

## Two new Carboniferous fertile sphenophylls and their spores from the Czech Republic

Milan Libertín, Jiří Bek, and Jana Drábková


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Two new species of sphenophyllalean strobili with in situ spores are proposed from the Radnice Basin of the western and central Bohemian Carboniferous continental basins of the Czech Republic. *Bowmanites brasensis* sp. nov. from Břasy (Matylda Mine) and *B. pseudoaquensis* sp. nov. from Ovčín locality are determined mainly on the basis of their spores, which are about 100 µm in diameter. The thick-walled exine of the miospores is laevigate or sometimes very finely scabrate on the proximal contact area. Spores resemble the dispersed species *Punctatisporites obesus*. Cones of *B. brasensis* and *B. pseudoaquensis* are organically connected with stems having prominent blade leaves and represent a new group of sphenophyllalean strobili.

**Key words:** Sphenophyllales, *Bowmanites*, *Punctatisporites*, spores, Pennsylvanian, Carboniferous, Czech Republic

Milan Libertín [[milan\\_libertin@nm.cz](mailto:milan_libertin@nm.cz)], National Museum, Václavské náměstí 64, 11821 Prague 1, Czech Republic Jiří Bek [[mrbean@gli.cas.cz](mailto:mrbean@gli.cas.cz)], Laboratory of Palaeobiology and Palaeoecology, Institute of Geology v.v.i., Academy of Sciences, Rozvojová 269, 165 00 Prague 6, Czech Republic Jana Drábková [[drabkova@cgu.cz](mailto:drabkova@cgu.cz)], Czech Geological Survey, Klárov 3, 118 21 Prague 1, Czech Republic.

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