Jonsell B. (ed.), Flora nordica **1.** – Stockholm: Bergius Foundation.

Karlsson T. & Agestam M. 2013: Checklista över Nordens kärlväxter. – Published at http://www.euphrasia.nu/checklista/ [accessed 21 Sep 2016].

Kartesz J. T. 2015: The Biota of North America Program. North American vascular flora. – Published at http://www.bonap.org [accessed 21 Oct 2016].

Kleinsteuber A., Ristow M. & Hassler M. (ed.) 2016: Flora von Rhodos und Chalki **1.** – Karlsruhe: Naturwiss. Verlag A. Kleinsteuber.

Koch M. 1996: Zur Ausbreitung des Dänischen Löffelkrautes (*Cochlearia danica* L.) als Küstensippe in das niedersächsische Binnenland. – Florist. Rundbr. **30:** 20–23.

Kryukova A. V. & Abramova L. M. 2015: On the biology of *Iris scariosa* Willd. ex Link, a rare species of the Republic of Bashkortostan. – Proceedings of the RAS Ufa Scientific Centre, Biology, Biochemistry and Genetics **3:** 49–52.

Kulikov P. V. 2005: Synopsis of flora of the Chelyabinsk region (vascular plants). – Ekaterinburg, Miass: Geotour.

Laguna Lumbreras E., Guillot Ortiz D., Rosellò Gimeno R., Gomez Serrano M. A., Ferrer Gallego P. P., Deltoro Torrò V. I. & Perez Rovira P. 2014: Nuevas citas de plantas alóctonas suculentas asilvestradas en la Comunidad Valenciana. – Bouteloua **18:** 141–159.

Lansdown R. V. 2006: Notes on the water-starworts (*Callitriche*) recorded in Europe. – Watsonia **26:** 105–120.

Lansdown R. V. 2008: Water-starworts (*Callitriche*) of Europe. – B.S.B.I. Handbook **11.**

Laurent-Täckholm V. & Drar M. 1943: – Some new Egyptian plants. – Svensk. Bot. Tidsskr. **36:** 243–261.

Le Floc'h É., Boulos L. & Véla E. 2010: Catalogue synonymique commenté de la Flore de Tunisie. – Tunis: Ministère de l'Environnement et du Développement durable.

Martinsson K. 1991: Geographical variation in fruit morphology in Swedish *Callitriche hermaphroditica* (*Callitrichaceae*). – Nordic J. Bot. **11:** 497–512.

Menezes de Sequeira M., Espirito-Santo D., Aguiar C., Capelo J. & Honrado J. (ed.) 2011: Checklist da flora de Portugal (Continental, Açores e Madeira). – Lisboa: Associação Lusitana de Fitossociologia.

Mennema J. 1986: *Cochlearia danica* L. op weg naar de binnenlanden van België en West-Duitsland. – Dumortiera **34–35:** 139–142.

Miller A. G. 1996: *Cruciferae*. – Pp. 380–448 in: Miller A. G. & Cope T. A. (ed.), Flora of the Arabian Peninsula and Socotra **1.** – Edinburgh: Edinburgh University Press.

Molnár Veszprém A. 2009: *Elatine* L. – Látonya. – P. 292 in: Király G. (ed.), Új magyar füvészkönyv. Magyarország hajtásos növényei. Határozókulcsok [New Hungarian herbal. The vascular plants of Hungary. Identification key]. – Jósvafő: Aggteleki Nemzeti Park Igazgatóság.

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

Molnár Veszprém A. & Pfeiffer N. 1999: Adatok hazai Nanocyperion-fajok ismeretéhez II. Iszapnövényzetkutatás az ár- és belvizek évében Magyarországon. – Kitaibelia **4:** 391–421.

Mosyakin S. L. & Robertson K. R. 1996: New infrageneric taxa and combinations in *Amaranthus* (*Amaranthaceae*). – Ann. Bot. Fenn. **33:** 275–281.

Mosyakin S. L. & Robertson K. R. 2003: *Amaranthus* L. – Pp. 410–435 in: Flora of North America Editorial Committee (ed.), Flora of North America North of Mexico **4.** – New York & Oxford: Oxford University Press.

Muldashev A. A. 2001: *Iris scariosa* Willd. ex Link. – Pp. 68 in: Mirkin B. M. (ed.), Red Book of the Republic of Bashkortostan **1.** Plants and fungi. – Ufa: MediaPrint.

Munz P. A. 1965: *Onagraceae*. – Pp. 1–278 in: North American Flora, ser. 2, **5.** – New York: New York Botanical Garden.

Olonova M. V. 1990: *Poa* L. – Pp.163–186 in: Krasnoborov I. M. (ed.), Flora Sibiri **2.** – Novosibirsk: Nauka, Sibirskoe Otdelenie.

