

Colysis pothifolia (Ham. ex D. Don) Pr., A new record for Pithoragarh District (Kumaon Himalayas)

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INFORMATION on the fern vegetation is so far based on the classical but pioneering work of Clarke (1880), Beddome (1892), Hope (1904) and Duthie (1906). Kumaon Himalayas is very rich in pteridophytic flora because of varied topography, climate, soil and vegetation. Pithoragarh is one of the important districts of Kumaon Himalayas known as Shor valley, which is bounded by Nepal and Tibet. Punetha and Kaur (1987) reported 121 species of ferns and fern allies from Pithoragarh and later Punetha and Kholia (1989) added 86 species of fern allies. However, *Colysis pothifolia* (Ham. ex. D. Don) C. Presl was not reported from Pithoragarh though Pangtey and Punetha (1987) reported it from Nainital. Pande (1990) and Pande *et al.* (1994) reported ferns of Kumaon Himalayas but they recorded *C. pothifolia* from the authority of Pangtey and Punetha (1987). Thus, so far there is no report of occurrence of *C. pothifolia* from Pithoragarh.

During the course of exploration of threatened ferns of Kumaon Himalayas, an interesting fern was collected from one of the ravines near Debcchhina (Didihat, Pithoragarh), which was identified as *C. pothifolia* belonging to the family Polypodiaceae. All the available previous record indicates that this species has neither been collected nor reported from Kumaon Himalayas since 1987. Only few plants of this species are found growing on the rocks under the shade. This species does not appear to be common in this area and is very rare in Pithoragarh.

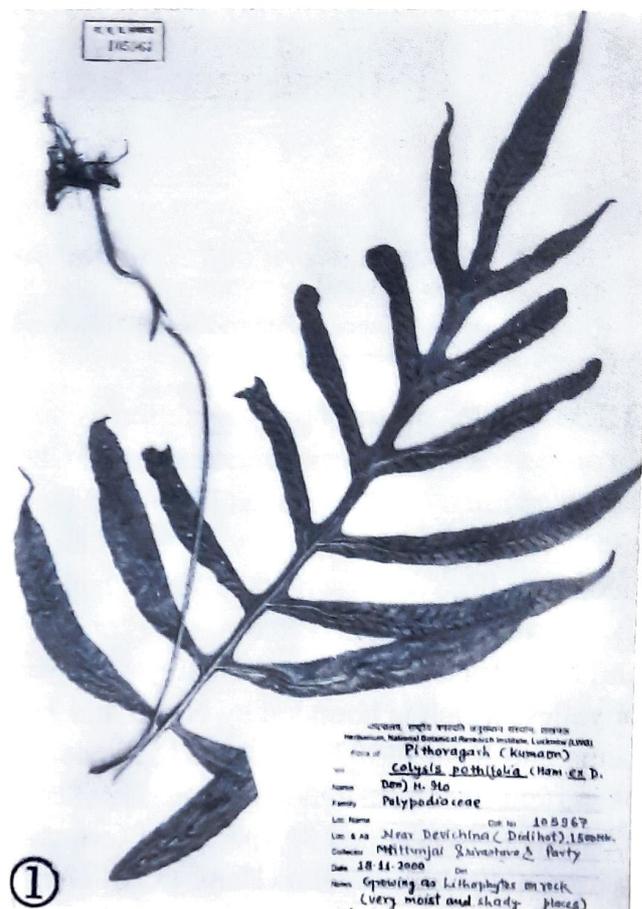
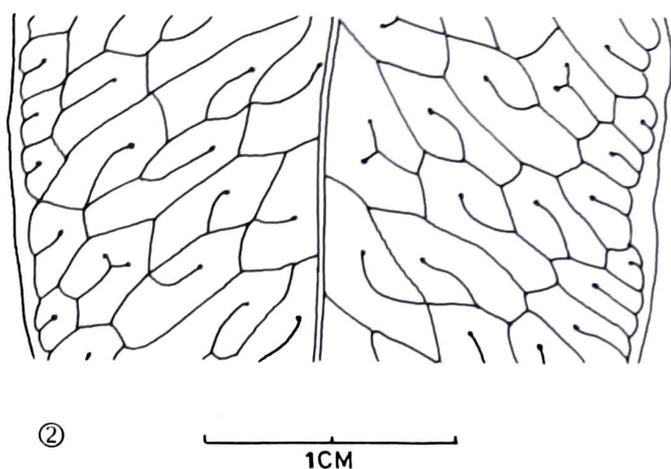
The occurrence of *C. pothifolia* in Pithoragarh is perhaps due to the dispersal of spores from the adjoining Nepal where this species is commonly found. This species was included by Pande and Bir (1994) in his report of endangered plants of Kumaon but this

report was based on the records of Khullar *et al.* (1991) from Patwardhannagar, Nainital which itself was based on the report of Pangtey and Punetha (1987).

As this species has not so far been reported from Pithoragarh it was considered desirable to place it on record as it may be of some phytogeographical interest. This report extends the geographic distribution of *C. pothifolia* and incidentally helps towards a better understanding of the phytogeographical affinities. The specimen examined is housed in the herbarium of National Botanical Research Institute, Lucknow, India.

Colysis pothifolia (Ham. ex D. Don) C. Presl, Epim. Bot. 148 (1849); H. Ito, J. Jap. Bot. 11: 89 (1935); in Hara, Fl. East. Himal. 1: 491 (1966); Nakaike, Enum. Pterid. Japon. Fil. 324 (1975); Kuo, Taiwania 30: 42 (1985); Satija & Bir, Asp. P1. Sci. 8: 85 (1985); Khullar, Fern Fl. W. Himal. 1: 73 (1994); Chandra, The Ferns of India. 399 (2000). *Hemionitis pothifolia* Ham. ex D. Don, Prodr. Fl. Nepal. 13 (1825). *Selliguea pothifolia* (Ham. ex D. Don) J. Sm., J. Bot. 3: 399 (1841). *Colysis elliptica* var. *pothifolia* (D. Don) Ching, Bull. Fan Mem. Inst. Biol. (Bot.) 4: 334 (1933).

Rhizome long creeping, scaly; stipe larger than frond, fronds much broader and longer, broadly decurrent at base, pinnatifid with a narrow wing on the rachis, wing less on the lower part of the rachis, apex acuminate; main costa of the lobes stout, prominent, lateral veins anastomosing to form areolae, areoles unequal with usually simple sometimes branched, free included clavate veinlets, main veins not very distinct to the edge, decurrent bases; sori exindusiate, spores nonperinate, exine smooth.



Figures: 1-2. *Colysis pothifolia* (Ham. ex D. Don) Presl: 1. Habit: 2. Venation

The species is growing as lithophytes on shaded rocks of closed forest.

Specimen examined: Debi Chhina (Didihat); Pithoragarh; LWG 105967; Mritunjai (2000).

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