Euro Med-Checklist Notulae, 5

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Notulae ad floram euro-mediterraneam pertinentes No. 34

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Euro+Med-Checklist Notulae, 5

Abstract

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This is the fifth of a series of miscellaneous contributions, by various authors, where hitherto unpublished data relevant to both the Med-Checklist and the Euro+Med (or Sisyphus) projects are presented.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*, *Boraginaceae*, *Caryophyllaceae*, *Chenopodiaceae*, *Compositae*, *Convolvulaceae*, *Crassulaceae*, *Cucurbitaceae*, *Dipsacaceae*, *Euphorbiaceae*, *Labiatae*, *Leguminosae*, *Linaceae*, *Moraceae*, *Orobanchaceae*, *Portulacaceae*, *Valerianaceae*, *Violaceae*; *Cyperaceae* and *Gramineae.* It includes new country and area records, taxonomic and distributional considerations for taxa in *Alkanna*, *Amaranthus*, *Anchusa*, *Artemisia*, *Atocion*, *Bidens*, *Bromopsis*, *Bufonia*, *Carex*, *Cenchrus*, *Cucurbita*, *Cytisus*, *Euphorbia*, *Festuca*, *Ficus*, *Gnaphalium*, *Helictochloa*, *Ipomoea*, *Koeleria*, *Linum*, *Lolium*, *Orobanche*, *Otospermum*, *Oxybasis*, *Paspalum*, *Phleum*, *Poa*, *Portulaca*, *Stipa*, *Tagetes*, *Teucrium*, *Thymus*, *Trigonella*, *Valeriana* and *Viola*, and the validation of names in *Adenostyles*, *Aeonium*, *Aichryson*, *Cephalaria*, *Helichrysum*, *Hieracium*, *Jacobaea* and *Sixalix*.

Additional key words: Europe, Mediterranean, vascular plants, distribution, taxonomy, new records, nomenclatural novelties

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 editors find it appropriate to change the current area abbreviation for the Crimean peninsula from one that can be understood in a political sense to a strictly geographical one. Country and mapping area abbreviations originally followed those defined and accepted in *Flora europaea*. Later, due changes were introduced to cope with new countries emerging from former Czechoslovakia, Yugoslavia and the USSR. The Euro+Med PlantBase Secretariat suggests to use from now on the abbreviation "Cm" for the Crimean peninsula. This kind of designation does not imply any political position concerning the status of the territory.

The following have contributed entries to the present instalment: N. M. G. Ardenghi, M. Axiotis, C. Ballerini, Á. Bañares, F. Bartolucci, I. Bazos, C. Cattaneo, P. Cauzzi, A. Danin, D. S. Dimitrov, G. Domina, M. Dzhus, R. S. Göktürk, G. Gottschlich, W. Greuter, D. Iamonico, R. Jahn, R. Karl, G. Khlevnaya, S. Magrini, S. Mossini, L. Novikova, D. Pankina, S. Pignatti, S. Rätzel, Th. Raus, M. Ristow, D. Salatellis, A. Scharfetter, A. Scoppola, M. Shcherbakov, H. Sümbül, V. Tikhomirov, H. Uhlich, V. Vasjukov, R. Vogt, V. M. Vutov, E. Willing, A. Yena and S. Zervou.

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Amaranthaceae

Amaranthus emarginatus Uline & W. L. Bray subsp. ***emarginatus*** [≡ *Amaranthus blitum* subsp. *emarginatus* (Uline & W. L. Bray) Carretero & al.]

N **Si(S):** Italy, Sicily: Province of Catania, Aci Castello, Aci Trezza, Via Lungomare dei Ciclopi, 37°33'47"N, 15°09'41"E, 10 m, fissure at base of sidewalk, 12 Jun 2015, *Ardenghi & Cauzzi* (FI). – Not listed for Sicily in the recent revision of the genus *Amaranthus* in Italy (Iamonico 2015), the species is quite common in the urban area of Aci Trezza. N. M. G. Ardenghi & P. Cauzzi

Boraginaceae

Alkanna macrosiphon Boiss. & Heldr.

+ **AE(G):** Greece, East Aegean Islands: Nomos of Dodekanisos, Inselgruppe Kastellorizo, Insel Megisti, zwischen Megalos Niftis und der Avlonia-Hochfläche, 36°08'34"N, 29°36'06"E, 140 m, Kalk, Felsfluren im Durchstieg durch die Felsbarriere (Militär-Steinweg), 24 Mar 2014, *Karl* (PAL-Gr, herb. Karl). – New to the East Aegean Islands and to Greece as a whole; formerly considered to be endemic to SW Anatolia (Huber-Morath 1978: 429). W. Greuter & R. Karl

Anchusa pusilla Guşul.

+ **Gr:** Greece: Nomos of Evros, c. 10 km NW Didimoticho, Umgebung von Karotí, 41°23'47"N, 26°25'31"E, 45 m, Silikatsedimente, Ackerrain, 27 Apr 2014, *Karl* (PAL-Gr, herb. Karl). – New to Greece. Formerly known from Turkey-in-Europe and N Anatolia (Chamberlain 1978: 397 [map 27], 398), Crimea (Dobročaeva 1999: 273) and NW Transcaucasia (Georgia: Abkhasia; Grossgejm 1967: 267). The localities in Turkey-in-Europe mapped in Chamberlain (l.c.) are fairly close to the new Greek locality. *Anchusa pusilla* is allied to the similar, largely sympatric *A. thessala* Boiss. & Spruner, with which it may have been confused in NE Greece (Dimopoulos & al. 2013). W. Greuter & R. Karl

Caryophyllaceae

Atocion compactum (Fisch.) Tzvelev (≡ *Silene compacta* Fisch.)

+ **AE(G):** Greece, East Aegean Islands: Nomos Lesvou, Eparchia Mithimnis, island of Lesvos, NNW of the village of Parakila, 39°12'04"N, 26°06'29"E, c. 600 m, rock crevices and small cavities on volcanic substrate in *Pinus brutia* forest, 10 May 2014, *Bazos & Zervou* 4640 (ATHU). – This is the first record for Lesvos and the East Aegean Islands as a whole. The species is scattered in Greece and rare in the Aegean, where it has been recorded from the islands of Tinos and Naxos. On Lesvos, *Atocion compactum* appears to be very local as a single, small population has been found so far, inhabiting a rocky outcrop a few kilometres above the village of Parakila. I. Bazos & S. Zervou

Bufonia perennis Pourr.

P **Bu:** Bulgaria: Black Sea coast (N), protected area Pobiti Kamani, central group, sandy places, 2 May 2015, *Dimitrov* (SOM 171482). – Most probably this is not a native species in Bulgaria. The area where it was found is frequently visited by many tourists from different countries, so it is likely that it was inadvertently introduced this way. The plant coexists there with *Anthemis arvensis* L., *A. ruthenica* M. Bieb., *Astragalus varius* S. G. Gmel., *Carex strigosa* Huds., *Lotus corniculatus* L., *Matthiola odoratissima* (M. Bieb.) R. Br., *Minuartia setacea* (Thuill.) Hayek subsp. *setacea* and *Stachys atherocalyx* K. Koch. D. S. Dimitrov & V. M. Vutov

Chenopodiaceae

Oxybasis chenopodioides (L.) S. Fuentes & al. [≡ *Chenopodium chenopodioides* (L.) Aellen]

N **Cr:** Greece, Kriti (Crete): Nomos of Iraklio, Eparchia of Monofatsi, Partira reservoir, SW side, 1.3 km NW of the village Partira, 35°07'37"N, 25°12'56"E, 305 m, at low-water level on wet sandy-pebbly soil, forming a belt along the shoreline together with *Persicaria lapathifolia* (L.) Gray, c. 1000 plants, 14 Apr 2014, *Jahn* (herb. Jahn + photos; confirm. A. Traxler). – Much resembling the situation of the plants found in Israel by Danin & Suchorukow (2009). Non-native status can be assumed, as evidently no suitable habitat existed before the construction of the artificial lake in the late 1990s. R. Jahn

Compositae

Adenostyles australis (Ten.) Iamonico & Pignatti, **comb. & stat. nov.** ≡ *Cacalia alpina* var. *australis* Ten., Syll. Pl. Fl. Neapol., App. 5: 40. 1842 ≡ *Adenostyles viridis* subsp. *australis* (Ten.) Nyman, Consp. Fl. Eur.: 396. 1879 ≡ *A. glabra* var. *australis* (Ten.) Wagenitz in Phyton (Horn) 23: 148. 1983 ≡ *Adenostyles alpina*

subsp. *australis* (Ten.) Greuter in Willdenowia 33: 247. 2003.

