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BOLBITIS NAGALANDENSE R. R. RAO & N. S. JAMIR A NEW SPECIES OF LOMARIOPSIDACEAE FROM NAGALAND, INDIA

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An illustrated description of the new species *Bolbitis nagalandense* is presented.

ABSTRAK

Pertelaan bergambar jenis baru *Bolbitis nagalandense* disajikan.

The authors while working on the pteridophytic flora of Nagaland State (India), collected numerous interesting species of ferns, some of which proved to be new to science. *Bolbitis nagalandense* R. R. Rao & N. S. Jamir a new fern species belonging to Lomariopsidaceae is described here.

Bolbitis nagalandense R. R. Rao & N. S. Jamir *sp. nov.* — Fig. 1.

Satis distincta habitu scandenti, et stipitibus in rhizomate semotilis dispositis.

Rhizoma usque ad 1 cm crassum, longe repens, ad apicem squamis atrobrunneis ovate-lanceolatis, ca 0.5 cm longis tectum. Stipites usque ad 15—25 cm longi, 6—10 cm distantes, omnino sparsim squamati, squamis illis rhizomatis similibus, straminei, in sicco pallide viridulis, usque ad 10—20 cm longi in frondibus sterilibus et usque 20—30 cm longi in frondibus fertilibus. Frondium sterilium lamina usque ad 60 x 20 cm, obovato-lanceolata, simpliciter pinnata; pinnae laterales numerosae, usque ad 25 vel plus paribus, alternatim dispositae in costa sessiles vel brevissime stipitatae, par infimum non redactum; pinnae maximae usque ad 8—13 X 15—25 cm, obovato-lanceolatae, ad basin subtruncatae, parum inaequales in latere acroscopico, gradatim angustatae prope apicem, ad anicem obtusae, ad marginem crenatae vel dentatae, tenues, herbaceae, in sicco atro-virides; rhachides pallide bruneae, stramineae sparsim

squamatae, costa 1—2.5 cm distans, infra breviter squamata, supra glabra, lamina utrinque glabra; venae distinctae, seriem regularem areolae formantes, sine venulis inclusis, liberae ad marginem laminae. Frondium fertile lamina usque ad 30 x 8 cm, simpliciter pinnata, usque ad 15 paribus, subopposita vel alterna, sessiles vel subsessiles, pinnae laterales maxime usque ad 5 x 0.7 cm, lineares, ovato-lanceolatae, parum falcatae, gradatim angustatae in apicibus acuminatis, ad marginem integrae, venae illis frondium sterilem similes sed multo approximatae; sporangia atro-brunnea, ad maturitatem paginam totam inferiorem dense tegentia.

Holotypus lectus a N. S. Jamir sub numero 7112, ad locum Changki. Alarimeru, alt. 1000 m Mokokchung district, Nagaland, India, et positus in CAL. Isotypus positus in herbario North-Eastern Hill University, Shillong (NEHU).

Rhizome up to 1 cm thick, long creeping the apical part covered with dark-brown, ovate-lanceolate scales, about 0.5 cm long. Stipes up to 15—25 cm long, 6—10 cm apart, sparsely scaly throughout, similar to rhizome scales, stramineous, pale-greenish when dry to about 10—20 cm long in sterile fronds and to 20—30 cm long in fertile fronds. Lamina of sterile frond up to 60 X 20 cm obovate-lanceolate in outline, simple pinnate; lateral pinnae numerous, up to 25 of more pairs, alternately arranged on costa, sessile or very shortly stalked; the lowest pair not reduced; largest pinnae up to 8—13 x 1.5—2.5 cm, obovate-lanceolate, subtruncate at base, slightly unequal on the acroscopic side, gradually tapering towards apex, blunt at apex, margin crenate or dentate; texture thin, herbaceous, dark-greenish when dry; rachises pale-brown, stramineous, sparsely scaly, costa 1—2.5 cm apart, short scaly beneath, glabrous above, lamina glabrous on both surfaces; veins distinct, forming regular series of areoles without included veinlets, free at the margin. Lamina of the fertile fronds up to 30 x 8 cm, simple pinnate, up to 15 pairs, subopposite or alternate, sessile or subsessile, largest lateral pinnae up to 5 x 0.7 cm, linear ovate-lanceolate, slightly falcate, gradually tapering into an acuminate apex, margin entire; veins similar to sterile fronds but much closer; sporangia dark-brown, densely covering the entire lower surface at maturity.

ECOLOGY: Rare in moist shady places along river banks, creeping on rocks and also climbing on tree trunks up to 3 m or even more in dense evergreen forests.

DISTRIBUTION : Nagaland.

SPECIMENS EXAMINED: A Changki, Mokokchung distr., 1000m, Jamir 7112 (GAL holotype; isotype in North-Eastern Hill University, Shillong — NEHU).

This species is quite remarkable on account of its climbing habit and very distantly placed stipes on the rhizome. It is fertile in May.

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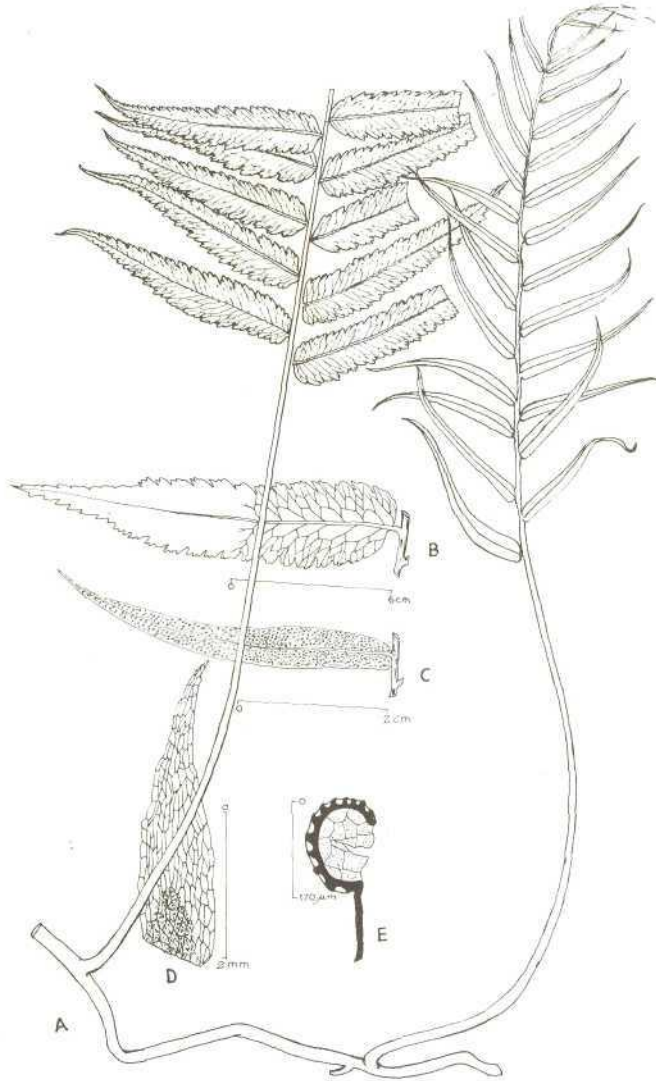


Fig. 1. *Bolbitis nagalandense* R. R. Rao & N. S. Jamir, *sp. nov.* A — Habit; B — Sterile pinna showing venation; C — Fertile pinna; D — Rhizome scale; E — Sporangium.

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