

## TWO NEW SPECIES OF NEPETA L. (LABIATAE) FROM IRAN

Z. Jamzad

Jamzad, Z. 1999 08 01: Two new species of *Nepeta* L. (Labiatae) from Iran. -Iran. Journ. Bot. 8 (1): 43-48. Tehran.

*Nepeta minuticephala* and *N. bokhonica* are described as new species. *N. minuticephala* belongs to the *N. cephalotes* Boiss., *N. eremokosmos* Rech. f. and *N. prostrata* Benth. group. It is distinguished from the other members of the group by its inflorescence, indumentum and leaf texture. *N. bokhonica* belongs to the *N. glomerulosa* Boiss., *N. juncea* Benth. and *N. praetervisata* Rech. f. group. The most characteristic feature of the new species is the slender many stemmed habit; stems covered by herbaceous leaves in whole of their length.

Ziba Jamzad, Research Institute of Forests and Rangelands, P. O. Box 13185-116, Tehran, Iran.

Key words. Labiatae, *Nepeta*, New species, Iran.

دو گونه جدید از جنس *Nepeta* L. از تیره نعنا از ایران

زیبا جمزاد

گونه‌های *N. bokhonica* و *N. minuticephala* به عنوان گونه‌های جدید شرح داده می‌شوند.

گونه *N. minuticephala* به گروه گونه‌های *N. eremokosmos* Rech. f.، *N. cephalotes* Boiss. و *N. prostrata* Benth. تعلق دارد. این گونه تفاوتی از نظر گل‌آذین، برگ و کرک با سایر گونه‌های این گروه دارد.

گونه *N. bokhonica* که متعلق به گروه گونه‌های *N. glomerulosa* Boiss.، *N. juncea* Benth. و *N. praetervisata* Rech. f. می‌باشد، دارای صفات مشخصه زیر است: شکل کلی گیاه دارای ساقه‌های نازک متعدد با قاعده چوبی است و در تمام طول پوشیده از برگهای تقریباً دایره‌ای شکل می‌باشد.

## Introduction

In a revision of the genus *Nepeta* in Iran the herbarium specimens collected from different localities in the country have been studied. In this study two new species were recognized which are described.

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

Suffrutex, pluricaulis, ca. 25 cm altus; caules tenues, erecti in parte inferiore ramosi, tota longitudine parvifoliati. Indumentum canescenti-tomentosum, e pube simplicis et ramosis articulatis et glandulis sessiles consistens. Folia late ovata usque orbicularia, 7-9 x 6.5-9 mm, obtusa, basi truncata, margine leviter dentata, breviter petiolata; petiolis 1-4 mm longis. Verticillastri 6-7 mm diametri, remoti vel superiores  $\pm$  approximati. Bracteae 3-5 x 3-4 mm, late lanceolatae usque ovatae, longe acuminatae, membranaceae, ciliatae, calyces aequantes. Calyx 5.5-6 mm longus, tubulosus, e pube simplicis et ramosis, articulatis, albis et glandulis sessiles obsitis, ore obliquus; dentes paulo inaequales; superiores 1.5 mm longi; inferiores 2 mm longi. Corolla 8 mm longa, curvata, alba; labium inferius coeruleum; labium superius 2 mm longum, bilobum; lobi late ovati; labium inferius

lobi medianus 1.5 x 3 mm, emarginatum. Nux palide brunnea, 1.8 x 1 mm, oblonga, depresso-tuberculata.

*Typus.* Hormozgan, Bandare Abbas, Bokhon, Tashgerd and Boneh mountains, 1800-2700 m, 2.5.1985, Mozaffarian 52423 (holotypus TARI).

