

Artificial inoculation - Greenhouse studies

June 2014

Eye cuttings of an early blight susceptible potato variety (Kuras) are grown in 12 cm plastic pots (one per pot) in Einheitserde Typ T (Fruhdoerfer) for about 6 weeks at 20°C, during winter with additional lighting (16h).

When the plants have 4 fully expanded leaves, they are used for inoculation. The stems are cut just above the uppermost leaf that is to be inoculated, then.

A spore solution containing conidia from 14 days old cultures at a concentration of 1×10^5 spores/ml in distilled water with 0,05% Tween 20 are used for spray inoculation with a chromatography sprayer till run off.

Inoculated potato plants are kept in a mist chamber at 98% relative humidity [RH] and 22 to 24°C for 48h, then at 60-70% RH. RH is adjusted by 2 defensors/nebulizers within the chamber, during winter there is additional lighting (16h), too.

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FRAC protocol for Alternaria species, 2006