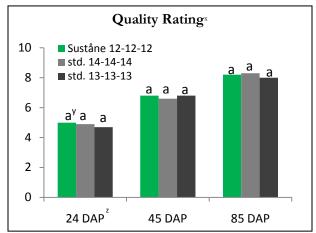


Research File: Sustane® 12-12-12

Fertility Trial, Caladium (Caladium x hortulanum 'Fire Chief')
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Rydal, Georgia – 2008

Due to increased environmental awareness and escalating costs of quality control release fertilizers greenhouse production is in need of alternative nutrient sources, preferably derived from sustainable resources. Therefore, Sustane® 12-12-12 (90 day), a natural based fertilizer made from aerobically composted turkey litter blend with high quality coated controlled release fertilizer was evaluated for use on 'Fire Chief' Caladium. The trial compared Sustane 12-12-12 (90 day) to two industry-leading controlled release fertilizers, a 13-13-13 (T70) and a 14-14-14 (3-4 mo.). Each fertilizer was incorporated at a rate of 0.85 pounds of nitrogen per cubic yard. The potting medium was a 50:40:10 mix (by volume) of pine bark, peat and perlite.



 $^{^{}x}$ plants rated on a scale of 1-9, 9=best y means within a measurement date followed by different letters indicates significant differences, according to Duncan (α =0.05) z DAP corresponds to days after planting

Picture taken 85 days after planting Rydal, GA during the summer of 2008



Results: Quality rating was equal for all treatment groups at 24, 45 and 85 days after planting. Fresh weight was measured at 85 DAP and was equal for all treatment three groups. At 63 days after planting, growth index, calculated as the sum of plant-width1, -width2 and -height divided by 3, was equal for all treatment groups.

Conclusions: For all parameters measured 'Fire Chief' Caladium grown with Suståne 12-12-12 (90 day) controlled release fertilzer performed equal or better to plants grown with either of the two control release fertilizers with an N-P-K ratio of 1-1-1. The trial results show Suståne 12-12-12 (90 day) can provide greenhouse growers with the same performance as current industry-leading controlled release fertilizers.