

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

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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

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