One of us (Pignatti 1982: 15) named as "*Adenostyles australis* (Ten.) Nyman" the populations growing in the C and S Apennines. The same binomial was included by Conti & al. (2005: 319) in *A. glabra* (Mill.) DC. subsp. *glabra*. Greuter (2003: 247) proposed to treat Tenore's taxon as a subspecies of *A. alpina* (L.) Bluff & Fingerh., and this choice was maintained in the subsequent Euro+Med PlantBase treatment (Greuter 2006+). Dillenberger and Kadereit (2012: 59) accepted the names *A. alpina* subsp. *alpina* (= *A. glabra* subsp. *glabra*) and *A. alpina* subsp. *nebrodensis* (Wagenitz & I. Müll.) Greuter.

The populations from the C and S Apennines are characterized by capitula with 3–8 flowers and involucres of c. 3 × 6–8 mm. The Sicilian population from the Madonie mountains (*A. alpina* subsp. *nebrodensis*) differs in having capitula with (10–)12–15(–18) flowers, while the alpine populations (*A. alpina* subsp. *alpina*) have capitula with involucres of 1–2 × 4–5 mm. Taking these morphological differences and the geographical distribution into account, we agree with Greuter (2006+) to consider the Apennine populations as a separate taxon, but we prefer to treat them at specific level. Since the binomial "*Adenostyles australis* (Ten.) Nyman" was never published – Nyman (1879: 396) in fact proposed the new combination *A. viridis* subsp. *australis* (Ten.) Nyman – the designation used by Pignatti (1982: 15) is to be considered not validly published (see also Greuter 2006+). In the absence of a valid name at specific rank, we here propose the nomenclatural change. *A. australis* can be considered an endemic species in Italy (not reported by Peruzzi & al. 2015). D. Iamonico & S. Pignatti

Artemisia nitrosa Stechm.

\+ **Rf(C):** Russia: Penza province, Neverkino district, 2 km E of village Elshanka, gully Solonechny, solonetz, steppe slopes, 27 Aug 2015, *Vasjukov, Novikova, Pankina & Shcherbakov*; ibid., 3 km S of village Mansurovka, solonetz, steppe slopes, 27 Aug 2015, *Vasjukov, Novikova, Pankina & Shcherbakov* (all LE, PKM, PVB). – New species for the flora of Rf(C), on the W edge of its distribution area.

Artemisia nitrosa grows together with several rare native species of the region, such as, at both sites: *Allium praescissum* Rchb., *Artemisia armeniaca* Lam., *A. santonicum* L., *Bassia prostrata* (L.) Beck, *Galatella angustissima* (Tausch) Novopokr., *G. linosyris* (L.) Rchb. f., *Jacobaea erucifolia* (L.) G. Gaertn. & al., *Limonium gmelinii* (Willd.) Kuntze and *Silaum silaus* (L.) Schinz & Thell.; near Elshanka village: *Allium flavescens* Besser, *Elytrigia lolioides* (Kar. & Kir.) Nevski, *Galatella crinitoides* Novopokr., *G.* ×*sublinosyris* Tzvelev, *Jacobaea grandidentata* (Ledeb.) Vasjukov, *Plantago cornutii* Gouan, *Senecio schvetzovii* Korsh., *Stipa pennata* L. and *Taraxacum bessarabicum* (Hornem.) Hand.-Mazz.; and near Mansurovka village: *Allium podolicum* Racib. & Szafer, *Campanula* ×*spryginii* Saksonov & Tzvelev, *Galatella biflora* (L.) Nees [≡ *G. sedifolia* subsp. *biflora* (L.) Sennikov], *Silene sibirica* (L.) Pers. and *Stipa borysthenica* Prokudin.

V. Vasjukov, L. Novikova, D. Pankina & M. Shcherbakov

Bidens frondosus L.

N **Gr:** Greece: Ipiros, Nomos of Ioannina, Eparchia of Dodona, SE Amfithea, 39°41'05"N, 20°52'25"E, herbaceous shore vegetation at the Lake of Ioannina, 14 Sep 2014, *Willing & Willing 244.418*; ibid., Eparchia of Konitsa, Distrato, 40°01'30"N, 21°00'49"E, damp herbaceous vegetation, 27 Sep 2014, *Willing & Willing 247.505*; id., W Makedonia, Nomos and Eparchia of Grevena, SE Grevena, 40°03'45"N, 21°24'39"E, ruderal places, 1 Oct 2014, *Willing & Willing 248.296*; ibid., Nomos and Eparchia of Kastoria, S Mavrochori, 40°30'23"N, 21°19'21"E, herbaceous shore vegetation at the Lake of Kastoria, 6 Oct 2014, *Willing & Willing 249.476*; ibid., Kefalari, 40°34'06"N, 21°16'05"E, damp herbaceous vegetation in the village, 8 Oct 2014, *Willing & Willing 249.881*; id., Nomos and Eparchia of Florina, Florina, 40°47'10"N, 21°21'11"E, ruderal places in town, 10 Oct 2014, *Willing & Willing 250.344*; ibid., E Parori, 40°51'22"N, 21°23'06"E, damp herbaceous vegetation, 11 Oct 2014, *Willing & Willing 250.731*; id., Nomos of Pella, Eparchia of Edessa, SW Edessa, 40°48'20"N, 22°00'51"E, wet gully along road, 15 Oct 2014, *Willing & Willing 251.566*; ibid., Nisi, 40°49'15"N, 21°56'16"E, weed in cherry tree plantation, 15 Oct 2014, *Willing & Willing 251.692* (all B). – The given localities range between 430 m and 900 m in altitude. This xenophytic species originates from North America and is distributed in the Mediterranean basin from Morocco and Portugal to Lebanon, including Bulgaria (Šumberová & al. 2005). Now it seems to have become invasive in N Greece and may have been overlooked so far because of the late autumnal flowering time.

Th. Raus & E. Willing

Gnaphalium pensylvanicum Willd. [≡ *Gamochaeta pensylvanica* (Willd.) Cabrera]

A **Si(S):** Italy, Sicily: Province of Catania, Aci Castello, Aci Trezza, Via Provinciale, square at the intersection with Via Pantolla, 37°33'45"N, 15°09'39"E, 13 m, sidewalk and public flowerbed of cultivated palms, 12 Jun 2015, *Ardenghi & Cauzzi* (FI). – This North American neophyte with increasing distribution was probably intro-

duced as a weed of plant nurseries, as it has occurred in other parts of the Italian peninsula, especially in the city of Pavia, where *Gnaphalium pensylvanicum* was collected for the first time in Italy in 1980 (Ardenghi 2013).

N. M. G. Ardenghi & P. Cauzzi

Helichrysum teydeum (Wildpret & Greuter) Raus, **comb. nov.** ≡ *Laphangium teydeum* Wildpret & Greuter in Willdenowia 33: 243. 2003.

