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**A new remarkably *Silene* L. species (*Caryophyllaceae*)**

**from Bingöl provinces, Turkey**

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**Abstract**

Perennial *S. magenta* Yıld. & Kılıç (*Caryophyllaceae*) are described and illustrated as new species from Bingöl, east Turkey. The distributions of the new and closely related species are mapped. *S. magenta* is closely related to *S. hamzaoglui* and *S. phyrigia*, respectively.

**Key Words:** *S. magenta*, *Caryophyllaceae*, Bingöl, Turkey

**Introduction**

*Silene* L. is one of the largest flowering plant genera in the world with c. 750 species with the generality of them distributed in Mediterranean region (1). Since 1967, 29 new taxa have been described from Turkey, is one of the main centres of diversity for the genus, is represented by 148 species (2-21). It is represented by 31 sections and 144 taxa, 42 % are endemic (From Fırat & Yıldız) (22).

The authors collected interesting specimens from the Tunceli and Bingöl provinces of east Turkey during a field trip in the summer of 2015-2016, respectivly. After morphological research, these specimens of *Silene* have been compared to many specimens of supposedly related species in the Herbaria of ANK, GAZI and HUB in Ankara. and consulting the numerous relevant literature, it was concluded that these specimens of *Silene* represent as new species to science.

**Taxonomic Treatment**

**Caryophyllaceae**

***Silene magenta*** Yıld. & Kılıç, **sp. nov.**, figures 7-14

Perennial herb no sterile shoots at the base. Stems 55-70 cm long including inflorescence, erect, terete, fragile, green to purplish, 1-3-paired leafy, usually glabrous to puberulent at base, glabrous to glandular-punctate, viscid at inflorescence. Nodium swollen. Leaves opposite, basal ones 7-17 x 0.5-1.4 cm, linear-oblanceolate, petiolate, attenuate at base, 3-nerved; stem leaves decreasing upward, 3-15 x 0.4-1.4 cm, linear-lanceolate, attenuate at base, acute at apex, puberulent, 3-nerved. Inflorescence 20-35 x 7-12 cm, paniculate-compound cymes, usually glabrous to glandular-punctate, viscid, (22)-31-35-flowered. Peduncules 3-5 cm long, erect, glabrous. Bracts 2, 40 x 3-4 mm, broadly linear, lowermost ones, 3 x 0.5 mm uppermost ones, semiconnate, linear, green-purplish, densely pilose at base and scrious margins, sparsely pilose and herbaceous at margins, acute at apex. Pedicels c. 2-5 mm long, erect, glabrıus. Bracteoles 2, 2-3 mm long, densely pilose at base, sparsely pilose at margins, decreasing as bracts. Calyx 6-8 x 3-4 mm, obconic, united, tube 5 mm, teeth 1 mm, ovate-obtuse with white scarious and shortly pubescent or pilose at apex, purple, 10-nerved, along on the veins glabrous. Corolla 8-15 x 0.5-2 mm, magenta. Petal’s claw 5 mm, scarious, pilose, 3-brownish nerved; limb c. 5-10 mm, magenta, bifid, glabrous. Stamens c. 3 mm long expanded at base, anthers c. 0.5-1.5 x 0.25-0.75 mm, light brown, versatile, glabrous. Styles 3, 7-8 mm. Anthophores c. 1-2 mm. Capsules 5-6 x 3-5 mm, ovale, glabrous, yellow.

Type. Turkey. B8 BİNGÖL: after the road separation Kiğı, Karakoçan-Sancak, 6. km, road edge, slope, 1450 m, 24.05.2017, Ş. Yıldırımlı 43367 & Ö. Kılıç (holo. Yıldırımlı Herbarium; iso. ANK, EGE, GAZİ, HUB, PAMUK, Yıldırımlı Herbariums).

Endemic. Anatolia-Turanian element.

Close to *Silene hamzaoglui* Budak but plants no sterile shoots at the base (with sterile shoots at the base); stems 55-70 cm long (not 35-55 cm), 1-3-paired leafy (not densely leafy), and glabrous to puberulent (not hirsute); leaves puberulent (not hirsute and ciliate); bracts pilose at margins (not canescent); bracteoles 2-3 mm long (not 5-8 mm); calyx glabrous along on the veins (not sparsely canescent along on the veins); flowers magenta (not pink); petal’s claw margins pilose (not ciliate); anthophores 1-2 mm long (not 2.5-3.5 mm); capsules c. 6 mm long (not 7-11 mm) and *S. phyrigia* Boiss. but stem leaves linear-lanceolate (not linear), inflorescence many flowered (not few flowered), calyx glabrous and shortly pilose at apex (not completely glabrous), petals magenta (not white).

**Etymology.** The species epithet is derived from a light purple, purplish-red, or pinkish purple colour of flowers.

Figure 7. *Silene magenta*, habitus, Ş. Yıldırımlı 43367 & Ö. Kılıç (holotype)



Figure 8. *Silene magenta*, habitus, Ş. Yıldırımlı 43367 & Ö. Kılıç (holotype)



Figure 9. *Silene magenta*, habitus, Ş. Yıldırımlı 43367 & Ö. Kılıç (holotype)



Figure 10. *Silene magenta*, basal leaves, Ş. Yıldırımlı 43367 & Ö. Kılıç (holotype)

Figure 11. *Silene magenta*, inflorescence, Ş. Yıldırımlı 43367 & Ö. Kılıç (holotype)



Figure 12. *Silene magenta*, calyx, Ş. Yıldırımlı 43367 & Ö. Kılıç (holotype)



Figure 13. *Silene magenta*, flower, Ş. Yıldırımlı 43367 & Ö. Kılıç (holotype)

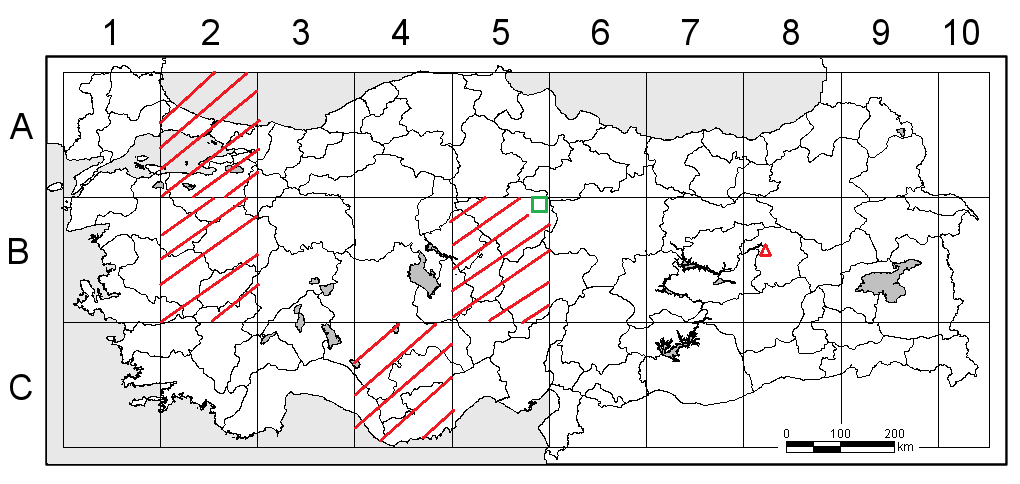


Figure 14. The distribution of *Silene magenta* close to *S. hamzaoglui* and *S. phyrigia* in Turkey

**:** *Silene magenta* **:** *S. hamzaoglui ***:**  *S. phyrigia*

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