# Research File: Sustane® 16-4-8 (180 day)

**Fertility Trial, Weigela (*Weigela florida 'Red Prince'*)**
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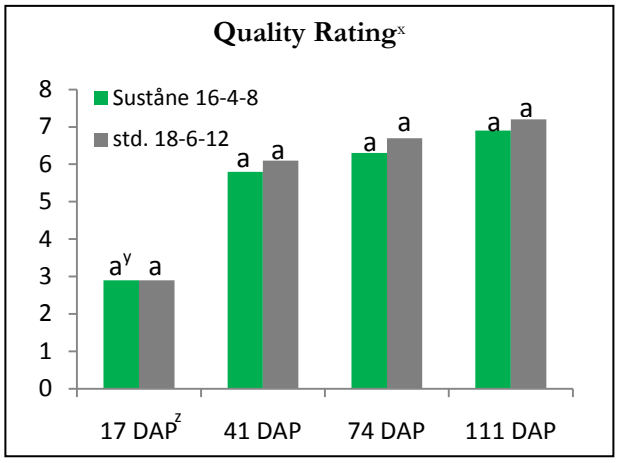
**Columbus, Ohio – 2008**

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 'Red Prince' weigela. 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 18-6-12 (8-9 mo.) control release fertilizer. Each fertilizer was incorporated at a rate of 1.8 pounds of nitrogen per cubic yard. The potting medium was 100% pine bark.

'Red Prince' weigela, Columbus, Ohio summer 2008.




[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

**Results:** At each date measured quality rating was equal for both fertilizers tested. Growth index average, calculated as the sum of plant-width1, -width2 and -height divided by 3, was equal for both fertilizers tested at 41 and 139 days after planting. End-of-season dry weights were taken at 146 days after planting, were equal for both fertilizers tested.

**Conclusions:** Sustane 16-4-8 (180 day) provides adequate season-long nutrition for growth of 'Red Prince' weigela. And performs equal to industry-leading standard 18-6-12 (8-9 mo.) control release fertilizer.

[1] Tyler, 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.