It has been shown that there is no justification for *Laphangium* (Hilliard & B. L. Burtt) Tzvelev (type *L. luteoalbum* (L.) Tzvelev) because *Gnaphalium luteoalbum* L. is deeply nested in *Helichrysum* Mill., being closely related to the S African *H. reflexum* N. E. Br. (Galbany-Casals & al. 2004). Th. Raus

Hieracium dentatum subsp. ***subcrispum*** (Arv.-Touv. ex Zahn) Gottschl., **comb. nov.** ≡ *Hieracium plantagineum* subsp. *subcrispum* Arv.-Touv. ex Zahn, Hieracioth. Eur. 3: 15. 1908 ≡ *Hieracium erigerontinum* Arv.-Touv. in Bull. Soc. Bot. France 41: 328. 1894 ≡ *Hieracium dentatum* subsp. *erigerontinum* (Arv.-Touv.) Zahn, Hierac. Alp. Mar.: 114. 1916, nom. illeg.

When revising herbarium specimens, Arvet-Touvet often created names that he later did not validate. In this case Zahn validated Arvet-Touvet's herbarium name "*subcrispum*" as *H. plantagineum* subsp. *subcrispum* with a full reference to the protologue of *H. erigerontinum*. That is why at subspecific rank the epithet *subcrispum* must be used. G. Gottschlich

Jacobaea grandidentata (Ledeb.) Vasjukov, **comb. nov.** ≡ *Senecio grandidentatus* Ledeb., Fl. Ross. 2: 636. 1845 ≡ *S. erucifolius* subsp. *grandidentatus* (Ledeb.) V. E. Avet. in Biol. Žurn. Armenii 24(11): 44. 1971. – Holotype: [Caucasus] "in provinciis caucasicis, in insula Sara m. Caspii, *Kieseritzky* pl. exs." (LE).
= *Senecio arenarius* M. Bieb. in Besser, Enum. Pl.: 33. 1822 [non *Senecio arenarius* Thunb., Prodr. Pl. Cap. 2: 158. 1800] – *S. erucifolius* subsp. *arenarius* Soó in Acta Bot. Acad. Sci. Hung. 15: 344. 1969, nom. inval. (McNeill & al. 2012: Art. 41.5, page of basionym reference not given) – *Jacobaea erucifolia* subsp. *arenaria* B. Nord. & Greuter in Willdenowia 36: 712. 2006, nom. inval. (McNeill & al. 2012: Art. 41.5, replaced synonym – *S. arenarius* – not published in the cited reference; alleged basionym not validly published). – *Jacobaea arenaria* E. Wiebe in Turczaninowia 3(4): 62. 2000, nom. inval. (McNeill & al. 2012: Art. 41.5, basionym not published in the cited reference).

A taxonomic investigation on the genus *Jacobaea* has shown that *J. erucifolia* (L.) G. Gaertn. & al. s.str. and *Senecio grandidentatus* are distinct from morphological and chorological points of view. I here propose a new combination, necessary for accommodating *S. grandidentatus* at specific rank in the genus *Jacobaea*. V. Vasjukov

Otospermum glabrum (Lag.) Willk.

A **Gr:** Greece: Nomos of Messinia, Eparchia of Pilia, 1.5 km SE of Methoni, 36°48'30"N, 21°43'00"E, 50 m, ruderal vegetation in road construction area, 22 Apr 1995, *Willing 38916 & Eisenblätter* (B 10 0516453). – Spontaneous individuals along a recently constructed road probably originating from fruits introduced with road construction equipment. *Otospermum glabrum* is native to the S of the Iberian peninsula and the Maghreb countries Morocco, Algeria, and Tunisia. R. Vogt & E. Willing

Tagetes patula L.

A **Si(S):** Italy, Sicily: Province of Palermo, Termini Imerese, Via Fossola, 37°59'16"N, 13°41'32"E, 74 m, fissure at the base of the sidewalk, 11 Jun 2015, *Ardenghi & Cauzzi* (FI). – A single individual was recorded, originating from the dissemination of plants probably cultivated in nearby gardens. First record for Sicily of this adventive ornamental of South American origin, which is known to occur as a casual escape from cultivation in adjacent continental Italy (Viegi & al. 1974; Wilhalm & al. 2006; Celesti-Grapow & al. 2010). N. M. G. Ardenghi & P. Cauzzi

Convolvulaceae

Ipomoea pandurata (L.) G. Mey. – Fig. 1.

P **It:** Italy: Lombardia, Province of Pavia, Borgo San Siro, SP 206, NE side, at the level of the cemetery, 45°13'51.4"N, 8°55'11.7"E, 100 m, *Rubus* sect. *Corylifolii* Lindl. scrub, between the road and a rice field, with *Silene latifolia* Poir. and *Sorghum halepense* (L.) Pers., 5 Aug 2015, *Ardenghi*, *Ballerini* & *Cauzzi* (FI, PAV). – A large stand (13 m long and 5 m wide) with a 95 % cover, probably originating from discarded roots, has been discovered along a rice field edge (Fig. 1A). *Ipomoea pandurata* is native to SE North America (Austin & Huáman 1996; Austin 2011), where it grows on sandy hills along creeks, rivers, and lakes (Austin 2011), sometimes acting as a troublesome weed in corn and soybean fields (Wax & al. 1981). It is reported to be cultivated as an ornamental (Wiersema & León 2013), although it has never been observed in nearby gardens by the authors. N. M. G. Ardenghi, C. Ballerini & P. Cauzzi

Crassulaceae

Aeonium urbicum subsp. ***meridionale*** (Bañares) Bañares, **stat. nov.** ≡ *Aeonium urbicum* var. *meridionale* Bañares in Willdenowia 29: 98. 1999.

Fig. 1. *Ipomoea pandurata* naturalized population – A: habitat and habit; B: flowers. – Italy, Lombardia, Province of Pavia: Borgo San Siro, 5 Aug 2015, photographs by C. Ballerini.

Aeonium urbicum is an endemic plant of Tenerife island. Its southern and southwestern populations, which have been described as *A. urbicum* var. *meridionale*, are clearly isolated from the northern var. *urbicum* (Bañares 1999: 98–99, fig. 2). That southern/southwestern taxon is strongly differentiated by its pink variegated petals (white in var. *urbicum*) and its singular carpel morphology, with styles divergent from the base (apically divergent in var. *urbicum*) and ovaries provided with short appendages (smooth in var. *urbicum*). These taxonomic characters and the allopatric distribution of the two taxa on Tenerife justify their recognition as subspecies. Interestingly, differential characters of *A. urbicum* subsp. *meridionale* are shared by *A. appendiculatum* Bañares (1999: 98–101), an endemic species from La Gomera island which possibly originated from the S Tenerife taxon.

Á. Bañares

Aichryson laxum subsp. ***latipetalum*** (Bañares & M. V. Marrero) Bañares, **stat. nov.** ≡ *Aichryson laxum* var. *latipetalum* Bañares & M. V. Marrero in Willdenowia 38: 481. 2008.

Originally known as locally common in only one site of the S slope of Tenerife from 800 m to 1050 m along the bottom of the Barranco del Espigón de Tea (Arafo). The new localities mentioned below correspond to upper and more exposed sites of the same slope of the island facing N and NE. The increased knowledge of this plant through the newly discovered localities and its comparison with related species (Bañares 2002: 229) lead me to consider that the morphological differences separating it from *Aichryson laxum* subsp. *laxum* (Table 1) are sufficient evidence to justify its recognition as a subspecies.

Table 1. Differential characters of *Aichryson laxum* subsp. *laxum* and *A. laxum* subsp. *latipetalum*.

