Two New Polystichums From the Himalayas¹

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During a study of *Polystichum* specimens from India and adjoining countries in the herbarium of the Komarov Botanical Institute, Leningrad, U. S. S. R., I discovered two new taxa which are described below. Both of them were filed under the name *P. aculeatum*, and the labels on most of the herbarium sheets indicated that they were identified as *P. aculeatum* by C. Christensen for his "Index Filicum." That the new taxa are distinct from *P. aculeatum*, a species found in the Indian subcontinent and certain parts of Asia, as well as in Europe, is clear from an examination of a photograph of the type of *Polypodium aculeatum* L. (Hort. Leiden, *Van Royen*), which was obtained from the Rijksherbarium in Leiden. (For a discussion of the typification of this species see Alston, A. H. G. 1940. J. Bot. Brit. & For. 78: 160–164).

Polystichum longipinnulum N. C. Nair, sp. nov.

Polysticho setifero (Forsk.) Moore ex Woynar affine, sed differt stipitibus dissiti-squamatis et pinnulis lineari-lanceolatis vel lineari-lanci-subfalcatis, latere acroscopico basibus valde manifeste auriculatis latere basiscopico serraturis spinulosis, pinnulis inferioribus penitus lobatis, interdum pinnatifidis.

Rhizome unknown. Stipes up to 25 cm long, pale, grooved on the upper side, bearing several scattered, large, lanceate, shining, purplish-brown, hyalinemargined scales 13-14 mm long, 2-4mm broad at the base, and smaller, fibrillose, brown scales throughout the stipe, rachis, and pinna midribs. Lamina triangular, up to 60 cm long, 32-34 cm wide, bipinnate, the basal (or rarely the subbasal) pinnae the largest, the upper pinnae very gradually reduced. Pinnae alternate, up to 18 cm long, 1.4–3.5 cm wide at the base, subsessile or sessile, closely pinnate throughout; pinnules opposite or alternate, subsessile or shortly stalked, not decurrent, linear-lanceolate or linear-lanceolate-subfalcate, 15-22 mm long, 3-4 mm wide, acute at the base, with a prominent, auricled acroscopic base and the basiscopic base narrowed to the midrib, the margins spinulose on the basiscopic side, those in the lower pinnules deeply lobed and the pinnules thus pinnatifid, the lobes aristate, the veins of each lobe with the acroscopic branch ending in a sorus and the basiscopic branch 1-forked with the lower branch entering the arista; lower surface of the lamina very sparsely scaly or glabrous; upper surface glabrous when old. Sori 7-10 pairs per pinnule, 1-2 pairs on the auricled lobe, the others in 1 row on each side of the midrib and rather nearer to it than the pinnule margins. Indusium very small, brown, peltate, not covering the sorus at maturity, often deciduous.

TYPE: Nepal, Wallich in ca 1885 (LE, Nair photo 3, CAL).

PARATYPES: Iserra (Khassia), India, 1440 m, 28 Sept 1867, C. B. Clarke 5114 (LE). Darjeeling, India, 2250 m, 17 Aug 1885, C. B. Clarke 27021 D (CAL, LE).

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Fig. 1. Holotype of *Polystichum longipinnulum*. Fig. 2. Holotype of *Polystichum setiferum* var. crenatum.

Polystichum setiferum var. crenatum N. C. Nair, var. nov.

Differt a P. setifero var. setifero pinnulis usque ad 16(18) mm longis, 4 mm latis ad punctum latissimum, nitidis, subcoriaceis, latere proximali recto et apicem versus dentato, latere distali leviter crenato, apice plus minusve rotundato aristato, loborum apicibus latere distali non aristatis.

TYPE: Punjab, India, King in 1878 (LE, Nair photo 4, CAL). PARATYPE: Punjab, King (LE).

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