



**Research File: Sustane® 8-4-4
Fertility Trial, Vinca (*Catharanthus
roseus* 'Pacifica XP Blush')**

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More than 25% of growers surveyed in 2007 reported managing fertility as the biggest challenge in organic production of ornamental crops, second only to pest management (Burnett and Stack, 2009)¹. Therefore, Sustane® 8-4-4, an all natural fertilizer made from aerobically composted turkey litter was evaluated for use on 'Pacifica XP Blush' vinca. The trial compared Sustane 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.

Picture taken 40 days after planting.



Sustane	Standard	Standard
8-4-4	14-14-14	13-13-13



The trial was performed in Rydal, GA during the summer of 2009, picture taken 6 days after planting.

Results: At 40 days after planting shoot fresh weight, plant quality rating, plant color rating and root quality rating was equal for all three fertilizers tested.

Conclusions: For all parameters measured vinca 'Pacifica XP Blush' grown with Sustane 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 Sustane 8-4-4 can provide greenhouse growers with the same performance as current industry-leading synthetic control release fertilizers.

¹Burnett, E.B., L.B. Stack. 2009. Survey of the Research Needs of the Potential Organic Ornamental Bedding Plant Industry in Maine. HortTechnology 19(4)743-747.