	A. laxum subsp. ***laxum***	***A. laxum*** subsp. ***latipetalum***
Leaves	ovate (broadest near base), apex rounded	ovate to rhombic, apex subacute, usually black-dotted
Flowers	9–12-merous	7–9-merous
Petals	linear-lanceolate, 0.9–1.1 mm wide	elliptic, 1.7–2 mm wide
Calyx (segments)	linear-lanceolate, 4–4.5 × 0.6–0.9 mm	lanceolate, 2.5–3.5 × 1–1.2 mm
Carpels	pubescent adaxially and usually abaxially	pubescent adaxially
Flowering time	April–May	June–July
Distribution	widely distributed on N slopes of Tenerife, La Palma, La Gomera, El Hierro and Gran Canaria	S slope of Tenerife

Specimens seen — Spain, Canary Islands, Tenerife: Barranco Hondo, UTM-WGS84: 28RCS638437, 1150 m, on humid slopes, Jun 2014, *Bañares & Bermúdez 48691* (TFC); ibid., Boca del Valle, UTM-WGS84: 28RCS608426, 1550 m, on humid slopes and rocky walls, Jun 2009, *Bañares 48689* (TFC); ibid., upper cliffs of Candela-

ria (Montaña Chirigel), UTM-WGS84: 28RCS608420, 1500 m, on humid rocky walls, Jun 2014, *Bañares & Bermúdez 48690* (TFC). Á. Bañares

Aichryson tortuosum subsp. ***bethencourtianum*** (Bolle) Bañares, **stat. nov.** ≡ *Aichryson bethencourtianum* Bolle in Bonplandia 7: 243. 1859 ≡ *Sempervivum bethencourtianum* (Bolle) Christ in Bot. Jahrb. Syst. 9: 161. 1888 ≡ *Macrobia bethencourtiana* (Bolle) G. Kunkel in Cuad. Bot. Canaria 28: 36. 1977 ≡ *Aichryson tortuosum* var. *bethencourtianum* (Bolle) Bañares & S. Scholz in Willdenowia 38: 481. 2008.

Morphological differences used to subordinate *Aichryson bethencourtianum* from Fuerteventura as a variety of the Lanzarote endemic *A. tortuosum* have been proved to remain stable when they were grown together, ex situ, under identical conditions. Their allopatric distribution in different islands leads me to recognize them here at subspecific rank, a concept which has also been suggested for several other infraspecific taxa in *Aichryson* (i.e. in the *A. pachycaulon* group, see Bramwell 1977).

Á. Bañares

Cucurbitaceae

Cucurbita moschata Duchesne

A **It:** Italy: Piemonte, Province of Novara, Terdobbiate, unsurfaced road between Via Nibbiola and Via Immacolata, 45°22'10.5"N, 8°40'56.6"E, 126 m, canal embankment with scattered vegetable refuse and *Chenopodium album* L., *Echinochloa crus-galli* (L.) P. Beauv., *Portulaca oleracea* L. and *Sicyos angulatus* L., 12 Aug 2015, *Ardenghi & Mossini* (FI); ibid., 25 Aug 2015, *Mossini & Ferraris* (PAV). – A large fruiting stand was discovered along an irrigation canal among rice fields, almost certainly growing from seeds rejected as food refuse. Two seedlings were observed, probably deriving from fruits produced in previous years. *Cucurbita moschata*, which originated in N South America from a yet unidentified wild ancestor (Paris 2000; Sanjur & al. 2002), is the most widely cultivated *Cucurbita* species in the tropics (Paris 2000; Lim 2012). Poorly adapted to temperate climates (Paris 2000; Sanjur & al. 2002), in Italy it is mainly grown (especially the well-known cultivars 'Lunga di Napoli' and 'Zucca trombetta di Albenga') in Liguria and across the Italian peninsula, while in the Po Plain it is largely replaced by *C. maxima* Duchesne, commonly used in local traditional dishes and occasionally adventive (Verloove & Ardenghi 2015). *Cucurbita moschata* is highly variable in fruit shape, but is readily separated from other conspecific cultivated taxa thanks to the apically expanded, slightly ribbed and slender fruiting peduncles (which are not enlarged in *C. maxima*, *C. melopepo* L. and *C. pepo* L.; moreover, in *C. maxima* they are distinctly corky, whereas in *C. pepo* and *C. melopepo* they are deeply furrowed), and the white-mottled and softly pubescent adaxial leaf surface (uniformly green in the other species).

N. M. G. Ardenghi & S. Mossini

Dipsacaceae

Cephalaria demirizii Göktürk & Sümbül, **sp. nov.** – *Cephalaria demirizii* Göktürk & Sümbül in Turkish J. Bot. 38: 943. 2014, nom. inval. (McNeill & al. 2012: Art. 40.7). – Holotypus: Turkey, B8 Diyarbakır, Hazro district, Uzunargıt village, Anbarsırtı, around Değirmen, 900 m, stream sides and rocky places, 31 Jul 2002, *R. S. Göktürk 5038 & M. Göktürk* (herb. Akdeniz University).

This name, validated here, was not validly published in the original publication (Göktürk & Sümbül 2014) because the type was specified as conserved in more than one herbarium.

G. Domina, R. S. Göktürk & H. Sümbül

Cephalaria squamiflora subsp. ***bigazzii*** (Bacch. & al.) Domina, **comb. & stat. nov.** ≡ *Cephalaria bigazzii* Bacch., Brullo & Giusso in Edinburgh J. Bot. 65: 146. 2008.

Cephalaria squamiflora subsp. ***ebusitana*** (O. Bolòs & Vigo) Domina, **stat. nov.** ≡ *Cephalaria squamiflora* var. *ebusitana* O. Bolòs & Vigo in Collect. Bot. (Barcelona) 17: 89. 1988 [''1987''] ≡ *Cephalaria ebusitana* (O. Bolòs & Vigo) Bacch. & al. in Edinburgh J. Bot. 65: 151. 2008.

Recently, Bacchetta & al. (2008) described a new SW Sardinian endemic species, *Cephalaria bigazzii* Bacch. & al., and raised to specific rank a variety of *C. squamiflora* endemic to the island of Ibiza, *C. ebusitana* (O. Bolòs & Vigo) Bacch. & al. Both these taxa are closely related to *C. squamiflora* (Sieber) Greuter. According to the taxonomic concept of this group by Greuter (1967) and Greuter & al. (1986), the observation of their morphological characters, and their well-distinct geographic distribution, I conclude that both taxa should be treated as subspecies of *C. squamiflora*. Therefore, the two new combinations are proposed here. G. Domina

Sixalix galianoi (Devesa & al.) Domina, **comb. nov.** ≡ *Scabiosa galianoi* Devesa, Ortega Oliv. & J. López in Taxon 53: 175. 2004 ≡ *Scabiosa gracilis* (Boiss.) Boiss., Fl. Orient. 3: 135. 1875 [non *Scabiosa gracilis* Roem. & Schult., Syst. Veg. 3: 64. 1818] ≡ *Scabiosa semipapposa* var. *gracilis* Boiss., Voy. Bot. Espagne 2: 297. 1840.

It is unanimously accepted that the tribe *Scabioseae* (*Dipsacaceae*) can be divided into several groups clearly identifiable on the account of differences in epicalyx structure.

Some authors are still torn between considering whether *Scabioseae* should all be included in a single,

large genus *Scabiosa,* divided into sections, or whether they should be split into several genera, as has been done in the most recent taxonomic and phylogenetic contributions (Avino & al. 2009; Carlson & al. 2009; Caputo & Del Guacchio 2011).

For the Euro+Med PlantBase project, in order to provide a nomenclature that follows the divisions based on clear morphological differences and recent molecular studies, according to the above cited contributions, I decided to accept eight genera within the tribe *Scabioseae*: *Lomelosia* Raf., *Pseudoscabiosa* Devesa, *Pterocephalidium* G. López, *Pterocephalus* Adans., *Scabiosa* L., *Sixalix* Raf., *Succisa* Haller and *Succisella* Beck.

