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A NEW VARIETY OF *DICRANOPTERIS LINEARIS* (BURM. F., UNDERW. FROM INDIA[1]

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ABSTRACT

In the present communication a new variety of *Dicranopteris linearis*, a gleichenioid fern has been reported from Pithoragarh district of Kumaon (West Himalayas). This makes a total of sixteen varieties of the species (nine from India).

The gleichenioid fern *Dicranopteris linearis* is very variable in nature which is apparent from the fact that as many as thirteen varieties have so far been reported from Malaya (Holttum, 1957, 1959), with detailed key for identification of the different varieties. Out of these, six varieties have been reported from India, in addition to another two which makes a total of eight varieties known from India (Panigrahi & Dixit, 1969, 1971). Thus altogether fifteen varieties are already known. During the course of studies undertaken recently on the family Gleicheniaceae by the junior author, another variety (Fig. 1) has been found in the Pithoragarh district of Kumaon (West Himalayas). A fragment of this fern along with our comments was sent to Prof. R. E. Holttum who agrees with our opinion that this could be a new variety (personal communication). Table I shows the characters by which this new variety can be distinguished from two other closely similar varieties.

Dicranopteris linearis var. *hirta* Kaur *et* Punetha var. nov.

Varietati *subferruginea* similis sed natura coloreque foliarium capillorum et sororum position differt. Capilli persistentes et profusi, superne brunnei subtus hyalini, in rhachidi et utraque laminae superficie insiti praesertim in interveniis superioribus et venis abaxialibus. Sori supra ramos venarum laterarium et acroscopicos et basiscopicos.

Holotype : N. Punetha Coll. No. NBRI 12001; Didihat, Distt. Pithoragarh; 1700m; lodged at herbarium of National Botanical Research Institute, Lucknow, India (LWG).

Isotype : N. Punetha Coll. No. NBRI 12001 a (CAL), 12001 b (K) 12001 c (L).

This variety is similar to var. *subferruginea* but for the nature and colour of the foliar hairs and the position of the

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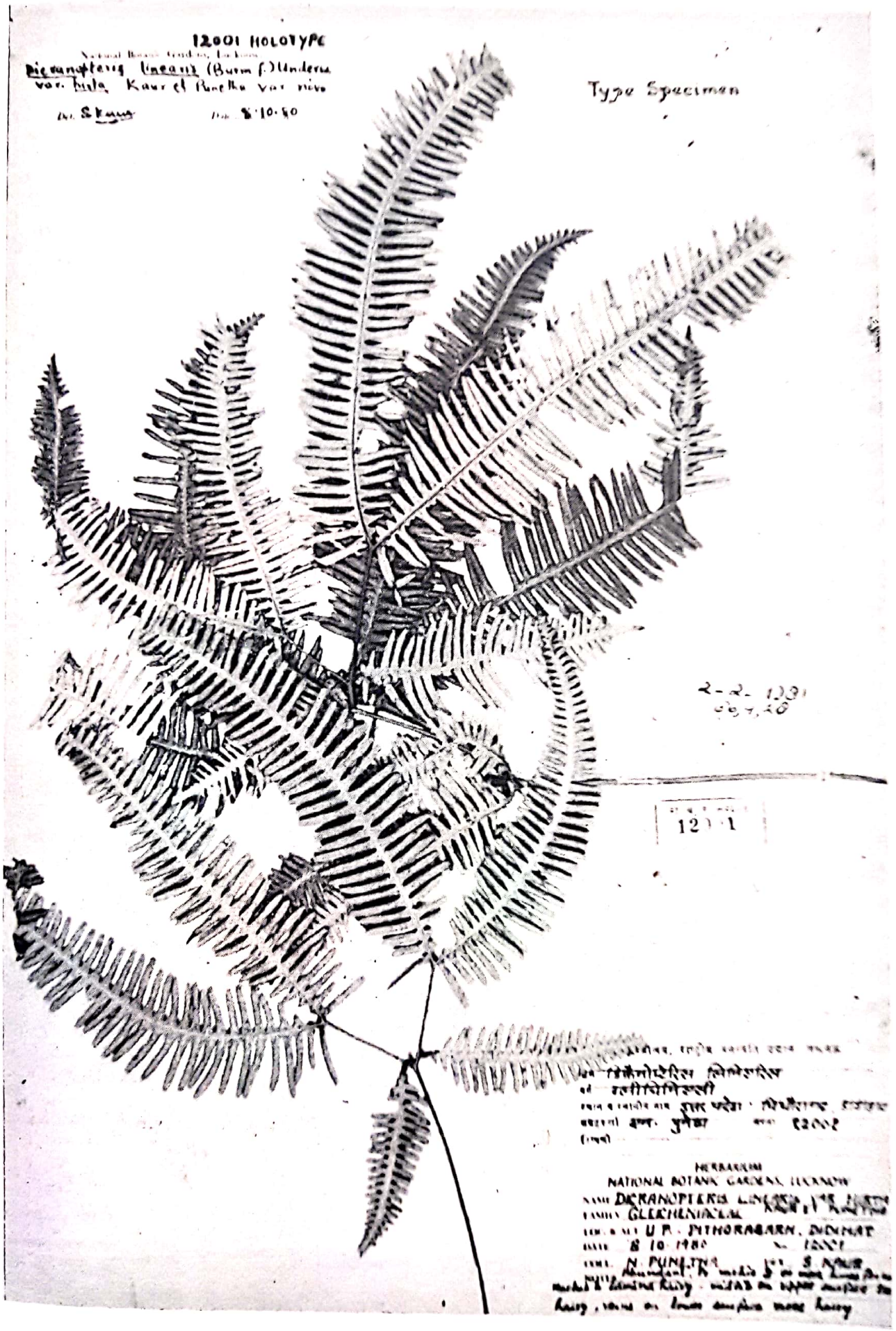

