Abstract:

Grey mould (Botrytis cinerea) causes severe losses in organic strawberry production in Finland. The effects of different biological sprays, mulches, and irrigation methods on the incidence of grey mould and shelf life of harvested berries have been and are being studied in field trials at MTT Agrifood Research Finland in Ruukki, Mikkeli, and Jokioinen during 2000-2002. The biological sprays are composed of seaweed, garlic, and compost extracts, silicon, Trichoderma spp., and Gliocladium catenulatum sprays. The mulching materials used included black plastic, green mulch, straw, buckwheat husks, flax fibre matting and wood chips from deciduous and coniferous trees. Biological sprays and mulches are being studied in Ruukki and Mikkeli, using the cultivar 'Jonsok'. The effects of drip irrigation and sprinkler irrigation on grey mould are currently being examined in Jokioinen with 2 cultivars, 'Jonsok' and 'Bounty'. In the first harvesting year 2001 the effects of different biological sprays and irrigation methods on the incidence of grey mould and shelf life of the berries were insignificant. Mulching materials significantly affected grey mould incidence. Buckwheat husk mulch caused the most severe losses compared with other mulches.