

Conventional, compost, organic production compared for strawberry

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A team of researchers from North Carolina State University set out to provide strawberry growers in their region with information that could help them transition to more sustainable soil and pest management production practices. Their study, published in the August 2015 issue of *HortTechnology*, compared conventional, compost, and organic strawberry production systems in the southeastern United States, and revealed good news for growers. All three systems resulted in positive net returns, and two showed "considerable reductions" in negative environmental and human health impacts.

According to the authors, the nonfumigated compost [system](#) and organic system evaluated resulted in reductions in negative environmental and [human health](#) impacts measured by a set of indicators. "For example, the total number of lethal doses (LD50) applied per acre from all chemicals used in each system and measuring acute human risk associated with each system declined from 118,000 doses/acre in the conventional system to 6649 doses/acre in the compost system and to 0 doses/acre in the organic system," the authors explained. "Chronic human health risk, groundwater pollution risk, and fertilizer use declined as well in the compost and organic systems as compared with the conventional system."

The scientists said that the report can be a guide for strawberry growers in the region who want to improve soil management practices, those who are considering starting new strawberry enterprises, or professionals who advise strawberry growers on business management decisions.

Although the compost system resulted in lower net returns than the conventional system (\$11,100/acre as compared with \$14,979/acre), the authors say it still has merits. "We believe that the compost system should be considered as economically viable transitional alternative to proactive growers who are interest to improve their soil quality, especially given any possible future restrictions on the use of fumigation and further deterioration in soil quality in the conventionally managed system," they said.

More information: The complete study and abstract are available on the ASHS HortTechnology electronic journal web site:

[horttech.ashspublications.org/ ... nt/25/4/585.abstract](http://horttech.ashspublications.org/...nt/25/4/585.abstract)

Provided by American Society for Horticultural Science

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