

## A NEW SPECIES OF LISTERA FROM NEPAL (ORCHIDACEAE)

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### *Listera nepalensis* Balak. *sp. nov.* — Fig. 1.

Affinis *L. longicauli* King & Pantling, a qua tamen differt magnitudine minore totius plantae, racemis brevioribus, labello angustiore lineari-lanceolato, sepalis lateralibus 3—4-plo. longiore ad apicem bifido.

Herba terrestri, erecta, gracilis, 6—20 cm alta, radicibus carnosis fibrosis e rhizomate brevi; *caulis* glaber, 3.5—12.0 cm longus infra folia, 1.0—1.5 mm crassus, unica vagina ornatus ad 2—4 cm supra rhizoma, vagina ca 5 mm longa, ca 2 mm lata. *Folia* sessilia, ovatocordata, ad apicem acuta, 1.5—3.0 cm longa et lata, membranacea, pallide viridia infra, glabra, tenuiter 5—7-nervia. *Racemi* 3—8 cm longi, glandulari-puberuli, supportantes flores 4—12, distanter dispositos in axillis bractearum, flore infimo 1—2 cm supra folia. *Bracteae* florales ovato-acuminatae, glabrae, ovario stipitatae breviores. *Pedicelli* 3—6 mm longi. *Flores* pallide virides, glabri, 1—2 cm longi. *Sepala* subaequalia, membranacea. *Sepalum dorsale* ovato-lanceolatum, erectum, 2.0—2.5 mm longum, ca 1.5 mm latum. *Sepala lateralia* ovato-lanceolata, subfalcata, paulum reflexa, 3—4 mm longa, 1.5—2.0 mm lata. *Petala* lineari-lanceolata, angustata, 2.5—2.75 mm longa, 0.8—1.0 mm lata. *Labellum* amplum, 3—4-plo. longior sepalis lateralibus, lineari-lanceolatum, latum in medio, fastigatum ad utrumque apicem, 3—5-nerviium, 8—13 mm longum, 2.0—2.5 mm latum, membranaceum; apice breviter bifido, lobis anguste obtusis, sinu brevissimo. *Columella* 2.5—3.0 mm longa, acute curvata ad apicem, rostello brevi, hebetate; pollinis 2, pyriformibus. *Ovarium* ca 4 mm longum, tenuiter obconicum, glabrum. *Capsula* ca 1 cm longa.

*Typus*: Stainton, Sykes & Williams 3431, lectus ad Phagune Dhuri, Nepal, ad altitud ca 3800 m die 8 Julii anni 1954 et positus in CAL.

Terrestrial, erect, slender herb, 6—20 cm tall with fleshy fibrous roots from a rootstock; *stem* glabrous, 3.5—12.0 cm long below the leaves, 1.0—1.5 mm thick; bearing a single sheath at about 2—4 cm high above the roots, sheath about 5 mm long, about 2 mm broad. *Leaves* sessile, ovate-cordate, reniform, acute at apex, 1.5—3.0 cm long, as wide as long, membranous, pale green below, glabrous, faintly 5—7-nerved. *Racemes* 3—8 cm long, glandular-puberulous, bearing 4—12 flowers arranged distantly in the axils of bracts, the first flower of the raceme rising at 2—3 cm above the leaves on the peduncle. *Floral bracts* ovate-acuminate, 3—5 mm long, 1—3 mm broad, scarious, concave, convolute, glabrous, shorter than the stalked ovary. *Pedicels* 3—6 mm long. *Flowers* pale green, glabrous, 1—2 cm long. *Sepals* subequal, membranous. *Dorsal sepal* ovate-lanceolate, erect, 2.0—2.5 mm long, about 1.5 mm broad. *Lateral sepals* ovate-lanceolate, subfalcate, slightly reflexed, 3—4 mm long, 1.5—2.0 mm broad, membranous. *Petals* linear-lanceolate, narrower, 2.5—2.75 mm long, 0.8—1.0 mm broad. *Lip* large, 3—4 times as long as lateral sepals, linear-lanceolate, broad at middle, narrowed at both ends, 3—5-nerved, 8—13 mm long, 2.0—2.5 mm broad, membranous, apex shortly bifid; lobes narrowly obtuse; sinus very short. *Column* 2.5—3.0 mm long, acute, curved at



Fig. 1. *Listera nepalensis* Balak. — a. Habit, nat. size; b. flower,  $\times 4$ ; c. bract,  $\times 4$ ; d. dorsal sepal,  $\times 10$ ; e. petal,  $\times 10$ ; f. lateral sepal,  $\times 10$ ; g. pollinia,  $\times 30$ ; h. fruit,  $\times 7$  (a—g from holotype, h. from Polunin et al. 5018).

apex; rostellum short, blunt; pollinia 2, pyriform. Ovary about 4 mm long, thinly obconic, glabrous. Capsule about 1 cm long.

*Distribution*: Nepal.

*Ecology*: Usually seen growing on moss covered rocks or leaf mould in *Abies-Betula*, *Pinus* and mixed deciduous forests at altitudes varying from 3000—4000 m and flowering in July—August (from field data on specimens cited below).

*Remarks*: Closely related to *L. longicaulis* King & Pantl. but differs in being a shorter plant with shorter racemes and narrow-lanceolate lip which is 3—4 times as long as lateral sepals and in the shortly bifid apex.

NEPAL: Phagune Dhuri, 3800 m, 8-7-1954, Stainton, Sykes & Williams 3431 (Holotype in CAL); near Tarakot, Bheri River, 14-7-1952, Polunin, Sykes & Williams 2446 (CAL); between Munigaon and Chutta, southeast of Jumla, 24-7-1952, Polunin, Sykes & Williams 4895 (CAL); between Jumla and Garjigoth, 8-8-1952, Polunin, Sykes & Williams 5018 (CAL).

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