

## TWO NEW SPECIES FROM LABIATAE IN IRAN

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*Nepeta assadii* and *Satureja kallarica* are described as new species from Iran.

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دو گونه جدید از خانواده نعنای در ایران  
زیبا جمزاد

گونه‌های *Satureja kallarica*, *Nepeta assadii* به عنوان گونه‌های جدید نامگذاری و شرح داده می‌شوند. اختلافات گونه‌های جدید با گونه‌های وابسته توضیح داده می‌شود.

## INTRODUCTION

The two new species describing below have been collected from west Iran, Zagros range, a very interesting area which has not been completely explored. So new collections contain some undescribed taxa, which two of them are described here.

### ***Nepeta assadii* Jamzad, sp. nov.**

Sect. *Schizocalyx* Pojark.

Indurato-caespitosa, humilia, caules 5-7 cm alti. Pilis longis albis patentibus et papilis minutissimus glanduliferis obsiti. Folia 6-9 mm longa, 5-7 mm lata, triangularo-ovata vel reniformia, basi truncata vel cordata, margine integra vel indistincte 1-2 crenis provisa, subsessilia, pilis albis et glandulis sessilibus minutissimus instructa. Folia floralia similia. Inflorescentia paniculata, pauciflora; cymae ad 5 florate; pedicelli 0.5-1.5 mm longi. Bracteae 3-4 mm longae, anguste lanceolato-acuminatae. Calyx 7-7.5 mm longus, tubuloso-campanulatus, ore obliquus; dentes lanceolato-acuminati, superiores 2-2.5 mm longi, inferiores 3-3.5 mm longi. Corolla 8-9 mm longa, coerulea, tubus inclusus; labium superius profunde incisum, lobus medianus labi inferius

involuto marginatus, laterales minuti. Nux 1.5 mm longa, 1 mm lata, ovata, tuberculata.

*Typus:* Bakhtaran: Mountains above Kerend, beginning of the road Dalahu, 1700-2000 m, 18,6,1987, Assadi 60810. (holo. TARI).

Caespitose, woody at base. Stems 5-7 cm high, covered with white patent hairs and small glandular papillae. Leaves 6-9 mm long, 5-7 mm wide, triangular-ovate or reniform, truncate to cordate at base; the margin entire or indistinctly 1-2 dentate, subsessile, covered with white hairs and small sessile glands. Floral leaves similar to cauline leaves. Inflorescence paniculate; cymes with up to 5 flowers; pedicels 0.5-1.5 mm long. Bracts 3-4 mm long, narrow lanceolate, acuminate. Calyx 7-7.5 mm long, tubulose-campanulate, covered by simple and glandular papillae on the ribs, ore oblique; teeth lanceolate, acuminate; upper lip 2-2.5 mm long; lower lip deeply cleft, 3-3.5 mm long. Corolla 8-9 mm long, blue; tube not exerted from the calyx; upper lip deeply cleft, middle lob of the lower lip toothed, involute margined, the laterals small. Nutlets 1.5 mm long, 1 mm wide, ovate, tuberculate.

