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***Sphagnum* farming: local production of a horticultural peat substitute.**

In most countries of Western and Central Europe the stocks of fossil white peat – the most important raw material for substrates in professional horticulture – are nearly depleted. About 30 Mio m³ of white peat are globally used for this purpose annually and are converted to CO₂ after a short period of use. To extract the peat mires with their unique biodiversity are destroyed unrecoverably. As peat is a finite resource the extraction is continually relocated to new areas. This polluting and non sustainable procedure continues because an appropriate alternative for peat in horticulture is still lacking.

The cultivation of peat mosses (*Sphagnum*) may provide such alternative. White peat has in fact developed from peat mosses in living bogs and fresh peat moss biomass appears to have similar physical and chemical properties as white peat enabling plant cultivation without loss of quality. Potential areas for *Sphagnum* farming include rewetted degraded bogs, such as agriculturally used or cut-over bogs. Their sustainable commercial use for that purpose could ensure continual employment in these often depauperated rural areas.

In a three year research project “Peat moss as a renewable resource“ (financed by the German governmental Agency of Renewable Resources FNR) the University of Greifswald in cooperation with the State Authority for Mining, Energy and Geology (office Bremen) and the German peat industry studies the optimal conditions for *Sphagnum* growth. The first promising results show that with adequate management (e.g. water table regulation, fertilization) peat moss production is much higher than under natural conditions.

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