

## NEW SPECIES OF THE GENUS *NEPETA* (LABIATAE) FROM PAKISTAN

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A new species of *Nepeta*, viz., *N. gilgitica* Shinwari and Chaudhri is described. This species belongs to section *Spicatae*. *Nepeta gilgitica* is closely related to *N. kokanica* Regel.

**Key words:** New species, *Nepeta*, Description.

### Introduction

The first taxonomic account of the family Labiatae of this region was written by J.D. Hooker [1]. Subsequently, this account was revised by Mukerjee [2], Shishkin and Yuzepchuk [3,4] and more recently by Rechinger [5,6]. But all these accounts comprises only a part of the region.

The absence of a complete taxonomic treatment of this family for our area makes it necessary to revise the family. Therefore, in first attempt the family from northern areas of Pakistan was revised to clear up the taxonomic position of a number of taxa. The study was part of M.Phil course [7] and was greatly facilitated by extensive collections by various workers of the Herbaria of Quaid-i-Azam University and Pakistan Museum of Natural History, Islamabad. Recently a number of new taxa have been described. For example, Al-Musawi [8] described 5 new species of the family from Iraq. Shinwari and Chaudhri [9,10] also described a number of new taxa of genus *Nepeta* and *Mentha*. To confirm the status of the taxa, molecular studies [11,12] and/or numerical taxonomy [13] may be used.

### Results and Discussion

*Nepeta* Linn., Gen.Pl. ed. 5: 710 (1754). The genus *Nepeta* contains about 250 species that are distributed in the Northern Hemisphere, from Pacific to the Atlantic Ocean. The highest variation and greatest abundance of the species in *Nepeta* is found in S.W. Asia and Western Himalayas, including the adjacent Hindukush range. There are about 59 species of *Nepeta* in Pakistan.

*Nepeta gilgitica* Z.K., Shinwari and M.N. Chaudhri sp. nova. Annu, pluricaulis; caulis ca. 17 cm longi; prostrati vel suberecti; tota planta canesci-pubescenti; folia sessilia, 0.5-1 x 0.2-0.5 cm, ovata-lanceolata, basi cuneata, margine crenata, apice acuta; inflorescentiae verticillasteris in spicacrum, 2-9 x 0.5-1.5cm, breve congestis, infirmi 1-2 interdum subremoti; bracteae 5-6mm, longae, oblongi-lanceolatae, ciliatae, margine

integro vel pectinato-serrata, apice acuminata; pedicelae 1.5mm longae; calyx 7 mm longus, ciliatae, dentes subaequales, linearis, corolla albide, 8mm longa, tubus e calyce paulo vel vix exsertus; stamina 4, parallela, sub labium superius corollae ascendunt, superiora corollam + aequantia; stylus inaequaliter bilobus.

*Type: Northern Areas: Gilgit district: Nomal to Naltar, ca. 2000m, 5.vii. 1976, Shahzad, Ashraf and Maqsood, 307 (ISL). Annual, prostrate or suberect herbs; hairy, upto 17 cm long; stem much branched from the base; leaves + sessile, lamina 0.5-1 x 0.2-0.5cm, ovatelanceolate, crenate, acute, cuneate; inflorescence contiguous, 2-9 x 0.5-1.5 cm, with one or two distinct whorls below the main spike, bracts of the lower whorls 6 mm long, oblong-lanceolate, margins pectinate acuminate; bracts of the main spike 5-6mm long, oblong-lanceolate, margin entire and ciliate, apex acuminate; pedicel 1.5mm long; calyx 7mm long, tube + equalling the teeth, teeth linear, ciliate; corolla 8 mm long, white, tube narrow, exserted*



Fig.1. *Nepeta gilgitica*: Flowering and fruiting plant.