Otte V., Tietz O. & Kirschey T. (ed.) 2007: Ten years of the Nature Park »Bol´šoj Thač« (Adygeâ, Russia, Caucasus). – Abh. und Ber. Naturkundemus. Görlitz **79(1).**

Paiva J., Herrero A. & Aedo C. 2001: *Martyniaceae*. – Pp. 21–24 in Castroviejo S. & al. (ed.), Flora iberica. Plantas vasculares de la Península Ibérica e Islas Baleares **14.** *Myoporaceae – Campanulaceae*. – Madrid: Real Jardín Botánico, C.S.I.C.

Piwowarczyk R. 2015a: *Orobanche zajaciorum* (*Orobanchaceae*): a new species from the Caucasus. – Phytotaxa **201:** 214–220.

Piwowarczyk R. 2015b: *Orobanche alba* Stephan ex Willd. subsp. *xanthostigma* Rätzel & Uhlich (*Orobanchaceae*). – P. 107 in: Nobis M., Nowak A., Ebel A. L., Nobis A., Nowak S., Gudkova P. D., Verkhozina A. V., Erst A. S., Łazarski G., Olonova M. V., Piwowarczyk R., Bobrov A. A., Khrustaleva I. A., Plášek V., Silantyeva M. M. & Zalewska-Gałosz J., Contribution to the flora of Asian and European countries: new national and regional vascular plant records, 3. – Acta Bot. Gallica Bot. Lett. **162:** 103–115.

Piwowarczyk R. 2016: *Orobanche zajaciorum* Piwow. (*Orobanchaceae*). – Pp. 163–164 in: Nobis M., Nowak A., Piwowarczyk R., Ebel A. L., Király G., Kushunina M., Sukhorukov A. P., Chernova O. D., Kipriyanova L. M., Paszko B., Seregin A. P., Zaleska-Gałosz J., Denysenko M., Nejfeld P., Stebel A. & Gudkova P. D., Contribution to the flora of Asian and European countries: new national and regional vascular plant records, 5. – Bot. Lett. **163:** 159–174.

Pusch J. 2009: *Orobanche reticulata*. – Pp. 43–47 in: Hegi G. (ed.), Illustrierte Flora von Mitteleuropa, Band **VI**, Teil **1A**, Lieferung **1**. – Jena: Weissdorn.

Pyšek P., Richardson D. M., Rejmánek M., Webster G. L., Williamson M. & Kirschner J. 2004: Alien plants in checklists and floras: towards better communication between taxonomists and ecologists. – Taxon **53:** 131–143.

Qaiser M. 1981: The genus *Tamarix* Linn. (*Tamaricaceae*) in Pakistan. – Pakistan J. Bot. **13:** 107–158.

Raab-Straube E. von & Raus Th. (ed.) 2015: Euro+Med-Checklist Notulae, 5 [Notulae ad floram euro-mediterraneam pertinentes 34]. – Willdenowia **45:** 449–464.

Rätzel S. & Uhlich H. 2004: *Orobanche benkertii* sp. nova (*Orobanchaceae* Vent.) und weitere *Orobanche*-Sippen aus dem Nordwest-Kaukasus. – Feddes Repert. **115:** 189–211.

Raus Th. & Raabe U. 2006: *Amaranthus palmeri* S. Watson – Pp. 719–720 in: Greuter W. & Raus Th. (ed.), Med-Checklist Notulae, 24 – Willdenowia **36:** 719–730.

Riffle M. S., Thilsted W. E., Murray D. S., Ahring R. M. & Waller G. R. 1988: Germination and seed production of unicorn-plant (*Proboscidea louisianica*). – Weed Sci. **36:** 787–791.

Rivera D., Obón C., Alcaraz F., Egea T., Carreño E., Laguna E., Santos A. & Wildpret W. 2013a: A review of the nomenclature and typification of the Canary Islands endemic palm, *Phoenix canariensis* (*Arecaceae*). – Taxon **62:** 1275–1282.

Rivera D., Obón C., Alcaraz F., Egea T., Carreño E., Laguna E., Santos A. & Wildpret W. 2013b: (2238) Proposal to conserve *Phoenix canariensis* against *P. cycadifolia* (*Arecaceae*). – Taxon **62:** 1337–1338.

Robertson K. R. 1981: The genera of *Amaranthaceae* in the southeastern United States. – J. Arnold Arbor. **62:** 267–314.

Rostański K. & Verloove F. 2015: The genus *Oenothera* (*Onagraceae*) in Belgium. – Dumortiera **106:** 12–42.

Ryabinina Z. N. & Knyazev M. S. 2009: The identification manual of vascular plants of the Orenburg region. – Moscow: Scientific Press Ltd KMK.