Fig. 1. Holotype of *Dicranopteis linearis* var. *hirta* Kaur *et* Punetha (LWG).

TABLE I

CHARACTERS BY WHICH VAR. *HIRTA* CAN BE DISTINGUISHED FROM VAR. *SUBFERRUGINEA* AND VAR. *WATTII*

var. *hirta*	var. *subferruginea*	var. *wattii*
Ultimate branches upto 31 cm long	Ultimate branches 14-20 cm long	Ultimate branches 24-30 cm long
Lowest basiscopic lobes of ultimate branches usually larger with more or less lobed margin	Lowest basiscopic lobes of ultimate branches usually larger with more or less lobed margin	Lowest basiscopic lobes of ultimate branches neither lobed nor enlarged
Lamina segments with prominent recurved edges	Lamina segments with prominent recurved edges	Lamina segments without reflexed edges
Hairs profuse and persistent on rachis and both surfaces of lamina	Hairs present on the lower surface on the veins	Hairs present on lower surface along the veins
Hairs form entangled web, brown above and hyaline beneath	Hairs pale rusty rather coarse and much branched	Hairs pale rusty fine and floccose
Sori on both acroscopic and besiscopic branches of lateral veins	Sori only on the acroscopic branch of the lateral veins	Sori only on the acroscopic branch of the lateral veins

sori. The hairs are profuse and persistent, brown above and hyaline beneath occurring on the rachis and both surfaces of the lamina especially on the intercostal areas above and on the veins on the abaxial side. The sori are situated on both acroscopic and basiscopic branches of the lateral veins.

Primary rachis commonly forked 3 or more times, both the branches at each forking more or less equal. Accessory branches upto 22 cm. long and normally not present at the ultimate forkings. Ultimate branches upto 31 cm long. Lowest basiscopic lobes of the ultimate branches usually larger with more or less lobed margins. Leaflets up to 4 cm long and 4 mm broad. Rachis and both surfaces profusely hairy with persistent hairs. Veins on the lower surface more hairy but midrib on the upper surface less hairy. Hairs on the lower surface brown but those on the upper surface (especially midrib) hyaline. Hairs entangled like those of var. *ferruginea*. Sori are borne superficially on both the acroscopic and basiscopic veins. Sporangia 8-10 in each sorus.

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