

Compost Use in Agriculture, Research and Demonstration Project

This program is available to local farmers through a cooperative partnership of WSU Extension Snohomish County, Snohomish County, Snohomish Conservation District, Waste Management, and local compost producers Cedar Grove Composting, Lenz Enterprises, and Bailey Compost

November 2013

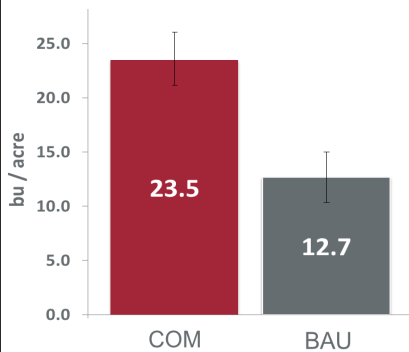


Research Results:

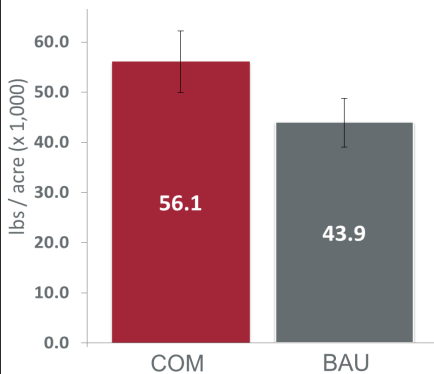
BAU =Business as Usual

COM=BAU + Compost

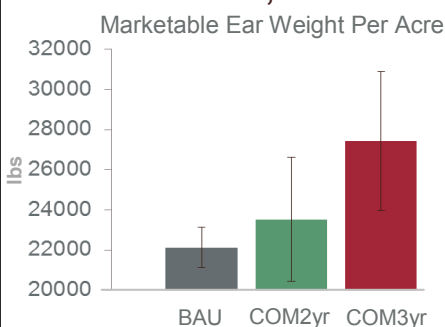
Triticale Yield, 2011



Pumpkin Yield, 2012



Sweet Corn, 2013



The Compost Outreach Project began in 2011 as a partnership between WSU Extension Snohomish County, the Snohomish Conservation District and Cedar Grove Composting.

Cedar Grove wanted to tap into the agriculture industry as a market for their finished compost and WSU wanted to research and evaluate the benefits of commercially-produced food and yard waste compost in local crop production.



The Compost Outreach Project has expanded with diverse funding sources and partnerships. The two-part program aims to provide as many farmers as possible the opportunity to utilize the compost through on-farm Research and Demonstration Trials over a variety of cropping systems.

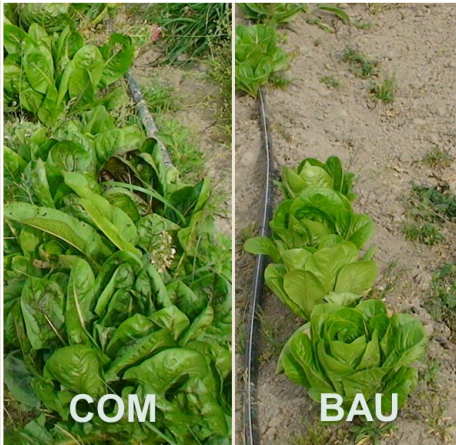
Research Trials:

- **Triticale, 2011** (18.5 dry tons of compost/acre*) - 100% increase in yield
- **Pumpkins, 2011 & 2012.** 2012- (27.5 dry tons/acre) - 20% increase in yield
- **Field Corn, 2012** (13 dry tons/acre) - No significant difference in yield
- **Field Corn, 2013** (7.25 dry tons/acre) - Yield results pending
- **Sweet Corn, 2013** (15 dry tons/acre) - 24% increase in weight of marketable corn ears between three years of compost treatment and control

* assuming 50% moisture content of compost

Demonstration Trials:

Lettuce Trial



- 59 trials (2011-2013)
- Farmers receive a donated ~50 cu. yd. load of compost and apply it alongside a business as usual (BAU) treatment
- Crops: Blueberries, raspberries, blackberries, hazelnuts, potatoes, hay, haylage, pasture grass, broccoli, lettuce, flowers (multiple species), pumpkins, turf grass, field corn, sweet corn, nursery and orchard trees, and more



Are You a Local Farmer?

GET INVOLVED!

For more information:

Visit the program website:

www.snohomish.wsu.edu/compost

Or call the program

coordinator:

Hallie Harness

(425) 357-6026

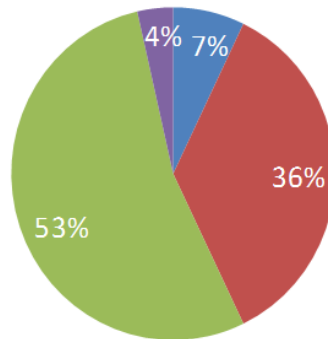
hallie.harness@wsu.edu

2013 Farmer Survey Responses:

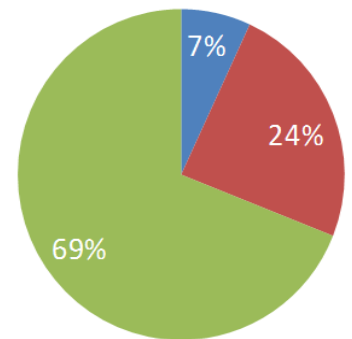
n=29

Effect of compost on crop production:

Effect of compost on soil quality:



■ Somewhat Adverse Effect
■ No Perceived Difference
■ Improved
■ Greatly Improved



Lessons learned from farmer correspondence and focus groups:

- Farmers are looking at compost as a substitute for poultry manure
- Farmers understand the benefits of increasing and maintaining organic matter in their soils, and see compost as a good method of doing so
- Many farmers are moving away from commercial fertilizers, but know that compost is not a direct substitute
- Several would not have tried compost without this program
- Barriers to compost use include spreading (time, equipment) and compost price
- Some farmers believe that compost use is more feasible in small scale specialty crop operations than large scale commodity crop farming

WASHINGTON STATE UNIVERSITY
SNOHOMISH COUNTY EXTENSION

Snohomish County



Composting Council®
Research & Education Foundation



King County