

Research File: Suståne[®] 8-4-4 Fertility Trial, Vinca (*Catharanthus roseus* 'Coral White') Warren Davenport PAT²H Horticultural Consulting Services 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, Suståne® 8-4-4, an all natural fertilizer made from aerobically composted turkey litter was evaluated for use on 'Coral White' vinca. The trial compared Suståne 8-4-4(45 day) to two industry-leading control 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.



The trial was performed in Rydal, GA during the summer of 2008, picture taken at trial initiation.



 Sustane
 Standard
 Standard

 8-4-4
 13-13-13
 14-14-14

At 42 days after planting shoot fresh weight of vinca grown with Suståne 8-4-4 was 14.6 grams compared to 17.8 and 16.3 grams for plants grown with the standard 13-13-13 and 14-14-14 control release fertilizers, respectively. Quality ratings of plants grown with Suståne 8-4-4 taken at 8, 15, 22, 29 and 36 days after planting were equal to the quality ratings of plants grown with the standard 13-13-13 and 14-14-14 control release fertilizers. At 36 days after planting bloom count was similar for all three fertilizers.

Conclusions: For all parameters measured 'Coral White' vinca bedding plant material grown with Suståne 8-4-4 performed equal 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 8-4-4 can provide greenhouse growers with the same performance as current industry-leading synthetic control release fertilizers.

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