

More regular light for rose under diffuse glass

In August 2010 Wageningen UR Greenhouse Horticulture in Bleiswijk started a study into rose growing under diffuse glass. With increasing irradiation, the first differences are now starting to appear. This research is financed by the EUPHOROS EU project, the Product Board for Horticulture, and the Dutch Ministry of EA&I (Economic Affairs, Agriculture & Innovation) in the context of the programme Greenhouse as Energy Source.

The rose 'Red Naomi' is grown in two greenhouse sections to study the effect of diffuse light on growth and development of rose. The reference section is glazed with normal greenhouse glass; the test section has a cover of diffuse glass (73% haze) with a double-sided Anti-Reflection (AR) coating.

The crop shows good growth in both sections and differences between the crops are not yet observed at first sight and production differences until now are still small. PAR measurements, however, are showing that light distribution in the two greenhouses is quite

different. On days with high irradiation, regularly occurring since mid March, the light level in the greenhouse with the diffuse cover is much more regular. A difference in number of burnt leaf tips is a direct effect of the

non-occurrence of high peaks. These are much less frequent in the section with diffuse glass, despite the screening in the reference greenhouse. Leaf tip burning is, as well as blue colouring of the petals, an indicator of the screening requirement of this variety. III

