

NEW AND INTERESTING TURKISH RECORDS OF ALLIUM

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ABSTRACT. The following *Allium* (Liliaceae) taxa are recorded as new to the flora of Turkey: *A. calypttratum* Boiss., *A. longicuspis* Regel, *A. commutatum* Guss., *A. capitellatum* Boiss., *A. oreophilum* C.A. Mey. and *A. hirtifolium* Boiss. Four other species—*A. scorodoprasum* L. subsp. *jajlae* (Vved.) Stearn, *A. fuscoviolaceum* Fomin, *A. glumaceum* Boiss. & Hausskn. and *A. cardiostemon* Fisch. & C.A. Mey.—are discussed.

The following new records of, and notes on, Turkish species of *Allium* are based on a study of the genus over a period of years in Ankara (Koyuncu, 1978), and subsequently in Jerusalem with Dr Fania Kollmann (who is preparing the account of the genus for the *Flora of Turkey*), and more recently during a six-month study period in the Kew and Edinburgh herbaria. In the account below, all specimens cited have been examined, unless otherwise stated. The localities of the new records are shown on fig. 1.

***A. calypttratum* Boiss.** [Sect. *Allium*], Diagn. ser. 1, 13:30 (1854). Fig. 1. Ic.: Israel Journ. Bot. 26:134, f. 2 (1977).

Type: [Turkey/Syria] in Cassii cacumen, vi 1846, Boissier (holo. G).

TURKEY. B6 Maraş: Göksun, Berit Da., W side, Kinikköz village, 1500 m, Yildiz 1168e. C5 Konya: Ereğli, Aydos Da., Aktoprak village, 1500-1700 m, Erik 2426.

Syria, Israel (Mt Hermon), central S Anatolia.

A new record for Turkey. The species is close to *A. rotundum* L., but can be distinguished by its white tepals, red spathe and glabrous filaments.

***A. longicuspis* Regel** [Sect. *Allium*] in Acta Horti Petrop. 3, 2:45 (1875). Fig. 1.

Ic.: Rech. fil., Fl. Iran. 76: t. 5, f. 72 (1971).

Type: [USSR, Uzbekistan] prope Taka in Kokania, O. Fedtschenko 4 (LE—n.v.).

TURKEY. C10 Hakkari: Zab gorge, 30 miles S of Başkale, Davis & O. Polunin, D. 23857.

Soviet C Asia, Iran, E Anatolia.

A new record for Turkey. *A. longicuspis*, probably a wild race of *A. sativum* L. (garlic), is characterised by longer filaments and its conspicuously exerted style. However, as in many other species with bulbiferous umbels, it sometimes produces flowers which do not open and have included styles.

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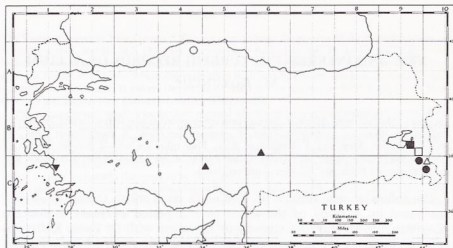


FIG. 1. ▲ *Allium calyptratum* Boiss., ▲• *A. longicuspis* Regel, ▼ *A. commutatum* Guss., ● *A. capitellatum* Boiss., ○ *A. scorodoprasum* L. subsp. *jajlae* (Vved.) Stearn, ■ *A. hirtifolium* Boiss., □ *A. oreophilum* C. A. Mey.

***A. commutatum* Guss.** [Sect. *Allium*], Enum. pl. Inar. 339 (1854). Fig. 1. Syn.: *A. rotundum* L. subsp. *commutatum* (Guss.) Nyman, Consp. Fl. Europ. 735 (1882).

A. ampeloprasum L. var. *lussinense* Haračić in Verh. Zool. Bot. Ges. Wien 43: Sitzungsber. 46 (1893).

A. bimetrale Gand., Fl. Cret. 99 (1916).

A. ampeloprasum L. var. *commutatum* (Guss.) Fiori, Nuova Fl. Anal. Italia 226 (1923).

A. ampeloprasum L. subsp. *bimetrale* (Gand.) Hayek, Prodr. Fl. Penins. Balkan. 3:49 (1932).

Ic.: Bothmer in Opera Bot. (Lund) 34:24, f. 9, 10 (1974); Zahariadi in Ann. Mus. Goulandris 3:84, f. 4–13 (1977).

Type: [Italy] Ischia, isole di S Anna, *Gussone* (lecto. NAP)—see Bothmer in Opera Bot. 34:24 (1974).

TURKEY. C1 Aydin: Dilek peninsula, *Uslu* (AEF 2210)—det. F. Kollmann. GREECE. Rhodos, SW of Kamiros scala, 15 m, *Bothmer* 22289.

C & E Mediterranean region, SW Turkey.

