

**CAMPANULA WATTIANA NAYAR ET
BABU (CAMPANULACEAE)
A NEW SPECIES FROM N.W. HIMALAYA**

BY M. P. NAYAR AND C. R. BABU

Central National Herbarium, Botanical Survey of India, Calcutta

(Received for publication on September 18, 1969)

Campanula wattiana Nayar et Babu

C. cashmirianam Royle et *C. canam* Wall. proxime appropinquans:
A priore differt: caulibus non-flexuosis, calycis lobis late ovato-triangu-
laribus, plerumque dentatis, corollae tubo subrotato, stylo longe exerto.
A. C. cana recedit: foliis subintegris vel remote dentatis, calycis lobis
late ovato-triangularibus, corollae tubo brevior et angustior.

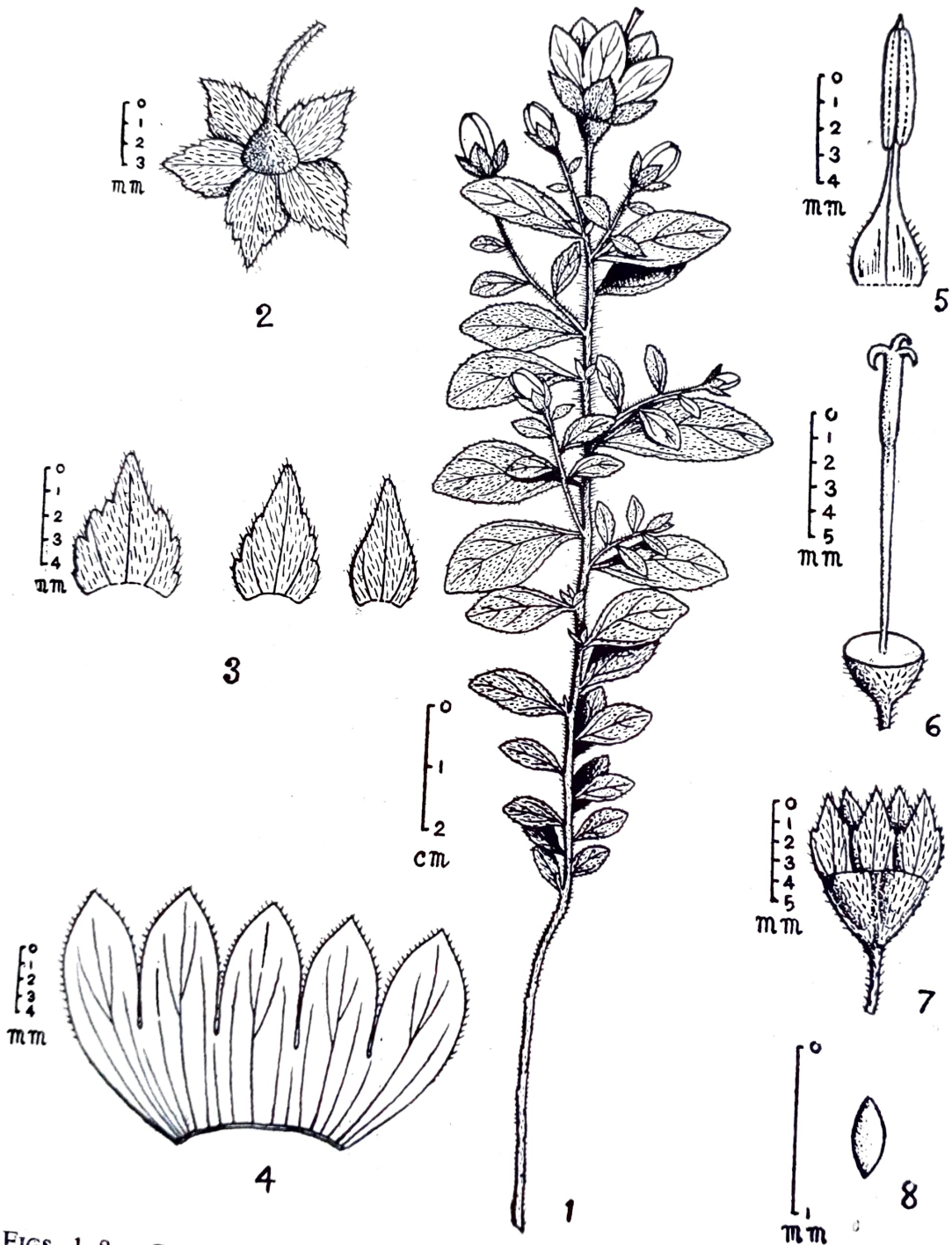
Herbae perennes, parce ramosae vel interdum multo ramosae.
Caules graciles, obtusangulares, primum dense pubescentes (setis 1-2
mm. longis), deinde glabrescentes. *Folia* subsessilia vel sessilia, alterna,
lanceolata, ovato-elliptica vel oblonga, $0.5-4-(-5) \times 0.2-1 (1.5)$
cm, ad basim attenuata vel cuneata ad apicem subacuta vel acuta,
margine subintegra vel breviter dentata, supra molliter pubescentia
vel raro glabrescentia, infra dense albo-pubescentia, nervis lateralibus
supra inconspicuis subtus conspicuis. *Flores* solitarii, terminales;
pedunculus dense patenti hirsutus et minute pilosus. *Calyx* turbi-
natus, dense pubescentes, prominenter 5-partitus, segmentis late ovato-
triangularibus, $6 \times 3 (-4)$ mm., ad apicem acutis vel subacuminatis,
ad basim cordatis, margine subintegris vel obtuse dentatis praeditus.
Corolla campanulata, ad medium vel rarius altius 5-fissa, 0.6-1.5 cm
longa, extus pilosa, tubo 3-5 mm longo, lobis oblongis, obtuse-acutis,
 $4-8 \times 4-6$ mm. *Stamina* 5, libera, filamentis ad basim ciliato-dilatis,
2-3 mm longis, antherae 2-3 mm longae, apiculatae. *Ovarium* in-

