

**BUILDING A CORN NITROGEN RATE DATABASE
FOR MINNESOTA'S IRRIGATED SANDY SOILS**

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A study was conducted to determine the optimum N rate to apply for corn grown on irrigated sandy soils in Minnesota. Sandy soils in Minnesota vary in the texture of the surface from silt loam to sand. Since 2006, 11 sites had 8 to 9 N fertilizer rates applied. The optimum N rate for the sandy sites with a silt loam surface texture ranged from 168 kg N/ha to 200 kg N/ha while the sandy surfaced soils optimum N rate ranged from 250 kg N/ha to 280 kg N/ha. The silt loam surface soil sites optimum N rate was similar to the N guideline for high production environments while the optimum N for the sandy surface soils was greater. This information will be incorporated into the current N guidelines for Minnesota.

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