A new record for Turkey. This species is very close to *A. ampeloprasum* L. (cf. Bothmer, 1974), but has a long beak on the spathe and larger bulbils; further, the tepals in *A. commutatum* have a uniform covering of small papillae and the outer filaments are often tricuspidate, rarely simple.

***A. scorodoprasum* L. subsp. *jajlae* (Vved.) Stearn** [Sect. *Allium*] in Ann. Mus. Goulandris 4:179 (1978). Fig. 1.

Syn.: *A. jajlae* Vved. in Bull. Univ. Asie Centr. 19:126 (1934), and in Fl. URSS 4:247 (1935). Grossheim, Fl. Kavkaza 2:118 (1940).

Type: [USSR] Crimea, Nikitskaya Yaila, 29 vi 1924, *Wulff* (holo. LE—n.v.).

TURKEY. A4 Kastamonu: above Küre, 800 m, *Çoskun & Çelik* (AEF 2191)—det. F. Kollmann.

Crimea, Caucasus, N Anatolia.

Apparently the first documented record for Turkey although Grossheim (op. cit., map 139) records two 'dots' near Artvin in A8 Çoruh. *A. scorodoprasum* L., *A. rotundum* L., *A. waldsteinii* G. Don and *A. jajlae* Vved. are four closely allied species which have all been accorded subspecific rank by Stearn (1978). The type subspecies differs from the others in the bulbiferous umbels, and subsp. *jajlae* differs from subsp. *rotundum* (L.) Stearn and subsp. *waldsteinii* (G. Don) Stearn in its pinkish flowers.

A. fuscoviolaceum Fomin [Sect. *Allium*] in Monit. Jard. Bot. Tiflis 14:50 (1909). Grossheim, Fl. Kavkaza 2:122–123 (1940).

Type: (Turkey A9 Kars) Saryhamysh [Sarıkamış], Coll. ignot. (TBI—n.v.).

TURKEY. B6 Sivas: between Bünyan and Pınarbaşı, 1400 m, *Koyuncu* (AEF 5094)—det. F. Kollmann. B9 Bitlis: Nermut Da., between Büyükgöl and Küçüköl, 2450 m, *Tatlı* 632. C6 Maraş: Ahir Da., above Maraş, 1000 m, *Koyuncu* (AEF 6211).

Caucasus, E Anatolia.

This species is close to *A. sphaerocephalon* L. and *A. phanerantherum* Boiss. & Hausskn., but can be distinguished from the former by its smooth tepals and from the latter by the papillose pedicels and the presence of bracteoles. It is a widespread species in E Anatolia and Caucasia but surprisingly has not been recorded from Iraq or Iran. *A. phanerantherum* grows in S Anatolia, Syria, Iraq and W Iran.

A. capitellatum Boiss [Sect. *Scorodon* C. Koch], Diagn. ser. 1, 7:118 (1846). Fig. 1.

Ic.: Rech. fil., Fl. Iran. 76: t. 3, f. 27 (1971).

Type: [Iran] ad nives regionis alpinae, mons Elamout Persiae borealis *Aucher-Eloy* 5386 (holo. G; iso. K).

TURKEY. C9 Hakkari: Berçelan yayla, in meadows, 3000 m, *Koyuncu* (AEF 2111)—det. F. Kollmann; Kara Da., rocky slopes, 3800 m, *Davis & O. Polunin*, D. 24453. C10 Hakkari: Cilo Da., 10 km W of Cilo Tepe, dry rocky slopes, 3400 m, *Davis & O. Polunin*, D. 24114.

IRAN. Mazandaran: Kudjur, in monte Ulodj, 3200–3400 m, *Rechinger* fil. 6480. Bakhtiari: Tang-i Sirdan, between the Kurang and Bazuft valleys, 4110 m, *Archibald* 3034; Zardeh-Kuh, above the Kurang valley, 4140 m, *Archibald* 2987.

Iran, E Anatolia.

A new record for Turkey. This high alpine species (above 3000 m) is close to *A. anacoleum* Hand.-Mazz. which is also recorded from Turkey (Hazarbaba Da., near Elazığ, *Hand.-Mazz.* 2609).

A. glumaceum [Boiss. & Hausskn. ex] Boiss [Sect. *Codonoprasum* (Rchb.) Endl.] in Fl. Or. 5:260 (1882).

Type: [Turkey C6 Maraş] in monte Berytdagh Cataoniae, 2300 m, 8 viii 1865, *Haussknecht* (holo. G; photo. HUJ).

TURKEY. C6 Maraş: Kocagiz village, Yangin alani, 1800 m, *Yildiz* 1541. Endemic.

A. glumaceum was previously known only from the type locality and this is the first record of it since Boissier's time. It is a rather distinct species characterized by its cylindrical-campanulate perianth, light yellow, 6–7 mm long, lanceolate-elliptic tepals, and filiform, erect, scabrous leaves.

