

On-Farm Trials Using a Field-Scale, One Meter Resolution Variable Nitrogen Rate Applicator. (S04-raun092840-Oral)

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Abstract:

Sensor-based variable nitrogen rate applicators have not been evaluated at the farm scale. Ten farmer fields were identified and fertilized using the N-Tech (Ukiah, CA) variable N rate applicator (VRT) developed at OSU. Grain yields averaged 2.7 Mg/ha when each 0.37 m² were fertilized using VRT. At the same average N rate as that employed with VRT (flat rate), grain yields averaged 2.4 Mg/ha. The increase in yield was due to recognition and treatment of small-scale spatial variability.

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