

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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