

New Blight of *Cupressaceae* in Austria and Croatia

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Abstract – In 2003, foliar blight was reported from several large trees of *Chamaecyparis lawsoniana* growing in an Austrian park. First symptoms had already been observed in 2000, and in 2003 up to 2/3 of tree height was blighted. In May 2003, samples were taken and a fungus fructificating abundantly on dead leaves and twigs was identified as *Stigmina thujina* (Dearn.)Sutton.

In July 2007, similar symptoms were observed in a nursery in Croatia on large *Chamaecyparis lawsoniana* trees and *Stigmina thujina* was again the main fungal species involved.

On both sites trees of *Chamaecyparis* were older than 25 years.

The blight spread outwards and upwards in the crown

The disease affected small twigs, leading to small cankers there, thus the distal parts died off. Infection also occurred on needles.

The lower branches in the crown totally had died off, in the rest of the crown the branches remained with only the outermost parts living.

Up to now, none of the trees died off completely.

There was no indication of root diseases or of collar rot.

The climatic situation on the two sites shows similarities:

Both sites are characterized by high air humidity all over the year.

An analysis of the sporulation dynamics conducted in 2004 revealed the presence of viable spores during the whole year. A striking peak in the number of sporodochia observed in June 2004 is believed to be a consequence of heavy precipitation in the preceding May.

Mycelial growth on MA was slow, showing a maximum rate at 20°C (12mm in 6 weeks). No growth was observed at 30°C and growth below 4mm at 10°C in 6 weeks.

Sporulation started readily at 20°C between 4 and 5 weeks on MA.

The primary source of infection remains unclear. The Austrian site is a public park daily visited by tourists from all over the world, where an unintended introduction is conceivable. The site in Croatia, however is a local nursery. According to observations of arborists, the disease can be spread with pruning equipment.

It seems very probable, that the main triggering factor for the epidemics to develop was high air humidity for many years.

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