

# 2006 CMDC

# Crop Canopy

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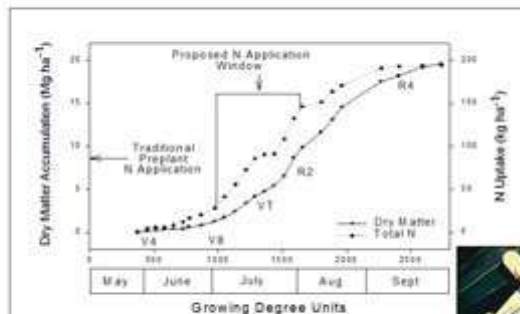
## Why Low N Use Efficiency?

- Large, and uniform doses of N prior to planting
- Spatially variable landscapes
- Recipe for low N use efficiency



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## Premise Of In-season N Application



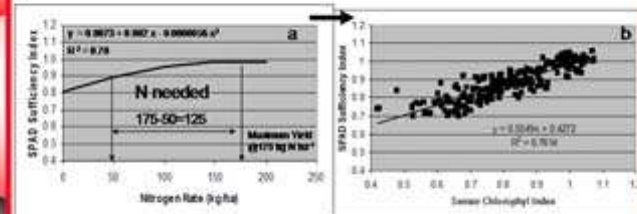
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## Why In-season N Management ?

- Worldwide fertilizer nitrogen use efficiency (NUE) for cereal grains estimated at only 33%
- Unaccounted 67% represents a \$15.9 billion annual loss of fertilizer N

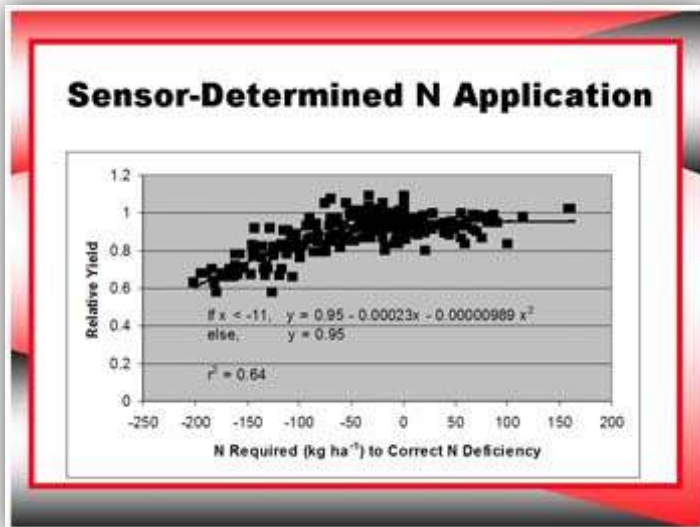
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## Chlorophyll Meter Vs. Sensor



$$N_{\text{applied}} = \text{function}(\text{Sensor Chl Index})$$

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