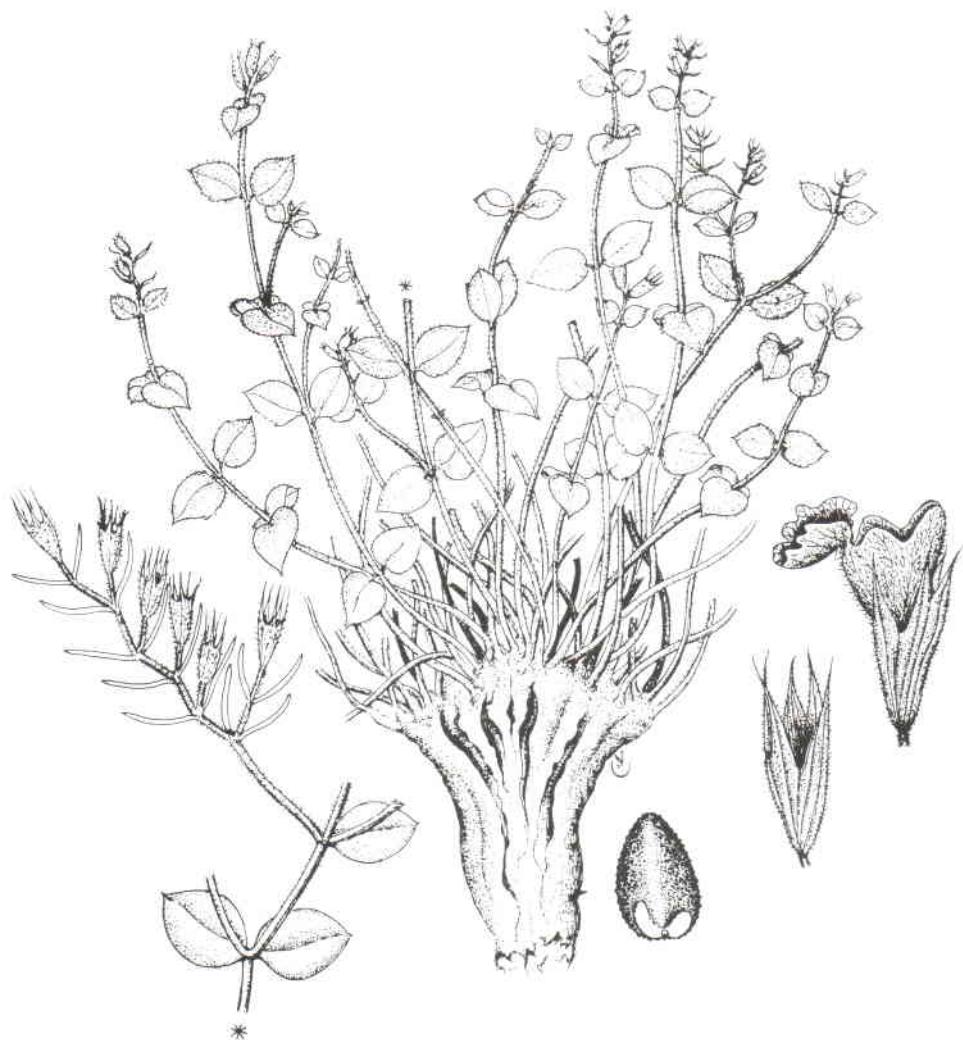


Fig. 1. *Nepeta assadii* ( $\times 1.4$ ; nutlet  $\times 11.3$ ; calyx and corolla  $\times 3.8$ ;  
young inflorescence  $\times 6.25$ )

The new species grows in crevices of rocks on Zagros range. It makes small cushions with thick woody roots.

Between the Iranian species of the genus *Nepeta*, the habit of the new species resembles much to *N. Iranshahrii* Rech. f., from the section *Capituliferae* (Benth.)Pojark., but the characters of flowers and inflorescence are similar to those of the section *Schizocalyx* Pojark. It differs from *N. fissa* C. A. Mey. in habit, leaf shape and size and the length of the corolla which is 8-9 mm with the tube included in the calyx. The nutlets are tuberculate in new species but smooth in *N. fissa*. The nutlets of the new species resembles to *N. cilicica* Benth, the E. mediterranian member of the section, but differs from it in other characters. It also differs from *N. leptantha* Boiss. & Hausskn. and *N. iodantha* Nab. in habit, the ratio of corolla to calyx length and leaf shape and size.

### **Satureja kallarica Jamzad, sp. nov.**

Caespitosa-suffruticosa, 15-20 cm alta. caulis ramosissimus, ramis tenuibus flexuosis. Tota planta pilis patulis albidis densissimis villosa-hirtella. Folia 4-11 x

3-6.5 mm, breviter petiolata, petiolis ad 1.5 mm longis. Folia floralia simila, paulo decrescentia verticillastri 2-5-flori, omnes remoti. Bracteae lineares. Pedicelli 2-4 mm longi. Calyx 7-8 mm longus, tubulosus, patule hirtellus, 13-nervius, subbilabiatus; dentes ± aequales, recti, 1.5 mm longi. Corolla 12 mm longa, albida, tubo recto, intus exanulatus; labium superius erectum, emarginatum; labium inferius trilobum, lobo medianus emarginatus, stamina 4; bina exteriora tubo exerta; antherae bilocularis, loculis divergentibus. Styli rami inaequales, divergentes. Nux 1.2 mm longa, oblonga.

*Typus.* Chaharmahal-e Bakhtiari: N. slope rocky Mont. of Kallar, S. Khederabad, 2600-3200 m, 18.8.1986, Mozaffarian 58139 (holo. TARI).

