

Experimental Organic Fertilizer Trials for Vegetable Seed Establishment

Pat²h Horticultural Consulting, Rydal, Georgia 2010

The objective of the trial was to evaluate efficacy of various organic fertilizers on germination rate and initial plant growth (first 4 weeks) of common vegetable plant species in a Georgia topsoil. The plant species tested were lettuce, peas, radish and spinach. Twenty seeds of each species were sown along a 21-inch long furrow. The fertilizers used were **Sustâne 4-6-4** organic, **Scotts Miracle Grow 7-1-2** "Organic Choice", **Espoma 4-3-3 Biotone Starter Plus** and an experimental vegetable **seed starter containing Sustâne**. Each fertilizer was applied as broadcast application with the exception of the experimental seed starter, which was applied in a band directly to the seeded furrow. Adequate soil moisture was maintained daily, as needed, by hand watering. The trial was conducted in Rydal, Georgia and commenced on September 29, 2010 and final evaluations were completed on October 28, 2010. **Standard Sustâne 4-6-4 provided superior results on most crops in germination and fresh weight (growth) over the four week trial period.**

Trial initiated on September 29, 2010 and final evaluations were completed on October 28, 2010.

Starter Treatment	Sustane 4-6-4		Scotts Organic Choice 7-1-2		Espoma Biotone 4-3-3		Experimental Organic (with Sustane) X-X-X	
Vegetable Crop	Germination	Fresh Wt.	Germination	Fresh Wt.	Germination	Fresh Wt.	Germination	Fresh Wt.
Baby Leaf Hybrid Spinach	12.0 a	1.13 a	4.7 b	0.74 b	6.0 b	1.10 a	7.7 b	1.12 a
Butternut Mix Lettuce	8.3 a	0.83 a	0.8 c	0.08 b	7.7 a	0.58 a	7.0 a	0.71 a
Snowbird Garden Peas	12.3 a	0.89 a	6.7 b	0.62 b	13.0 a	0.94 a	12.0 a	0.82 ab
Crimson Crisp Hybrid Radish	18.3 a	1.16 a	10.3 b	1.1 a	18.5 a	1.2 a	18.2 a	0.89 a

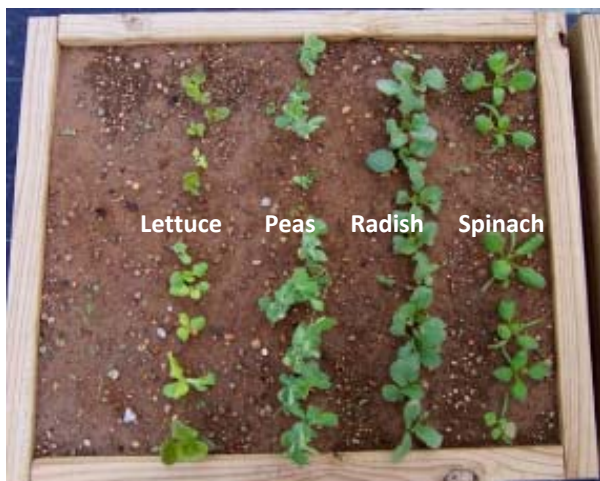
All treatments supplied 3.75 lb. N per 1,000 sq. ft. (or 1.19 kg. per 100 sq. meters.)



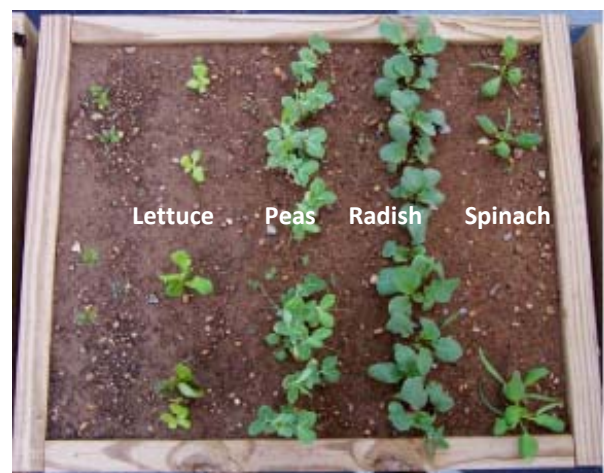
Experimental Vegetable Seed Starter Mix
Formulated with Sustâne 3.75 lb. N per 1,000 sq.



Scotts Miracle Grow 7-1-2 "Organic Choice"
Applied at 3.75 lb. N per 1,000 sq. ft.



Sustâne Organic 4-6-4 only
Applied at 3.75 lb. N per 1,000 sq. ft.



Espoma Biotone 4-3-3 Starter Plus
Applied at 3.75 lb. N per 1,000 sq. ft.