Subshrub, ca. 25 cm high. many stemmed. Indumentum tomentose, canescens, consisting of white articulated simple and branched hairs and sessile glands. Stems erect, leafy at the whole length. Leaves broadly ovate to  $\pm$  orbicular, 7-9 x 6.5-9 mm, obtuse, truncate at the base, shallowly dentate at the margins, shortly petiolate; petioles 1-4 mm long. Inflorescence consisting of distant small verticillasters, approximating above; verticillasters in flower 6-7 mm in diameter. Bracts 3-5 x 4 mm, broadly lanceolate to ovate, membranous, acuminate, ciliate at the margins. Calyx 5.5-6 mm long, tubular, covered with simple and branched articulated white hairs and sessile glands; throat oblique; teeth unequal; upper teeth 1.5 mm long; lower teeth 2 mm long. Corolla white; lower lip blue, 8 mm long, curved; upper lip bilobed; lobes 2x1.5 mm; middle lob of the lower lip 1.5x3 mm, with



Fig. 1. *Nepeta bokhonica* (x0.7); leaf (x1.5); bract, corolla and calyx (x3.5).

dark blue spottings, emarginate. Nutletspale brown, depressed tuberculate.

The new species belongs to the *N. glomerulosa* Boiss., *N. juncea* Benth. and *N. praetervis* Rech. f. group. The most characteristic features of the new species are its habit with many slender stems which are woody in lower parts and are covered by small herbaceous leaves all over of their length and the verticillasters which are small.

*N. bokhonica* grows in Hormozgan province in Iran which is the most southern limit of the distribution of the *N. glomerulosa* group in Iran.

***Nepeta minuticephala* Jamzad, sp. nov.**

Perennis. Caules 30-35 cm alti, erecti, a basalibus ramosi; rami purpurei, tota longitudine dense pilis albis longis et patentibus obsiti. Folia herbacea; inferiora petiolata; petioli 6-12 mm longi; laminae 8-12 x 10-15 mm, late ovatae vel flabelliformes, basi truncatae, margine indistincte crenatae, apice rotundatae, superne laxe et inferne dense longiuscule albo-villosae; folia superiora late ovato-triangularia, breviter petiolata. Inflorescentia e cymae pauciflorae

composita; cymae inferiores pedunculatae, pedunculis 10-20 mm longis, superiores ± sessiles, in capitulum minutum terminale conferti. Bracteae 4-5 mm longae, lanceolatae, acuminatae, longe albo-villosae. Calyx 7 mm longus, longe albo-villosus, tubulosus, rectus, ore ± obliquus; dentes calycini 2 mm longi, lanceolati in spinas attenuati. Corolla 11 mm longa, extus sparse albo-villosa, caerulea; labium superius 1.5 mm longum, bilobum, lobis obtusis, lobus medianus labii inferi 1.5 mm longus, 3 mm latus. Nux 1.7x0.9 mm, alba, brunnea, laevis, obsolete punctata.

*Typus.* Tehran, Saveh, Gharghabad, Ghasemabad, 1900 m, 17. 6. 1989, Mozaffarian 67763 (holotypus TARI).

Perennial. Stem 30-35 cm high, erect, branched from the base; branches purple tinged, covered by dense patent long white hairs. Leaves petiolate; petioles 6-12 mm long; blade 8-12 mm long, 10-15 mm wide, broadly ovate to flabelliform, at the base truncate, shallowly crenate at the margins, covered with dense long white hairs, denser on lower surface. Inflorescence consisting of cymes formig small oblong capitules; peduncles 1-2 cm long; upper cymes more