Salazar C. & Quesada J. 2009: *Tamarix* L. – Pp. 190–193 in: Blanca G. & al. (ed.), Flora vascular de Andalucía Oriental **2.** – Sevilla: Consejería de Medio Ambiente, Junta de Andalucía.

Sánchez Gullón E. & Verloove F. 2015: New records of interesting xenophytes in the Iberian Peninsula. V. – Lazaroa **36:** 43–50.

Sánchez Pedraja O., Moreno Moral G., Carlón L., Piwowarczyk R., Laínz M. & Schneeweiss G. M. 2005+ [continuously updated]: Index of *Orobanchaceae*. – Published at http://www.farmalierganes.com/Otrospdf/publica/Orobanchaceae%20Index.htm [accessed Oct 2016].

Sanz Elorza M., Dana Sánchez E. D. & Sobrino Vesperinas E. 2004: Atlas de las plantas alóctonas invasoras en España. – Madrid: Ministerio de Medio Ambiente.

Sauer J. D. 1955: Revision of the dioecious amaranths. – Madroño **13:** 5–46.

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

Schiman-Czeika H. 1964: *Tamaricaceae*. – Pp. 1–17 in: Rechinger K. H. (ed.), Flora iranica **4.** – Graz: Akademische Druck- und Verlagsanstalt.

Schotsman H. D. 1958: Notes on *Callitriche hermaphroditica* Jusl. – Acta Bot. Neerl. **7:** 519–523.

Shevchenko G. T. & Rodionenko G. I. 2008: *Iris scariosa* Willd. ex Link. – Pp. 304–305 in: Kamelin R. V. & al. (ed.), Red Book the Russian Federation (plants and fungi). – Moscow: Scientific Press Ltd KMK.

Simon T. 1992: A magyarországi edényes flóra határozója. – Budapest: Tankönyvkiadó.

Sociedade Portuguesa de Botânica 2012–2016: flora·on. – Published at http://flora-on.pt/ [accessed 21 Oct 2016].

Stace C. 2010: New Flora of the British Isles, ed. 3. – Cambridge: Cambridge University Press.

Strid A. 2016a: Atlas of the Aegean flora. Part 1: Text & plates. – Berlin: Botanic Garden and Botanical Museum Berlin, Freie Universität Berlin. – Englera **33(1).**

Strid A. 2016b: Atlas of the Aegean flora. Part 2: Maps. – Berlin: Botanic Garden and Botanical Museum Berlin, Freie Universität Berlin. – Englera **33(2).**

Strid A. & Tan K. (ed.) 1997: Flora hellenica **1.** – Königstein: Koeltz Scientific Books.

Sukhorukov A. P., Martín-Bravo S., Verloove F., Maroyi A., Iamonico D., Catarino L., El Mokni R., Daniel T. F., Belyaeva I. V. & Kushunina M. 2016: Chorological and taxonomic notes on African plants. – Bot. Lett. doi: http://dx.doi.org/10.1080/23818107.2016.1224731

Thulin M., Rydberg A. & Thiede J. 2010: Identity of *Tetragonia pentandra* and taxonomy and distribution of *Patellifolia* (*Chenopodiaceae*). – Willdenowia **40:** 5–11.

Toelken H. R. 1977: A revision of the genus *Crassula* in southern Africa. Part 1. – Cape Town: The Bolus Herbarium, University of Cape Town.

Trigas P., Karetsos G. & Tsiftsis S. 2012: Reports 117–131. – Pp. 86–88 in: Vladimirov V., Dane F., Matevski V. & Tan K. (ed.), New floristic records in the Balkans: 18. – Phytol. Balcan. **18:** 69–92.

Tuğ G. N. 2012: *Amaranthus* L. – Pp. 21–22 in Güner A., Aslan S., Ekim T., Vural M. & Babaç M. T. (ed.), Türkiye Bitkileri Listesi (Damarlı Bitkiler). – İstanbul: Nezahat Gökyiğit Botanik Bahçesi ve Flora Araştırmaları Derneği Yayını.

Tzvelev N. N. 1976: Zlaki SSSR. – Leningrad: Nauka, Leningradskoe Otdelenie.

Tzvelev N. N. 1979: *Iridaceae* Juss. – Pp. 292–311 in: Fedorov A. A. (ed.), Flora evropejskoj časti SSSR **4.** – Leningrad: Nauka, Leningradskoe Otdelenie.

Tzvelev N. N. 1997: O nekotorykh kritičeskikh I novykh dlja severo-zapadnoj Rossii vidakh sosudistykh rastenij. On some critical and new for north-west Russia species of vascular plants. – Bot. Zhurn. (Moscow & Leningrad) **82(12):** 93–97.

