



Research File: Sustane® 16-4-8 (120 day)
Fertility Trial, Lantana (*Lantana x hybrida* 'New Gold')

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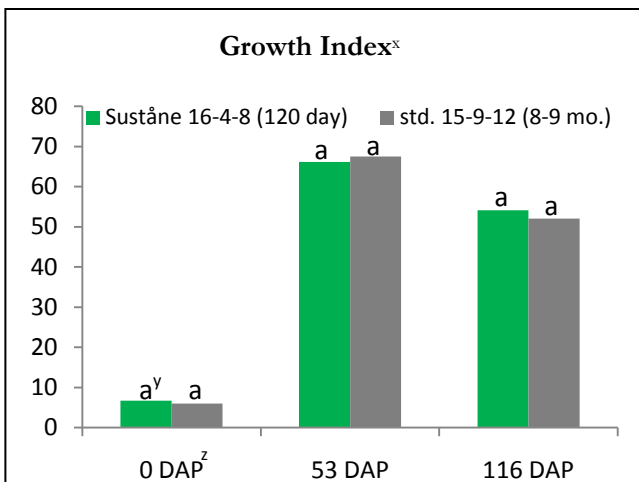
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Tyler, et al. (1993)¹ reported the addition of aerobically composted turkey litter to container substrate for production of ornamental crops is beneficial to plant performance, improved container substrate nutrient retention and provided adequate nutrients 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 (120 day) controlled release fertilizer on plant performance of 'New Gold' lantana. 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 (120 day) to an industry standard 15-9-12 (8-9 mo.) controlled release fertilizer. Each fertilizer was incorporated at a rate of 1.5 pounds of nitrogen per cubic yard. The potting medium was a 3:1 mix (by volume) of pine bark and peat.

'New Gold' Lantana Mobile, Alabama summer 2008.



Results: Growth index average, calculated as the sum of plant-width1, -width2 and -height divided by 3, was equal for both fertilizers measured at 0, 53 and 116 days after planting. End-of-season fresh weight was measured at 116 days after planting, were equal for both fertilizers tested; plants produced with Sustane 16-4-8 (120 day) had end-of-season fresh weights of 108.9 g compared to 111.3 g for plants produced with 15-9-12 (8-9 mo.), no statistical difference (according to ANOVA, $\alpha=0.05$). At each date measured quality rating was equal for both fertilizers tested.

Conclusions: Sustane 16-4-8 (120 day) provides adequate season-long nutrition for growth of 'New Gold' lantana. And Sustane 16-4-8 (120 day) performs equal to industry-leading standard 15-9-12 (8-9 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 ($\alpha=0.05$)

^z DAP 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.