Economics of Composting & Compost Application

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Economics of Composting

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"Composting adds diversity to my operation. It's a potential revenue source that can increase income without having to increase acres.



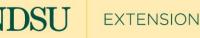




Topics to be covered

- Why compost?
- Equipment and equipment costs
- Case studies: How composting fits into the operation of three producers.







Why compost?

- Reduce chemical fertilizer costs
- Reduced transport costs
- Potential revenue source
- Superior quality & soil health benefits







	Nutrient content (lb/ton compost)	Price of chemical fertilizer (price/lb)	Nutrient value (per ton compost)
Nitrogen	20	\$0.27 - 0.38	\$5.40 - \$7.60
P_2O_5	16	\$0.41	\$6.56
K ₂ O	22	\$0.28	\$6.16
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Reduce chemical fertilizers expenses by 50%



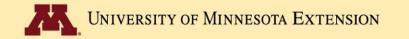






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 "If the cost of make and applying compost is less than the cost of an equivalent amount of chemical fertilizer, then the decision is a no brainer.







- "If the cost of make and applying compost is less than the cost of an equivalent amount of chemical fertilizer, then the decision is a no brainer."
- "Even if I am just breaking even, it is worthwhile because I know compost is bringing benefit to the soil that chemical fertilizer does not."







Composting reduces hauling costs

"The economics of composting really boils down to freight."







Composting reduces hauling costs

- "The economics of composting really boils down to freight."
- "Essentially, producers can haul compost twice as far as manure for the same money."







Compost offers a potential source of revenue

Composting offers the potential to diversify operations. For some producers, it could be a niche that provides an additional avenue for earning revenue.









Superior Quality of Compost

 Reduces the number of viable weed seeds and soil pathogens



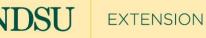




Superior Quality of Compost

- Reduces the number of viable weed seeds and soil pathogens
- Improves planting ease







Superior Quality of Compost

- Reduces the number of viable weed seeds and soil pathogens
- Improves planting ease
- Uniformity



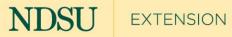










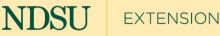




Soil Health Benefits

 Compost amendment supported high yield and at the same time increased soil organic matter.



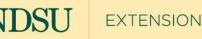




Soil Health Benefits

- Compost amendment supported high yield and at the same time increased soil organic matter.
- Chemical fertilizer and raw dairy manure produced high yields but did little or nothing to improve the soil.







Why is organic matter a big deal?

 Serves as a buffer for crop production systems during extreme conditions.









Why is organic matter a big deal?

- Serves as a buffer for crop production systems during extreme conditions.
- There is always mineralization going on.













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Thank you!

