

characters distinctive enough to separate it from *Stigmaria ficoides* which is an aggregate "species" founded simply to accommodate temporarily the roots of *Lepidodendrons* and *Sigillarias*.

LYCOPODIALES. (?)

Genus *PSILOPHYTON*, Dawson.

1859. *Psilophyton*, Dawson, Quart. Journ. Geol. Soc., vol. 15, p. 478.

The genus was founded by Dawson for Devonian plants from Gaspe with a delicate, slender, and branching habit. Their nature has been much discussed, and though they have been recognised widely in various fossil floras, Nathorst (1894 p. 12) agrees with Schenk, Solms Laubach and other palaeobotanists that the value of this "genus" is "beinache gleich null" and considers that of the so-called species, only *Psilophyton princeps* shows anything like distinctive characters. It is most probable that very many of the fragments called "Psilophyton" are macerated rachises of ferns or of Lycopods.

Weiss in 1889 maintained that the "genus" *Psilophyton* of Dawson was already covered by Goeppert's *Drepanophycus* in 1852. But owing to the non-algal nature of the plants composing it, he suggested *Drepanophytum* to include *Psilophyton princeps* and other forms. To Weiss' position Dawson (1889) took objection, pointing out that the priority of *Psilophyton* stood, as "*Drepanophycus*" was an entirely unsuitable generic name for the Canadian plants, and that if it was to be altered to *Drepanophytum* this latter genus would then date only from 1889, while *Psilophyton* itself had stood from 1859.

Smith and White (1905) and Seward (1910) both give critical accounts of the genus to which reference should be made. It appears evident that the only plants in the genus which have any claim to be considered as independent organisms, are of Devonian age. The St. John specimens can lay little claim to a permanent identity. Nevertheless, though the "genus" is so doubtful, it is perhaps convenient to retain it to designate some of the fragments that have been so much discussed in palaeobotanical literature.