Tzvelev N. N. 2012: Konspekt flory vostočnoj Evropy **1.** – Sankt-Peterburg & Moskva: Tovariščestvo naučnykh izdanij KMK.

Tzvelev N. N. 2015: O rode Sarasikha (*Orobanche* L. sensu lato, *Orobanchaceae*) v Rossii. – Novosti Sist. Vyssh. Rast. **46:** 189–215.

Uhlich H., Kreutz C. A. J. & Rätzel S. 2015: A contribution to the taxonomy and phytogeography of *Orobanche alba* Steph. ex Willd. (*Orobanchaceae*). – Phytotaxa **222:** 1–16; and Erratum in Phytotaxa **224:** 300.

Uhlich H., Pusch J. & Barthel K.-J. 1995: Die Sommerwurzarten Europas. – Magdeburg: Westarp Wissenschaften.

Universidad dos Açores 2008+ [continuously updated]: Base de dados da biodiversidade dos Açores. – Published at http://www.azoresbioportal.angra.uac.pt/ [accessed 21 Oct 2016].

Uotila P. 2009: *Elatinaceae*. – In: Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published at http://ww2.bgbm.org/EuroPlusMed/PTaxonDetail.asp?NameCache=Elatinaceae&PTRefFk=7300000 [accessed Jun 2016].

Uotila P. 2011: *Patellifolia procumbens* (C. Sm.) A. J. Scott., Ford-Lloyd & J. T. Williams. – Euro+Med PlantBase – the information resource for Euro-Mediterranean plant diversity. – Published at http://ww2.bgbm.org/EuroPlusMed/PTaxonDetail.asp?NameId=7721047&PTRefFk=7300000 [accessed 22 Apr 2016].

Valdés B., Talavera S. & Fernández-Galiano E. 1987: Flora vascular de Andalucía Occidental **3.** – Barcelona: Ketres Editora S.A.

Valkenburg J. L. C. H. van, Duistermaat H. & Verloove F. (curators) 2015+: Q-bank invasive plants database. *Ambrosia psilostachya*. – Published at http://www.q-bank.eu/Plants/BioloMICS.aspx?Table=Plants%20-%20Species&Rec=1096&Fields=All [accessed 14 Dec 2015].

Verloove F. 2006: Catalogue of neophytes in Belgium (1800–2005). – Scripta Bot. Belg. **39:** 1–89.

Verloove F. & Sánchez Gullón E. 2012: New records of interesting vascular plants (mainly xenophytes) in the Iberian Peninsula. II. – Fl. Medit. **22:** 5–24.

Villar J. L., Alonso M. A., Juan A. & Crespo M. B. 2012: Does *Tamarix dalmatica* (*Tamaricaceae*) occur in Spain? – Anales Jard. Bot. Madrid **69:** 253–258.

Wagner W. L., Hoch P. C. & Raven P. H. 2007: Revised classification of the *Onagraceae*. – Syst. Bot. Monogr. **83.**

Ward S. M., Webster T. M. & Steckel L. E. 2013: Palmer amaranth (*Amaranthus palmeri*): a review. – Weed Technol. **27:** 12–27.

Welch D. 2001: Colonisation by *Cochlearia danica* L. along trunk roads in central Scotland from 1996 to 2000. – Watsonia **23:** 446–449.

Yannitsaros A. & Bazos I. 2001: A genus of the American family *Martyniaceae* new for Greece. – Pp. 115–117

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

in: Kamari G., Psaras G. & Georgiadis Th. (ed.), Proceedings, 8th Scientific Congress, Greek Botanical Society, Patras October 5–8, 2000 [in Greek with English abstract]. – Patras: Greek Botanical Society.

Yena A. V. 2012: Prirodnaya flora Krymskogo poluostrova. – Simferopol: N. Orianda.

Zeddam A. & Raus Th. 2010: *Opuntia ficus-indica* (L.) Mill. – P. 190 in Greuter W. & Raus Th. (ed.), Med-Checklist Notulae, 29. – Willdenowia **40:** 189–204.

Zohary M. 1972: *Tamarix*. – Pp. 351–364 in: Zohary M. (ed.), Flora palaestina **2.** – Jerusalem: Israel Academy of Sciences and Humanities.

Willdenowia
Open-access online edition www.bioone.org/loi/will BioOne
Online ISSN 1868-6397 · Print ISSN 0511-9618 · Impact factor 0.500
Published by the Botanic Garden and Botanical Museum Berlin, Freie Universität Berlin
© 2016 The Authors · This open-access article is distributed under the CC BY 4.0 licence

Downloaded From: https://complete.bioone.org/journals/Willdenowia on 29 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use