Almost all new combinations needed for this assessment, in the territories covered by the Euro+Med PlantBase, were published by Greuter (1986) and Soják (1987). New taxa published afterward for these territories followed this treatment. A single new combination is here proposed for the recently described *Scabiosa galianoi* Devesa & al. G. Domina

Euphorbiaceae

Euphorbia serpens Kunth

N **Si(S):** Italy, Sicily: Province of Catania, Aci Castello, Aci Trezza, Piazza Giovanni Verga, 37°33'48"N, 15°09'42"E, 11 m, fissures among the paving stones and public flowerbeds of cultivated palms, 12 Jun 2015, *Ardenghi & Cauzzi* (FI). – Similarly to other European countries and Italian localities, the species, locally well established and common among the urban pavements, was probably introduced as a weed of plant nurseries (see e.g. Verloove 2013; Ardenghi & Mossini 2015). N. M. G. Ardenghi & P. Cauzzi

Labiatae

Teucrium flavum subsp. ***hellenicum*** Rech. f.

+ **AE(G):** Greece, East Aegean Islands: Nomos of Lesvos, Eparchia of Mitilini, island of Lesvos, WNW of Agiasos, at the locality called Kastelli, 39°05'11"N, 26°21'46"E, c. 450 m, open *Pinus brutia* forest, 9 Jun 2013, *Goula & al.* (ATHU). – Species and subspecies new for both Lesvos and the East Aegean Islands as a whole. *Teucrium flavum* L. was first located and photographed in this area by M. Axiotis. Shortly afterwards K. Goula, A. Kantsa and A. Stefanaki collected the plant from the same locality, which allowed us to verify that the plants of Lesvos belong to *T. flavum* subsp. *hellenicum*.

I. Bazos & M. Axiotis

Teucrium lamiifolium d'Urv. subsp. ***lamiifolium***

+ **AE(G):** Greece, East Aegean Islands: Nomos of Lesvos, Eparchia of Mithimni, island of Lesvos, approximately 1 km WNW of Filia, at the locality called Koupetra, 39°16'00"N, 26°07'14"E, c. 290 m, olive grove, 1 Jul 2014, *Salatellis* (ATHU). – This is the first record of the species for Lesvos, the East Aegean Islands and Greece as a whole. This typical subspecies is otherwise known from Bulgaria and Turkey (European and Asiatic parts). According to D. Salatellis, who first observed, photographed and collected the plant, there were very few individuals growing in an olive grove not far from the village of Filia, in W Lesvos. A more detailed floristic investigation of the area would give us more information on the size of this population and the possible existence of any additional ones.

I. Bazos & D. Salatellis

Thymus oenipontanus Heinr. Braun ex Borbás

– **Ct:** *Thymus oenipontanus* is distributed in the Alps (France, Switzerland, Italy and Austria) and the Apennines (Italy) (Machule 1957; Jalas 1970; Bartolucci 2010; Tison & Foucault 2014). The record for former Czechoslovakia (Euro+Med 2006+) is erroneous and refers to misidentified material of *T. odoratissimus* Mill. (Čáp & Šípošová 1993: 366, as *T. glabrescens* Willd.). Recently the taxon was reported as new for Croatia (Starmühler 2011; Rottensteiner 2014), based on specimens kept in GZU (duplicates in MBM, ZA and WHB). The revision of herbarium material housed in GZU shows that the specimens stored under *T. oenipontanus* were misidentified and actually represent *T. longicaulis* C. Presl. Hence, *T. oenipontanus* is to be excluded from the flora of Croatia.

There is considerable confusion in taxonomic literature as to the correct date and place of validation of the name *Thymus oenipontanus*. It was first mentioned, attributed to Heinrich Braun but without diagnostic elements, by Borbás (1889: 215), who effected nomenclatural validation by means of a Latin description one year later (Borbás 1890: 84). Braun (1891: 296), in current databases inaccurately cited as the bibliographical source of the name (Kerguélen 1999+; Euro+Med 2006+), offered merely a determination key without nomenclatural relevance.

F. Bartolucci & A. Scharfetter

Leguminosae

Cytisus borysthenicus Gruner

+ **Cm:** Crimea: Razdol'nensky region, Razdol'noye town, steppe, 2 Jun 1970, *Koshelev* (CSAU). – Re-examining herbarium sheets in CSAU, we discovered an old specimen properly collected and correctly determined by a former student of

the Crimean agricultural institute in his home region, as we could see in our archives.

This is the fifth species of the genus *Cytisus* L. in the Crimean flora (Yena 2012). The species is distributed in sand steppes from the N coast of the Black Sea to Kuban (Tzvelev 1987). Although there are still c. 1000 ha of this kind of biotope in the vicinity of Razdol'noye, we have not yet collected the species there. It is probable that all Crimean populations of *C. borysthenicus* have by now disappeared, owing to total ploughing during the Soviet era.

A. Yena & G. Khlevnaya

Trigonella spicata Sm.

+ **Mk:** Macedonia: ad vicum Tatarli, May 1917, *Nikolov* (SOA 30502). – The collection corroborates a literature record by Cirimotic (1958) regarding the mountain of Dab (district of Gevgelija), which was not substantiated by herbarium material. D. S. Dimitrov & V. M. Vutov

Linaceae

Linum virgultorum Planch.

+ **Cr:** Greece, Kriti (Crete): Nomos of Iraklio, Eparchia of Monofatsi, slope Kopanistis 1.4 km NE above Koudouma monastery, near second hairpin of the dirt road leading down to the monastery, 34°56'53"N, 25°05'45"E, 590 m, phrygana on S-exposed slope, hard limestone, terra rossa, dominated by *Calicotome villosa* (Poir.) Link, *Phlomis lanata* Willd., *Rhamnus lycioides* subsp. *oleoides* (L.) Jahand. & Maire, *Salvia fruticosa* Mill. and *Thymbra capitata* (L.) Cav., growing in the shelter of shrubs, 12 Apr 2014, *Jahn* (herb. Jahn + photos). – In this population the petals are whitish when alive, darkening to bluish violet when dry. Plants like these, besides plants with blue flowers as described by Davis (1967: 445), also exist on Rodos (see Meyer & Hassler 2013). A first European record of this mainly Anatolian species from continental Greece, Sterea Ellas, based on a specimen collected by Pinatzi on Mt Corydalus, Attiki, 5 km W of Athens (Turrill 1932: 450), was regarded as doubtful by Dimopoulos & al. (2013: 113).

R. Jahn

Moraceae

Ficus elastica Roxb.

A **Si(S):** Italy, Sicily: Province of Palermo, Termini Imerese, Via Fossola, 37°59'14"N, 13°41'32"E, 74 m, fissure at the base of the sidewalk, a single individual, 11 Jun 2015, *Ardenghi & Cauzzi* (FI). – The plant, not observed in cultivation in the surroundings, was probably sown by birds; a second spontaneous juvenile individual, about 50 cm tall, was noticed on the bastion at the intersection of Via Fossola with Via Palermo. In the Euro+Med area until now only given as a casual adventive in the neighbouring Maltese islands (Euro+Med 2006+).

N. M. G. Ardenghi & P. Cauzzi

Orobanchaceae

Orobanche grenieri F. W. Schultz – Fig. 2.