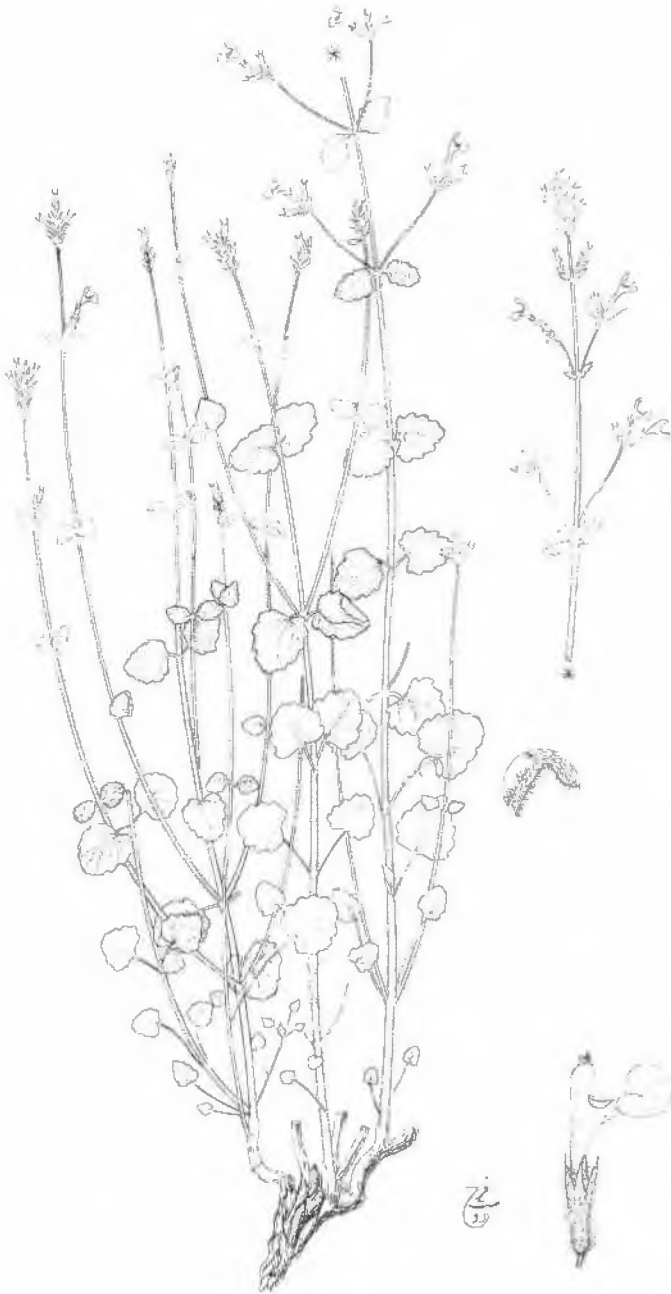


Fig. 2. *Nepeta minuticephala* (x0.56); flower (x1.6).

or less sessile; lower cymes pedunculated, remote. Bracts 4-5 mm long, lanceolate, acuminate, covered by dense white, 0.5-0.7 mm long hairs. Calyx 7 mm long, tubulose; throat  $\pm$  oblique; teeth 2 mm long, lanceolate, acuminate, spinose at the top. Corolla 11 mm long, blue, sparsely puberulose; upper lip 1.5 mm long, bilobed; lobes oblong, obtuse; middle lobe of the lower lip 1.5 mm long, 3 mm wide. Stamens as long as the upper lip of the corolla. Nutlets brown, oblong, 1.7  $\times$  0.9 mm, smooth, punctate.

The new species belongs to the *N. eremokosmos* Rech. f., *N. prostrata* Benth, *N. floccosa* Benth. and *N. cephalotes* Boiss. group (sect. *Capituliferae* (Benth.) Pojark.) *N. eremokosmos* seems to be the closest species to the new species but it differs from *N. minuticephala* in habit which is radially expanded (not erect), inflorescence consisting of dense capitules (not small heads). Also leaf texture and indumentum

are other differences between the two species.

The new species differs from *N. prostrata* in having erect and not prostrate habit, cymes present in upper part of the branches but not all over the stem. It also differs from *N. cephalotes* by having more herbaceous habit, different indumentum and small heads.

The new species  $\pm$  shares the inflorescence type with *N. floccosa*, which is geographically distributed in Afghanistan, Pakistan and Himalaya, the differences between the two species are leaf texture, indumentum and scattered leaves on the branches.

### Acknowledgment

I wish to thank Mrs. R. Farahdoost; the artist of the Research Institute of Forests and Rangelands for preparing the illustrations.