

BRIEF COMMUNICATIONS
EQUISETUM TELMATEIA EHRH. VAR. NANUM, NOV. VAR.

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In the years 1973 and 1974 approximately 65 sporophytes of *Equisetum telmateia* were obtained by sowing spores and culturing gametophytes (VAN HOEK 1977). All spores had been collected from one little stand, probably consisting of one clone. In the middle of August 1974 a sporophyte was discovered at a very early stage of development, which was clearly different from all others by its bluishgreen colour, in contrast with the bright light-green colour of the typical variety. The plant was grown under a polyethene bag in a flower pot filled with sand and clay in a temperature-controlled room at a temperature of 297 K and a light intensity of about 5500 lux (Philips TL M40W/33 RS). It developed much slower than the typical variety and also morphologically differently in these respects that stems following the first one did not branch and the increase of their widths was far less. 15 months after its origination the plant had produced 8 unbranched stems, all of them less than 1 mm in diameter and less than 5 cm in height. After 19 months 17 stems were present, less than 1 mm wide, up to 8 cm in height, some of them with one or two branches. The highest number of ridges was 5. At this time (March 1976) the plant was transferred to a laboratory room in front of a window exposed to the south, also kept under a polyethene bag in order to assure a high relative humidity. *Figure 1* depicts the plant at the age of 20 months. At 21 months 4 new stems were visible having 6 ridges. Later on the clone has been split and the parts were grown under different temperature and light conditions. After 4 years of development no stems of more than 1 mm in diameter and with more than 6 ridges had developed. It might be concluded that a stable stage of morphological development was reached and a diagnosis and a description could be given.

Diagnosis. Ortum ex *Equiseto telmateiate* var. *typico*, sed ab eo differt dimensionibus minoribus nimis atque caulibus glaucoviridibus sparse vel haud ramosis.

Descriptio. Planta pusilla crescens valde lente. Caules steriles glaucovirides usque ad 1 mm ampli, 8–10 cm alti, 5–6-carinati, scabriusculi, 8–12 (15) internodiis, pauce vel non ramosi; rami caulibus similes; ochreola 1–2 mm longa; vaginae ampliatae; dentes vaginarum triangulares liberi, 0,4 mm longi, sine acuminibus oblongatis; stomata in 2 seriebus unilineatis iuxtaposita; lacuna centralis stricta; collenchyma carinale 2–3 cellulas altum, valleculare nulla vel 1 cellula altum; endodermis circa quidquidquem fasciculum; rhizoma cum

stolonis brevibus 1 mm amplum, fuscum, non pilosum, laeve; lacuna centralis adest; endodermis circa quidquidem fasciculum. Caules fertiles non vidi.

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REFERENCE

HOEK, L. VAN (1977): Settling of *Equisetum telmateia* Ehrh. by means of gametophyte culture. *Acta Bot. Neerl.* **26** (1): 83-87.

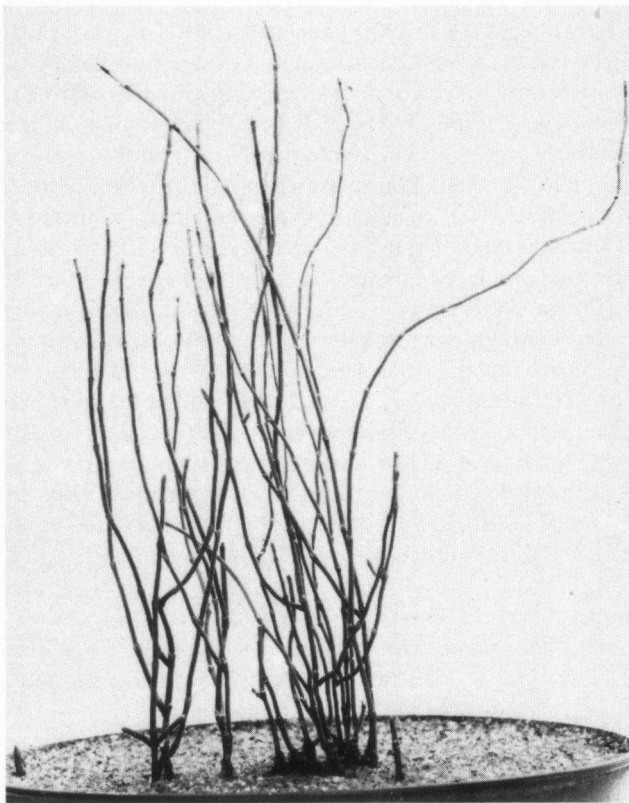


Fig. 1. *Equisetum telmateia* Ehrh. var. *nanum* Van Hoek, at the age of 20 months. $\times 1$.