+ **Ab(A):** Azerbaijan: Talysh, NE side (near the border to Iran), near Şonaçola (S of Lerik), 38°41'01.3"N, 48°22'45.5"E (WGS 84), c. 1410 m, *Artemisia*-steppe on little hills, S of the small stream Konjavuçay, in open and sunny place, in loose siliceous grit, parasitic on perennial *Lactuca* species (root attachment verified), 27 May 2013, *Rätzel, Ristow & al.* (herb. Rätzel). – *Orobanche grenieri* has for a long time been interpreted as a synonym of *O. cernua* Loefl., until Carlón & al. (2005: 29) showed its discreteness. For this taxon, so far known only with certainty from France and Spain, Piwowarczyk & al. (2015: 411) gave first locations for Asia (Georgia and Tajikistan). They mentioned further doubtful records from N Italy and the Black Sea region, which have been confirmed by Carlón & al. (2005+) and which we can confirm here as well, according to the following images and specimen: Italy, Liguria, Prov. Savona, Toirano, 44°7'31.8"N, 08°12'28.5"E, Apr 2008, *Renzo Salvo* (photo, as "*O. minor* Sm.", at http://www.actaplantarum.org/floraitaliae/viewtopic.php?t=8525); Turkey, Yozgat Prov., 10 km E of Yerköy, 39°38'17"N, 34°28'02"E, direction to Karacaahmetli, on *Lactuca viminea*, 19 May 2004, *Coulot PC-8* (herb. Coulot); Crimea, Feodosia, Karadagskiy Prirodny Zapovednik, 44°56'10"N, 35°14'00"E, dry coastal slope, on *Lactuca viminea*, 10 May 2013, *Fateryga* (photo, as "*O. cernua* Loefl.", at http://www.plantarium.ru/page/image/id/185943.html); ibid., Yalta, Gruzport, 44°30'05"N, 34°12'07"E, scree, on *Lactuca viminea*, 27 May 2014, *Fateryga* (photo, as "*O. cumana* Wallr.", at http://www.plantarium.ru/page/image/id/240324.html). The two localities for N Turkey mentioned in Carlón & al. (2005+; see also map in Piwowarczyk & al. 2015: 412, fig. 1) are in fact identical; they both rely on the same specimen collected by P. Coulot.

The finding from Azerbaijan adds to the Transcaucasian part of the distribution. The circumstances at this location confirm the classification of this taxon as a species: the plants of this population were growing exclusively on *Lactu-*

Fig. 2. *Orobanche grenieri* – Azerbaijan, Talysh, NE side, near Şonaçola, 27 May 2013, photograph by S. Rätzel.

ca, but never on any of the surrounding abundant *Artemisia* plants (the main host of *Orobanche cernua* s.str.). *Orobanche cernua*, additionally differing in colour, was missing. It was found in different other locations in Azerbaijan, always growing on *Artemisia*.

S. Rätzel, M. Ristow & H. Uhlich

Portulacaceae

Portulaca cypria Danin

A **By:** Belarus: Brest province: Brest, memorial complex "Brest Fortress", 52°05'06.8"N, 23°39'51.3"E, weed on flowerbeds near main entrance to fortress, rare, 17 Aug 2000, *Dzhus 1160* (MSKU). – This species was recently described from Cyprus (Danin & al. 2008) and was probably originally confined to the Mediterranean (E of Algeria and Corsica). Our records from Belarus, as well as those from Belgium (Danin & Verloove 2015) and Switzerland (see Euro + Med 2006+), are undoubtedly alien.

M. Dzhus, A. Danin & V. Tikhomirov

Portulaca granulatostellulata (Poelln.) Ricceri & Arrigoni

N **By:** Belarus: Brest province: Brest district, Brest (Kavaliova), vicinity of railway station Brest-Yužny, 52°03'51.4"N, 23°45'01.3"E, between railroad tracks, sparse, 30 Aug 2003, *Dzhus 1967* (MSKU); Drahičyn district, SSE part of Braševičy, 54°12'28.8"N, 25°01'16.1"E, weed near estate of Braševičy forestry, rare, 10 Aug 2011, *Dzhus 1142/3* (MSKU); Kobryn district, E part of Pavicce, 51°59'29.1"N, 24°48'45.5"E, weed on garbage dump to left of Pavicce-Radastova highway, sparse, 11 Aug 2011, *Dzhus 1286* (MSKU); Pinsk district, 2.5 km NNE of Selišča, near Selišča-Parachonsk road, 52°12'53.5"N, 26°25'54.6"E, garbage dump near settling ponds, sparse, 4 Aug 2011, *Dzhus 976* (MSKU); ibid., 2.5 km SE of Vulka, Pinsk garbage dump (solid waste landfill), 52°11'23.6"N, 26°15'50.4"E, on middens, sparse, 27 Aug 2010, *Dzhus 1451* (MSKU). Homiel province: Brahin district, NE part of Kamaryn, road to pier, 51°26'35.5"N, 30°34'40.1"E, on sand, sparse, 2 Sep 2009, *Dzhus 1315* (MSKU); Homiel, Lunacharsky recreation park, c. 200 m below bridge across river near Bauman St., 52°25'22.4"N, 31°01'07.7"E, stony shallows at embankment, sparse, 11 Sep 2002, *Dzhus 1245* (MSKU); Rahačoŭ district, SW part of Ilyič village, 53°15'27.8"N, 30°25'04.2"E, side of dirt road to filtration fields, sparse, 10 Sep 2010, *Dzhus 1648* (MSKU); Svetlahorsk district, Svetlahorsk (at city line), between Avijacyonnaja St. and Enjargecikaŭ St., 52°37'37.5"N, 29°42'17.9"E, old garbage dump, exposures of crude soil, solitary, 9 Aug 1997, *Dzhus 1520* (MSKU); ibid., 2.2 km N of Čyrkaviči, right bank of river Biarezina, territory of sanatorium "Serebryanye klyuchi", 52°40'51.6"N, 29°39'2.93"E, weed near inhabited buildings, sparse, 10 Aug 2013, *Dzhus 1231/1* (MSKU); ibid., near Svetlahorsk, 6 km SE of railway station Svetlahorsk-on-Biarezina, at highway R-82 (Svetlahorsk-Rečyca), 52°35'25.7"N, 29°47'16.6"E, city garbage dump, storage ground of municipal solid waste, rare, 2 Sep 1997, *Dzhus 2730* (MSKU); Žytkaviči district, 2.3 km N of Mlynok, near highway R-88, 52°09'22.3"N, 27°53'26.4"E, Žytkaviči solid waste landfill (dump), sparse, 7 Sep 2008, *Dzhus 1219* (MSKU). Minsk province: Maladzečna district, railway station Palačany, 54°13'45.2"N, 26°42'45.9"E, along railroad tracks, sparse, 21 Jul 2010, *Dzhus 754* (MSKU);

Minsk, Makajonka str., 8, Republican Ecological Centre of schoolchildren, 53°55'26.06"N, 27°37'35.81"E, weed near greenhouse, sparse, 17 Sep 2011, *Dzhus 1819* (MSKU); ibid., near Kurčatava str. 10, 53°50'13.7"N, 27°27'58.91"E, weed near compost heaps in botanical garden of biological faculty of Belarusian State University, rare, 9 Sep 2013, *Dzhus 1216* (MSKU); Minsk (Šabany), 1 km SW of railway station Šabany, filtration fields (settling ponds) near Inženiernaya St., 53°49'42.6"N, 27°40'53.9"E, ruderal plant communities between ponds, rare, 17 Sep 1999, *Dzhus 1976a* (MSKU); Minsk (Kurasoŭščyna), along railroad tracks at crossing with river Lošyca, 53°51'17.7"N, 27°30'16.1"E, among stones, sparse, 17 Sep 2005, *Dzhus 1508* (MSKU); Minsk district, vicinity of railway station Pamyslišča, c. 100 m toward Brest, on right, 53°48'49.4"N, 27°27'04.6"E, on crushed stone at railway tracks, sparse, 24 Aug 2003, *Dzhus 1915* (MSKU); Miadziel district, resort settlement Narač, Leninskaja str. 23, 54°54'46.17"N, 26°42'20.51"E, weed near flowerbeds at school no. 2, sparse, Sep 2013, *Dzhus 2041* (MSKU); Stoŭbcy district, Stoŭbcy, at crossing of Gagaryn St. and Leninskaya St., 53°28'35.7"N, 26°43'49.8"E, weed between tiles at city square, sparse, 21 Aug 2013, *Dzhus 1502* (MSKU). Viciebsk province: Lepeĺ district, Biarezinski biosphere reserve, Domžarycy, near House of Education, 54°45'01.1"N, 28°18'44"E, weed near flowerbeds, sparse, 21 Sep 2010, *Dzhus 1956* (MSKU); ibid., Domžarycy, near school, 54°44'49.14"N, 28°18'51.12"E, spreading from flowerbeds, sparse, 22 Jun 2011, *Dzhus 477* (MSKU); ibid., 2.4 km NW of Kvetča, 54°42'54.2"N, 28°17'35.2"E, weed on garbage dump, sparse, 21 Sep 2010, *Dzhus 1965* (MSKU); Viciebsk, near crossing of Urycki St. and 2nd Sadovaja, territory of botanical garden, 55°12'03.71"N, 30°12'48.92"E, weed, sparse, 15 Sep 2013, *Dzhus 1294* (MSKU); Viciebsk region, nearest vicinity of Viciebsk, c. 3 km S of Tulava, 55°10'22.5"N, 30°19'34.8"E, city garbage dump, rare, 19 Jul 1999, *Dzhus 1260* (MSKU). – This most common species in the *Portulaca oleracea* L. aggregate worldwide (Danin & al. 1978; Danin 2011) is by far the most frequently collected species in Belarus.