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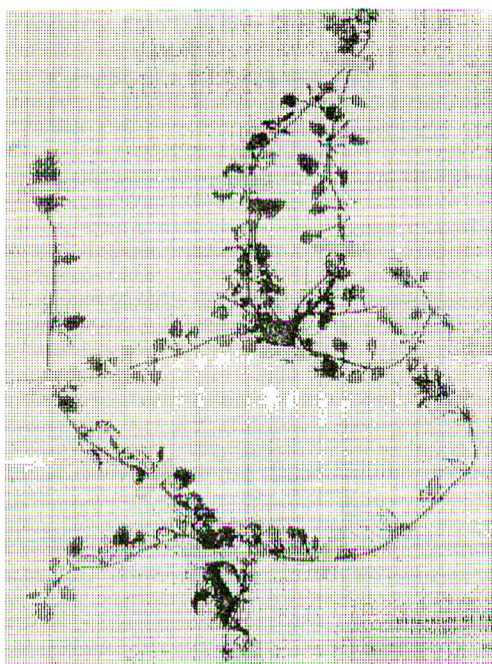


Fig 2. *Nepeta kokanica*: Flowering plants.

from the calyx; upper stamens as long as upper lip or barely exerted.

#### SPECIMENS EXAMINED

*Northern areas.* Gilgit district: Nomal to Naltar, ca. 2000m, 5.vii.1976, *Shahzad, Ashraf and Maqsood*, 3087 (ISL).

*Distribution:* Endemic to the northern areas of Pakistan.

This species belongs to section *Spicatae* and is closely related to *Nepeta kokanica* from which it differs in being annual and wholly prostrate and having bracts of the lower whorl pectinate, while in *N.kokanica* Regel the plant is perennial and erect and the bracts are entire.

#### References

1. J. D. Hooker, *The Flora of British India*. (L. Reeve & Co. Ltd., Brook near Ashford, Kent, 1985) Vol.4, pp.604-704.
2. S. K. Mukerjee, *Rec. Surv. Ind.*, **14** (1), 1 (1940).
3. B. K. Shishkin, and S. V. Yuzepchuk In V. L. Komarov and B. K. Shishkin, *Flora USSR* (Botanical Institute of the Academy of Sciences of the USSR, Moscow/Leningrad, 1954), Vol. **20**, pp.1-502.
4. B. K. Shishkin and S. V. Yuzepchuk. In V. L. Komarov, and B. K. Shishkin, *Flora USSR* Botanical Institute of the Academy of Sciences of the USSR, Moscow/Leningrad, 1954) Vol. 21, pp. 1-641.
5. K. H. Rechinger (Ed.), *Flora Iranica*, (Labiatae Fasc. (1982), Vol.150, pp.1-501.
6. K. H. Rechinger (Ed.), *Flora Iranica, Labiatae (Talluae)* Fasc. (1982) Vol. 150, pp.1-591.
7. Z. K. Shinwari, *The Labiatae of the Northern Areas (A Taxonomic Revision)*, M.Phil. Thesis, Quaid-i-Azam University, Islamabad (1986).
8. H. E. Al-Musawi, *J. Biol. Sci. Res.*, **19** (2), 329 (1988).
9. S. K. Shinwari and M. N. Chaudhri, *Biologia*, **36** (2), 67 (1990).
10. Z. K. Shinwari and M. N. Chaudhri, *Acta Phytotax. Geobot*; **43** (2), 97 (1992).
11. Z. K. Shinwari, R. Terauchi and S. Kawano, RFLP Analysis of cpDNA in Several Species of Asiatic *Disporum*, *Plant Species Biology* (1994).
12. Z. K. Shinwari, R. Terauchi, F. H. Utech and S. Kawano Recognition of the New World *Disporum* Section *Prosartes*-as *Prosartes* (Liliaceae) Based on the Sequence Data of *rbcL* Gene, *Taxon* (1994).
13. T. Siddique, M. Qaiser and S. S. Shaikat, *Candollea*, **44**, 521- (1989).