

Hagerty Compost Research Trial 2014 Results
Organic green beans
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Lenz Organic Green Blenz compost was applied at
Darrell Hagerty Farms on May 26th 2014 at a rate of
approx. 24.8 cu yd/acre (approx. 6.5 dry tons/acre).

Organic green beans were planted two days later. Pelleted chicken manure and
Nutra-rich fertilizer was applied evenly across all plots.

Site design included five replications of two treatments = Compost (C) and
Neutral (N). The neutral treatment was business-as-usual (BAU) and the
compost treatment was BAU + compost.

Photos were taken throughout the growing season and an increase in plant size
was observed in the compost area. (See picture 1).

Harvest data collection took place on Aug. 6, 2014.

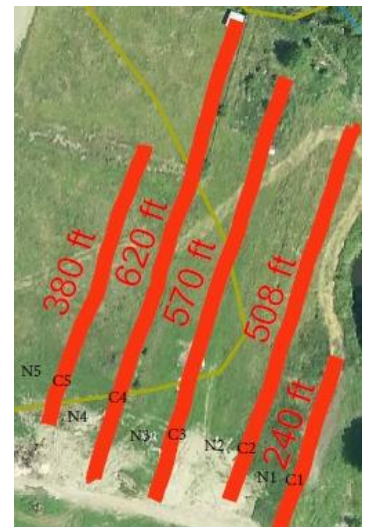
Protocol:

- 1) Removed all above ground plant matter from three, 3 ft. subsamples
in each rep. and collected weights.

Picture 3: Step 1, all above ground biomass removed in three subsamples per
rep.



Picture 1: Rep. 5 on July 17, 2014, compost treatment on left.



Picture 2: Site design mapped by
Leif Fixen.



Picture 4: Andrew Corbin, PhD. records
the weight of each subsample.

- 2) Removed green beans from the plants and recorded weights of “total” beans in each subsample.
- 3) Separated the small, unmarketable beans in each subsample using a gauge provided by the farmer. Unmarketable bean weights were recorded and the marketable bean weights for each subsample were found by subtracting unmarketable beans from the total beans from each subsample.



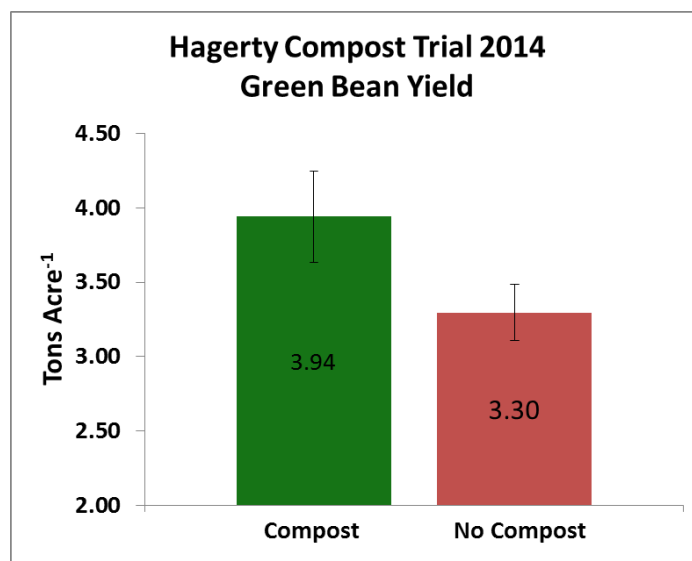
Picture 5: Step 2, Compost Program Staff, Julie Kintzi removes green beans from the plants.



Picture 6: Using the gauge to determine marketable vs unmarketable beans.

Results:

Compost resulted in a statistically significant 19% (.64 ton/acre) increase in yield compared to the business-as-usual treatment. At \$485/ton of green beans, this increase in yield translates to a \$312/acre gross increase in profit for Darrell. Including spreading expenses such as labor, fuel, and machinery, the break-even point for Darrell is \$12.58 per cubic yard of compost, delivered and applied.



Special thank you to Darrell Hagerty for participating in this compost research trial and to Lenz Enterprises for provision of the organic compost! Also, thank you to the harvest team: Kate and Bill Halstead, Julie Kintzi, Hallie Harness and Andrew Corbin of WSU Snohomish County Extension and Leif Fixen of the Snohomish Conservation District.