Caespitose woody perennial, 15-20 cm high, stem divided from the base into slender flexuous branches. All parts covered with white long patent villose hairs. Leaves 4-11x3-6.5 mm. Floral leaves similar to the stem leaves but smaller. Verticillasters 2-5 flowered, remote. Bracts linear, pedicels 2-4mm long. Calyx 7-8 mm long, tubular, 13-nerved, subbilabiate; teeth ± equal, erect, 1.5 mm long. Corolla 12 mm long,

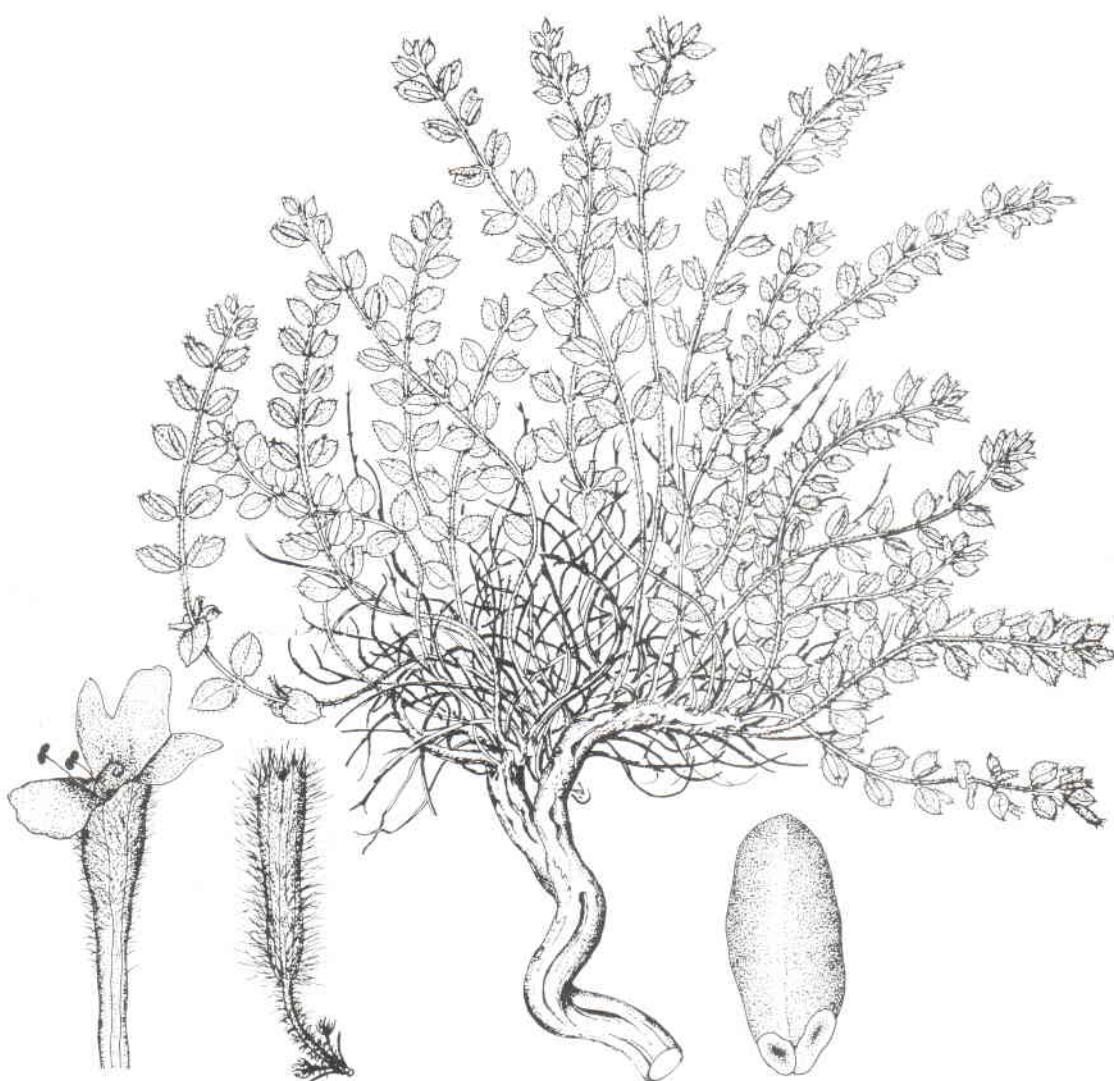


Fig. 2. *Satureja kallarica* (x 0.85; calyx x 4.75; corolla x 4.9; nutlet x 35)

white; the tube erect, without hairy ring inside; upper lip erect, emarginate; lower lip trilobed; middle lobe emarginate. Stamens 4, the two exteriors exerted from corolla tube, theca divergent. Style branches unequal. Nutlets 1.2 mm long, oblong.

The new species with its long tubular, short toothed calyx resembles to some species of the genus *Cyclotrichium* but the not resupinate flowers, the included interior stamens, the glabrous corolla tube and the divergent theca prove it being separate from *Cyclotrichium*. It also resembles to some species of the genus *Micromeria* by

having slender stems and branches and also shape of calyx and corolla, but not size. In the genus *Satureja* I could not find any close species to it. Anyway it belongs to the group with subbilabiate calyx and flat leaves.

### Acknowledgements

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