Diplodia sapinea – now found in Finland

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Diplodia sapinea (syn. Sphaeropsis sapinea) causes stem cankers, tip dieback and blue stain on pines in temperate and subtropical regions worldwide. In pine plantations D. sapinea can cause large-scale dieback but in natural pine forests it is rather an opportunistic pathogen and in some pine species it can be regarded as an endophyte. In Southern Europe this fungus has existed at least for 100 years but not in Northern Europe. Climate may have restricted its distribution as its optimal temperature for growth in laboratory conditions has been reported to be as high as 28 °C and minimal threshold temperature 4 °C (Milijašević 2006). During recent decades this fungus has been reported also in Northern Europe: Lithuania in 1999, Estonia in 2007 and Sweden in 2013.

Recently, during August – October 2015 we found pycnidia of D. sapinea in Scots pine cones (Pinus sylvestris) collected in two parks of Helsinki and in a pine forest in Lohja. Morphology of the pycnidia and conidia correspond to those reported for D. sapinea. ITS – sequences of seven isolates matched to those of D. sapinea in GenBank. Finally, the species specific primer pair (DdF/BotR) for D. sapinea gave a positive result while the species specific primer pair (DsF/BotR) for D. scrobiculata (close relative to D. sapinea) gave a negative result. No symptoms of disease could visually be detected in trees of the stands where the cones were collected.