ferum, 3-loculare; stylus cylindricus, exertus, sursum dilatus, 1-1.6 cm. longus; stigma 3-fidum, papillosum.

Typus : Watt 8609 (CAL).

Campanula wattiana Nayar et Babu, sp. nov.

Simple or sparingly branched, sometimes much-branched, perennial herbs. Stems slender, obtusangular, densely clothed with short white



FIGS. 1-8. *Campanula wattiana*. Fig. 1. Habit. Fig. 2. Flower (inverted) with corolla removed. Fig. 3. Calyx-segments. Fig. 4. Corolla opened out. Fig. 5. Stamen. Fig. 6. Gynoecium. Fig. 7. Capsule with calyx-segments. Fig. 8. Seed.

hairs mixed with white patent 1-2 mm long hairs, often lanate, glabrescent on older parts. Leaves subsessile or sessile, alternate, lanceolate or ovate elliptic, attenuate or cuneate at base, subacute-acute at apex, subentire to dentate, softly pubescent or rarely glabrescent on the upper surface, densely white pubescent on the lower surface, 0.5-4 (-5) $\times$ 0.2-1 (-1.5) cm, lateral nerves 3-4 pairs, obscure above, prominent and raised beneath. Flowers solitary at the ends of branchlets; peduncle densely clothed with short hairs mixed with long patent hairs, with a bract-like leaf at the base, 0.3-1.5 cm long; calyx-tube turbinate, densely soft-pubescent, prominently 5-ribbed, 2-3 mm long, limb 5-partite, segments broadly ovate-triangular, acute-subacuminate, with a cordate base, subentire to obtusely dentate, softly pubescent, 3.5-6 $\times$ 3-4 mm; corolla campanulate, divided halfway or rarely more down, 0.6-1.5 cm long, pilose without; tube 3-5 mm long, lobes oblong, obtusely acute, 4-8 $\times$ 4-6 mm; stamens 5, free, filaments with a dilated, ciliate base, 2-3.5 mm long, anthers 2-3.5 mm long, apiculate; ovary inferior, 3-celled, style cylindrical, exerted, dilated upwards, 1-1.6 cm. (incl. stigma). Stigma 3-fid, papillose. Capsule obovoid, crowned with persistent calyx-lobes, dehiscing by small valves at base, densely soft-pubescent, 4-5 $\times$ 4 mm; seeds reddish-brown, lance-shaped, smooth, 0.05 cm long.

INDIA: JAMMU AND KASHMIR : Bagi, alt. 2970 m, Sept. 23, 1888 *Watt*, 8609 (CAL- holotype, isotypes). HIMACHAL PRADESH : Bashahr, Kasha to Rumsh, alt. 2640, Oct. 15, 1891, *Lace*, 1125 (CAL); Bulsun, rocks above Patunala Tract, alt. 2640 m, Sept. 1877, *Collett*, 5536 D (CAL); UTTAR PRADESH : Jaunsar Bahar, Deoban Range, alt. 2210-2640 m, Oct. 1, 1979 m, *R. F. D.* 1199 (CAL); Shali, alt. 2640 m, Oct. 1864, *Brandis*, 3225 (CAL); Jaunsar, alt. 29270 m, Oct. 1894, *Gamble* 15101 (CAL); Pandawa, alt. 2800 m, Sept. 1898, *Gamble* 27318 (CAL); Kumaon, Budhi, Kutti Valley, Sept. 13, 1900, *Inayat*, 24628 (CAL); Kutti Valley, alt. 3630-3960 m, Sept. 10, 1884, *Duthie* 3120 (CAL).

Flowers and fruits : Sept.-Oct.

Distribution.—India : N.W. Himalaya; between 2200-3900 m.

This distinct species is closely allied, and indeed often identified as *C. cashmiriana* Royle and also *C. cana* Wall., but is easily recognizable from the former by subrotate corolla which is divided more than halfway down, long exerted style, broadly ovate-triangular, usually distinctly dentate calyx-segments and stems which are not flexuous and from the latter by broadly ovate-triangular, calyx-segments, smaller and narrower corolla and subentire-dentate leaves. *C. cashmiriana-complex* is characterised by flexuous or zig-zag stems, broadly, campanulate corolla which is divided less than halfway down, ovate-lanceolate, usually entire calyx-segments, narrower and smaller corolla and distinctly dentate leaves.

This plant is named after *G. Watt*, who collected this remarkable plant and first suggested its undoubted affinity with *C. cashmiriana* Royle.