M. Dzhus, A. Danin & V. Tikhomirov

Portulaca nitida (Danin & H. G. Baker) Ricceri & Arrigoni

N **By:** Belarus: Brest province: Kobryn district, Divin, 51°57'23.52"N, 24°34'36.80"E, weed at flowerbed near shop, sparse, 1 Aug 2011, *Dzhus 1242* (MSKU); Pinsk district, S part of Pinsk, between rivers Pina and Pripyat, near Stolinskaja St. (Highway P-6), 52°06'27.7"N, 26°06'35.3"E, soil exposures near highway, 27 Aug 2008, *Dzhus 928* (MSKU); Stolin district, SE part of Belauša village, left bank of river Haryn (near ferry), 51°56'30.5"N, 26°55'14.5"E, crude alluvial sand, sparse, 27 Aug 2010, *Dzhus 1529* (MSKU). Homiel province: Akciabrski district, Akciabrski, near district government at hotel, 52°38'48.9"N, 28°52'59.7"E, weed on flowerbeds and lawns, frequent, 31 July 2006, *Dzhus 1148* (MSKU); Žytkaviči district, NW part of Aziarany, near Turaŭ-Lelčycy (R-128) highway at bridge through river Stviga, 52°02'26.4"N, 27°50'36.3"E, roadside, sparse, 5 Aug 2011, *Dzhus 992/1* (MSKU). Minsk province: Minsk, Niamiha str. 28, 53°54'08.3"N, 27°32'59.5"E, weed in cracks of asphalt, frequent, 5 Oct 2006, *Dzhus 1808/2* (MSKU); Miadziel district, 0.7 km N of Narač and 1.3 km SE of Čechi, 54°57'24.7"N, 26°41'41"E, on village dump, 24 Jul 2011, *Tikhomirov 03299* (MSKU). Viciebsk province: Lepel district, Biarezinski biosphere reserve, Domžarycy, near school, 54°45'02.8"N, 28°18'56.4"E, weed at flowerbeds, sparse, 25 Sep 2008, *Dzhus 1302* (MSKU). – The second most common species of the *Portulaca oleracea* L. aggregate in Belarus. In the S part of Belarus, *P. nitida* has been found in disturbed habitats. In N regions of the country it has been recorded only as a weed in flowerbeds and garbage dumps.

M. Dzhus, A. Danin & V. Tikhomirov

Portulaca oleracea L. s.str.

P **By:** Belarus: Homiel province: Rahačoŭ district, 0.7 km NNW of Ilyič village, 53°16'16.6"N, 30°24'39.6"E, garbage dump, sparse, 11 Sep 2009, *Dzhus 1462* (MSKU). – Although *Portulaca oleracea* L. s.l. has long been known in Belarus, we discovered only one locality of this species in the narrow sense.

M. Dzhus, A. Danin & V. Tikhomirov

Portulaca rausii Danin

A **By:** Belarus: Minsk province: Minsk, near Kurčatava str. 10, 53°50'12.9"N, 27°28'03.4"E, weed in botanical garden of biological faculty of Belarusian State University, rare, 1 Aug 2011, *Dzhus 859* (MSKU). – Recently described from Sicily (Danin & al. 2008) and probably originally confined to the Mediterranean (Algeria, Greece and Turkey). In Belarus this species is found only as a weed in a botanical garden, where, apparently, it was imported with seeds of cultivated plants.

P **Uk:** Ukraine: Odessa province: Ovidiopol district, NE part of Karolino-Bugaz village, near platform of railway station Studencheskaja, 46°09'53.11"N,

30°33'24.87"E, weed at railway crossing, common, 28 Aug 2012, *Dzhus 520* (MSKU).
M. Dzhus, A. Danin & V. Tikhomirov

Portulaca sativa Haw.
A **By:** Belarus: Minsk province: Minsk, near Kurčatava str. 10, 53°50'11.0"N, 27°28'03.3"E, weed near botanical garden of biological faculty of Belarusian State University, rare, 17 Sep 2010, *Dzhus 1845* (MSKU). – In Belarus this species is found only as a weed in a botanical garden, where, apparently, it was imported with seeds of cultivated plants. M. Dzhus, A. Danin & V. Tikhomirov

Portulaca trituberculata Danin & al.
A **By:** Belarus: Brest province: Brest, crossing of Zubačoŭ St. and Maskoŭskaya St., along square near bridge through Muchaviec river, 52°05'05.5"N, 23°40'05.6"E, flower beds, rare, 4 Jul 1997, *Dzhus 2050* (MSKU); Brest district, N district of Brest (Ploska), terminal stop of bus line 13 at N side of cemetery, 52°07'49.1"N, 23°43'52.4"E, roadside, sparse, 31 Aug 2003, *Dzhus 2114* (MSKU). Homiel province: Lelčycy district, Dziaržynsk, near Soviet village, 51°40'25.5"N, 27°32'43"E, weed between sidewalk tiles, sparse, 28 Aug 2010, *Dzhus 1567* (MSKU). Minsk province: Dziaržynsk district, 0.2 km from railway station Kojdanava towards Minsk, at loading platform, 53°41'0.1"N, 27°09'53.7"E, among railway tracks, sparse, 9 Aug 2011, *Dzhus 1100* (MSKU). – The second most common species of the *Portulaca oleracea* L. aggregate in Europe (Danin 2011). Only four localities of this species have been found in Belarus. Probably it is an ephemeral casual plant.
M. Dzhus, A. Danin & V. Tikhomirov

Valerianaceae

Valeriana asarifolia Dufr. – Fig. 3.
+ **AE(G):** Greece, East Aegean Islands: Nomos of Dodekanisos, Eparchia of Rodos, Regional Unit of Rodos, island of Chalki, Klisoures NW of Chorio on N side of island, 36°13'56.3"N, 27°32'36.4"E, 406 m, vertical and shady limestone cliff with N-facing exposure, 24 Apr 2015, *Cattaneo* (herb. Cattaneo-CK13). – First record for Chalki and the East Aegean Islands. After the earlier botanical investigations of Major & Barbey (1894), Rechinger (1944) and Rechinger & Rechinger-Moser (1951), the most relevant floristic literature on Chalki includes Carlström (1987), Tzanoudakis & Kollmann (1991), Biel & Tan (2009) and Hirth & Spaeth (2010). According to those references, this species has never been reported there until now.