A. oreophilum C.A. Mey. [Sect. *Porphyroprason* Ekberg], Verz. Pfl. Cauc. 37 (1831). Fig. 1.

Syn.: *A. platystemon* Kar. & Kir. in Bull. Soc. Nat. Mosc. 15:514 (1842).

A. ostrowskianum Regel in Acta Horti Petrop. 7:545 (1881).

lc.: Rech. fil., Fl. Iran. 76: t. 6, f. 92 (1971).

Type: [USSR, Caucasus] In petrosis alpinis Tufandagh Caucas. orientalis, 1500 hexap., C. A. Meyer (LE—n.v.).

TURKEY. B9 Van: Başkale, Ispiriz Da., 3500 m, *Davis & O. Polunin*, D. 23758.

Afghanistan, Pakistan, Caucasus, E Anatolia.

A new record for Turkey. *A. oreophilum* is not closely related to any other. It is characterized by its short stem, two linear leaves, broadly campanulate perianth, connate, adnate and triangular filaments, and 3-lobed stigma.

A. cardiostemon Fisch. & C.A. Mey. [Sect. *Melanocrommyum* Webb & Berth.] in Ind. Sem. Hort. Petrop. 6:43 (1840).

Syn.: *A. trilophostemon* Bornm. in Feddes Rep. 10:238 (1911).

lc.: Rech. fil., Fl. Iran. 76: t. 8, f. 112 (1971).

Type: [USSR, Azerbaijan] Armeniae ruthenicae provincia Nakitschiwan, in valle Koschadara, *Szovits* (iso. K).

TURKEY. A9 Kars: Ziyaret Da., above Yalnizçam, 2250 m, *Davis & Hedge*, D. 30304; 5 km from Karakurt on road to Başköy, 1650–1700 m, *W. Marais* 1580. B6 Sivas: Gürün to Pinarbaşı, 48 km W of Gürün, 2300 m, *Stainton & Henderson* 5688A. B7 Sivas: Divriği, Dumlucu Da., *T. Baytop* 12967. B8 Erzincan: between Tercan and Aşkale, rocky igneous slopes, 1850 m, *Davis & Hedge*, D. 29313. B9 Ağrı: between Patnos and Erçiş, dry slopes, 1650 m, *Koyuncu* (AEF 6570). B10 Van: Güzeldere pass, 34 km from Başkale to Hoşap, 2800 m, *Davis*, D. 45949. C6 Adana: between Osmaniye and Fevzipaşa, Nurdagi, dry slopes, 1000 m, *Koyuncu* (AEF 2152). C10 Hakkari: Nehil çayı, 62 km from Hakkari to Yüksekova, 1750 m, *Davis*, D. 49923; Yüksekova-Şemdinli road, 98 km from Yüksekova, steep east slope, *J. Trelawny* 1006.

Transcaucasus, NW Iran, E & S Anatolia.

This species is characterized by the dense, many-flowered umbel, inner filaments 2-toothed (above the middle), and dark red anthers and tepals. It is rather widespread in eastern Anatolia, but was previously known only from one collection in the Anti-Taurus by *G. Dieck* (ann. 1906). This was described, as *A. trilophostemon*, by Bornmüller in 1911 as having scabrous leaves, narrowly linear tepals, and abruptly narrower outer and broader inner filaments. I have not seen Dieck's specimen, but have collected the plant from the same area (*Koyuncu* AEF 2152). The name

A. trilophostemon refers to its 2-toothed inner filaments. All these characters are typical of *A. cardiostemon*, with which it is evidently conspecific.

A. hirtifolium Boiss. [Sect. *Melanocrommyum* Webb & Berth.], Fl. Or. 5:281 (1882). Fig. 1.

Syn.: *A. atropurpureum* Waldst. & Kit. var. *hirtellum* Regel in Acta Horti Petrop. 3, 2:248 (1875).

Ic.: Rech. fil., Fl. Iran. 76: t. 9, f. 120 (1971).

Type: [Iran] in Persia prope Ispahan, *Aucher-Eloy* 5389 (holo. G; iso. K).

TURKEY. B9 Van: Van kalesi, in meadows, 1580 m, *Koyuncu* (AEF 6572).

IRAN. Azerbaijan: 32 km NW Sanandaj towards Marivan, 2220 m, *Archibald* 2077. Bakhtiari: Damavar, 3600 m, *W. Koelz* 15180.

Iran, E Anatolia.

A new record for Turkey. *A. hirtifolium* Boiss., *A. stipitatum* Boiss., *A. altitissimum* Regel and *A. jesdianum* Boiss. & Buhse are all related species. *A. hirtifolium* and *A. stipitatum* can be easily distinguished from the others by their pubescent leaves.

A. hirtifolium is distinguished from the Afghan *A. stipitatum* by its slightly ridged stem (not obviously ribbed) and tepal margins parallel for two thirds their length, then becoming attenuate towards the apex.

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