



## First report of *Cylindrocladium buxicola* on box in the Czech Republic

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Box (*Buxus* spp.) is a traditional ornamental shrub widely planted in Europe. In the Czech Republic there have been no records of any important diseases of box so far. Dark brown spots were observed on the leaves of *Buxus sempervirens* cv. 'Suffruticosa' and *B. microphylla* in a nursery in the northwest part of Moravia in August 2010 (Fig. 1). The observed symptoms on the leaves (Fig. 2) were consistent with symptoms of *C. buxicola* on *Buxus* spp. found in other countries (Henricot & Culham, 2002; Brand, 2005; Cech *et al.*, 2010), but black streaks on the stems were not recorded. The pathogen *Volutella buxi* also sporulated on the diseased leaves. White clusters of conidia, conidiophores and ellipsoidal vesicles of *C. buxicola* were associated with the spots on the abaxial surface of the leaves. Macroconidiophores (89-147 µm) were penicillate with hyaline, cylindrical, straight, and one-septate conidia (4.9-6.3 x 3.5-5.5 µm). Single conidia colonies were produced on potato dextrose agar at 25°C and were used to sequence the DNA region encoding for β-tubulin using the primers T1 and Bt2B. The sequence deposited in GenBank (Accession Number JN616287) was 100% identical to published sequences of *C. buxicola* in GenBank. This, taken together with morphological and cultural characteristics confirms the identity of the fungus as *C. buxicola*.

The leaves of five two-year-old plants of *B. sempervirens* cv. 'Suffruticosa' and *B. microphylla* were inoculated by spraying a suspension of conidia (1 x 10<sup>6</sup> conidia/ml) of *C. buxicola*. Control plants were inoculated with

sterile distilled water. Inoculated plants were incubated at 23°C with a 12 h photoperiod in humid chambers (95% relative humidity). Typical symptoms for *C. buxicola* infection on the leaves were observed 13 days after inoculation. *C. buxicola* was re-isolated from the inoculated plants. The control plants were healthy. To our knowledge, this is the first report of *C. buxicola* on *B. sempervirens* cv. 'Suffruticosa' and *B. microphylla* in the Czech Republic.

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Figure 1



Figure 2

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