The geographical distribution of *Valeriana asarifolia* on Andikithira, Kriti and Karpathos (Tzanoudakis & al. 2006; Turland & al. 1993) shows a connection between the floristic regions Pe (Peloponnisos) and KK (Kriti and Karpathos) (Georghiou & Delipetrou 2010) and seems to follow the S Aegean island arc, connecting the Balkans to Anatolia. This pattern is complemented by the presence of this taxon on Chalki, bridging KK and EAe (East Aegean Islands).
C. Cattaneo

Violaceae

Viola kitaibeliana Schult.
– **Br, Ga(C):** Valentine & al. (1968) reported this species in *Flora europaea* also for Britain and for France (Ga, which includes the Channel Islands, British islands off the coast of Normandie, France); afterwards it has been reported in all the British Floras (e.g. Clapham & al. 1987; Stace 1999, 2010), for the Isles of Scilly (West Cornwall) and for the Channel Islands (see Randall 2004 for references). According to our current taxonomic studies (Magrini & Scoppola 2015), *Viola kitaibeliana* is to be excluded from the British flora and all the records for the Isles of Scilly and for the Channel Islands are to be referred to *V. nana* (DC.) Le Jol.
S. Magrini & A. Scoppola

Cyperaceae

Carex lasiocarpa Ehrh.
+ **Mk:** Macedonia: Dobro Pole, 14 Jun 1916, *Mrkvicka* (SOM 9720, 9722, 9723, 9724; det. Davidov). – This boreal element is new for the Macedonian flora (Jiménez-Mejías & Luceño 2011).
D. S. Dimitrov & V. M. Vutov

Gramineae

Bromopsis riparia (Rehmann) Holub
+ **Mk:** Macedonia: Jablanica mts., above village of Gorna Belica, 1230 m, meadows, 22 Jul 1948, *Kitanov* (SOM 171215; det. Dimitrov). – Valdes & Scholz (2009) did not indicate this species for the Republic of Macedonia. This Pontic element is known from Albania, Bulgaria, Greece, Moldova, Romania, Russian Federation, Serbia, Turkey (Asian part) and Ukraine.
D. S. Dimitrov & V. M. Vutov

Cenchrus purpurascens Thunb. [= *Pennisetum alopecuroides* (L.) Spreng.]
A **Bu:** Bulgaria: Sofia, Evlogi and Hristo Georgievi Blvd. before NDK [National Palace of Culture], 3 Sep

Fig. 3. *Valeriana asarifolia* – A: flowering plant in habitat; B: basal part of plant showing basal leaves and flowering stems; C: inflorescence. – Greece, Nomos of Dodekanisos, Eparchia of Rodos, Regional Unit of Rodos, Chalki, Klisoures NW of Chorio on N side of island, 24 Apr 2015, photographs by C. Cattaneo.

2014, *Dimitrov* (SOM 170994). – This ornamental grass is a perennial species native to Asia and Australia. Culms are erect, 60–100 cm long; leaf blades are erect or drooping, flat, conduplicate, or involute, 10–45 cm long, 3–6 mm wide, slightly scabrous; inflorescence axis is pilose; spikelets are borne in bristly yellowish to purplish cylinders 8–20 cm long, each spikelet c. 6 mm long.

According to Verloove (2012), this species is introduced in Armenia, Azerbaijan and Georgia. For the Czech Republic this species is reported as a casual neophyte (Danihelka & al. 2012).

D. S. Dimitrov & V. M. Vutov

Festuca nigrescens Lam.

+ **Mk:** Macedonia: Jablanica mts., N of village of Labuništa, 1000 m, limestone rocks, 14 Aug 1948, *Kitanov* (SOM 171459); Šar Planina, above Popova Šapka, 2000 m, calcareous rock, 22 Aug 1948, *Kitanov* (SOM 171421).

D. S. Dimitrov & V. M. Vutov

Helictochloa planiculmis (Schrad.) Romero Zarco

+ **Mk:** Macedonia: Dešat mts., E of Veš Vrah, alpine meadows, 7 Aug 1948, *Kitanov* (SOM 171216; det. Dimitrov). – Valdes & Scholz (2009) did not indicate this species for the Republic of Macedonia. This Carpato-Balkan-Anatolian element is known from Bulgaria, Czech Republic, Poland, Romania, Serbia, Slovakia, Turkey (Asian part), and Ukraine.

D. S. Dimitrov & V. M. Vutov

Koeleria macrantha (Ledeb.) Schult.

+ **Mk:** Macedonia: Dobro Pole, 2 May 1916, *Mrkvicka* (SOM 4864, 4864, 4865, 4866, 4868; rev. Ujheli 5 Jun 1969). D. S. Dimitrov & V. M. Vutov

Koeleria obscura Kožuharov & al.

+ **Mk:** Macedonia: Dešat mts., between Karchin and Deš Senici, 2050 m, alpine meadows, 8 Aug 1948, *Kitanov* (SOM 171483); ibid., peak Karchin, 2200 m, mountain meadows, 8 Aug 1947, *Kitanov* (SOM 171474).

D. S. Dimitrov & V. M. Vutov

Koeleria schurii Ujhelyi

+ **Mk:** Macedonia: Dešat mts., E of Veš Vrah, meadow communities, 7 Aug 1948, *Kitanov* (SOM 171472). D. S. Dimitrov & V. M. Vutov

Lolium rigidum Gaudin

+ **Mk:** Macedonia: Jablanica mts., Kestrets above village of Radolišta, 900 m, grassy places, 3 May 1948, *Kitanov* (SOM 171470).

D. S. Dimitrov & V. M. Vutov

Paspalum vaginatum Sw.

N **Si(S):** Italy, Sicily: Province of Catania, Aci Castello, Aci Trezza, Lungomare Galatea, beach, 37°33'55"N, 15°09'47"E, 9 m, cliffs, 12 Jun 2015, *Ardenghi & Cauzzi* (FI). – The plant was indicated for Sicily by Clayton (1980), probably on the basis of Fiori (1921), who recorded it from "Plaia presso Catania" under "*Paspalum distichum* L. *typicum*" [until Guédès (1976), this name was referred to *P. vaginatum*; see also Brummitt (1983: 281) and Banfi & Galasso (in press)] in opposition to *P. distichum* subsp. *paspalodes* (Michx.) Thell. (= *P. distichum* L.). However, Pignatti (1982) excluded the species from Sicily and the Italian flora, referring a 19th century record from the coast of Catania ["Playa"; this is probably the same record by Fiori (1921)] to *P. distichum*, although the mentioned morphological characters are compatible with *P. vaginatum* (see also Filigheddu & Farris 2001). Yet, its presence in Sicily remained unconfirmed in subsequent times (see Celesti-Grapow & al. 2010) until the present record.

N. M. G. Ardenghi & P. Cauzzi

Phleum montanum K. Koch

+ **Mk:** Macedonia: Dešat mts., near village of Rastuša, 700 m, grassy places, 6 Aug 1948, *Kitanov* (SOM 171460). D. S. Dimitrov & V. M. Vutov

Poa laxa subsp. ***zollikoferi*** (Acht.) Kožuharov

+ **Mk:** Macedonia: Šar Planina, above hut Popova Šapka, 2000 m, calcareous rocks, 22 Aug 1948, *Kitanov* (SOM 171467). D. S. Dimitrov & V. M. Vutov

Poa media Schur

+ **Mk:** Macedonia: Šar Planina, above hut Popova Šapka, 2000 m, calcareous rocks, 22 Aug 1948, *Kitanov* (SOM 171468).

D. S. Dimitrov & V. M. Vutov

Poa stiriaca Dörfl.

+ **Gr:** Greece: Ipiros, N Pindos, Nomos of Ioannina, Eparchia of Metsovo, above town of Metsovo, on serpentine rocks near road to Kalambaka, 4 Aug 2013, *Dimitrov* (SOM 169940). – According to Edmondson (1977), this species is known from E and C Europe, as far as Montenegro. This European geoelement grows in rocky places and forest outskirts.

D. S. Dimitrov & V. M. Vutov

Stipa pulcherrima subsp. ***epilosa*** (Martinovský) Tzvelev

+ **Mk:** Macedonia: Dešat mts., E of Veš Vrah, alpine meadows, 7 Aug 1948, *Kitanov* (SOM 171424).

D. S. Dimitrov & V. M. Vutov

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