

Back

Agricultural and Food Science - abstract



Vol. 16 (2007), No. 1, p. 25-33

PROKKOLA, SOILE, KIVIJÄRVI, PIRJO, Effect of biological sprays on the incidence of grey mould, fruit yield and fruit quality in organic strawberry production

Keywords Fragaria \times ananassa, Botrytis cinerea, grey mould, organic cultivation, biological control, plant extracts, garlic extract, compost extract, seaweed, silicon, Trichoderma spp., Gliocladium catenulatum,

Abstract

Plant diseases, especially grey mould (Botrytis cinerea), may cause severe losses in organic strawberry production. In a two-year period, 2001–2002, the effects of different biological sprays on grey mould, the fruit yield and fruit quality of organically grown strawberry 'Jonsok' were studied in field trials at MTT Agrifood Research Finland in Ruukki and Mikkeli. In Experiment 1 the biological sprays were seaweed, garlic and compost extracts, silicon and Trichoderma spp. on both trial sites. In Experiment 2, compost extract, Trichoderma spp. and Gliocladium catenulatum sprays were studied in Ruukki. The treatment time was chosen to control grey mould. The effect of different biological sprays on the incidence of grey mould and total and marketable yield was insignificant compared to the untreated control. In both years and in all trials the incidence of grey mould was low and rot occurred mainly in the latter part of the harvesting period, which may partly explain the small differences between treatments. Anyhow, despite of feasible biological control cultural control methods will be important to manage the fungus in organic strawberry production.

Contact pirjo.kivijarvi@mtt.fi

[Full text] (PDF 533 kt)

Update 5.6.2007.

Source: MTT's Publications database Afsf