



**Research File: Sustane® 16-4-8 (180 day)
Fertility Trial, 'Daphne' Azalea (*Rhododendron*
sp. 'Daphne')**

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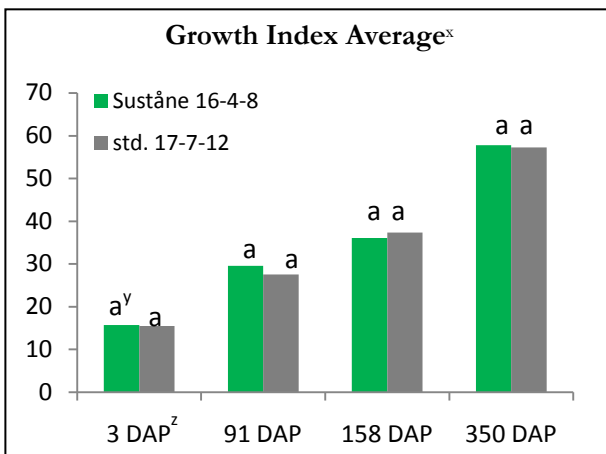
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Tyler, et al. (1993)¹ reported the addition of aerobically composted turkey litter to container substrate for production of ornamental crops is beneficial to plant performance, improved container substrate nutrient retention and provided adequate nutrients for plant growth, including micronutrients. The trial herein is predicated on the work of Tyler et al. (1993) and was designed to evaluate the effect of Sustane® 16-4-8 (180 day) control release fertilizer on plant performance of 'Daphne' azalea. More than half of Sustane 16-4-8 is composed of an all natural fertilizer derived from aerobically composted turkey litter. The trial compared Sustane 16-4-8 (180 day) to an industry standard 17-7-12 (12 mo.) control release fertilizer. Each fertilizer was incorporated at a rate of 2.0 pounds of nitrogen per cubic yard. The potting medium was a 3:1 mix (by volume) of pine bark and peat.

'Daphne' azalea, Mobile, Alabama summer 2008.



Results: At 158 days after planting, plant quality was equal for Sustane 16-4-8 and the standard 17-7-12 treatment groups. Plant dry weight was sampled at 164 days after planting; dry weights were equal for both fertilizers tested. At 158 days after planting, root quality ratings, rated between 1 and 5 with 5 being best, was equal for both fertilizers tested. Root rating for Sustane 16-4-8 was 3.4 and the standard 17-7-12 was 3.3. Growth index average was equal, at each measurement date, for both fertilizers tested.

Conclusions: Sustane 16-4-8 (180 day) provides adequate season-long nutrition for growth of 'Daphne' azalea. And performs equal to industry-leading standard 17-7-12 (12 mo.) control release fertilizer.

^x calculated as the sum of plant-width1, -width2 and -height divided by 3

^y means within a measurement date followed by different letters indicates significant differences, according to ANOVA ($\alpha=0.05$)

^zDAP corresponds to days after planting

¹Tyler, H.H., S.L. Warren, T.E. Bilderback and W.C. Fonteno. 1993. Composted Turkey Litter: I. Effect on Chemical and Physical Properties of a Pine Bark Substrate. *J. Environ. Hort.* 11(30):131-136.