IMPACT OF COMPOST AND TILLAGE ON SWEET CORN YIELD, SOIL PROPERTIES, AND NEMATODES

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INTERPRETIVE SUMMARY

Recycling of urban plant debris as yard waste compost (YWC) requires extensive research in Florida and the USA. This research investigated the use of YWC as a fertilizer amendment and its effect on soil quality and sweet corn yield. Data show that the effect of YWC is for sweet corn yields of fancy grade ears to increase by as much as 70%. Extension fertilizer recommendations can possibly be cut by one-half under these old YWC additions, whereas the control required the full recommendation. Soil quality is highly improved as evidenced by a large reduction in bulk

density and by increase in soil water holding capacity of 70 to 150%, depending upon the old and new YWC treatment combination. The more favorable soil quality from addition of YWC resulted in increased corn yield. Greater numbers of root-knot nematode were associated with a more favorable soil environment. The healthier corn likely provided a good host environment for increased root-knot nematode numbers.

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