

WUR GREENHOUSE HORTICULTURE INSPECTION REPORT

Test number: 2017-904
Subject: Pipe paint coating
Type: PIPE PAINT H51 SB
Submitted by: Mr G. Geraerts, Spuiterij Geraerts, Ambachten 10, 5711LC Someren (NL)

Purpose of the inspection

To determine the risk of damage to horticultural crops grown in greenhouses and warehouses in which this coating is used for protecting heating pipes and other pipes.

Pre-treatment

For this test, 2 samples comprising a total of 600 cm² were treated with the coating by the client. These two samples were delivered to Wageningen UR on 15 March. Testing these samples started on 15 March.

How the inspection was done

The test was carried out in an isolated room in which four flat trays were placed. The volume of each tray was 0.6 m³ and they were covered with a frame with a single ridge. The trays were heated electrically. The temperature was controlled centrally using a thermostat. The space was ventilated intermittently with air from outside the test trays. One tray was used as a neutral space without a sample, and one of the other three trays was used for testing the sample painted with the SB coating. Each tray was connected by a steel pipe to a stove. In that stove, the two samples were placed in a closed tube. The temperature in the tube was maintained at 95°C. This temperature is broadly similar to the estimated maximum value that a coating can reach in a commercial greenhouse. The vapours from the tube were passed intermittently into the tray via the pipe using a fan. The temperature in the tray was virtually constant at 23-24°C and the trays were illuminated with fluorescent tubes (18 hours per day). For the tests, young cucumber, Chinese cabbage and kohlrabi plants were used that were cultivated under artificial light. The condition of the plants was assessed almost every day.

Results of the inspection

During the 15-day test with the coated samples, no abnormalities were observed in any of the crops tested in terms of growth or any discoloration caused by the coating used (see photos).

Conclusion

Given the results of the test and given that the conditions represented a large overdose, it may be expected that this coating will not cause any difficulties in practice.

The coating PIPE PAINT H51 SB has been given the approval code KAS 2017-07.

Note

This report says nothing about the quality and soundness of this coating.

Wageningen, 30 March 2017

Wageningen UR Greenhouse Horticulture
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(E.A. van Os BSc / B.A. Eveleens)



Photos taken on 30-Mar-2017. Left: photo of plants that were aerated with greenhouse coating PIPE PAINT H51 SB. Right: control treatment without the coating.