

NITROGEN RATE EXPERIMENT

Materials and Methods:

- Plot size 13X35 ft., 12 inch row spacing
- 5 Nitrogen rates: 10, 30, 50, 70 and 90 kg ha⁻¹
- Sunflower hybrid 63A21 was seeded at 45,000 plants acre⁻¹
- Conducted in 2010 at Indian Head, Outlook, Swift Current, and Tribune. In 2011, at Indian Head, and Swift Current. In 2012, at Indian Head, Swift Current and Tribune.

Results:

- Grain yield increased linearly with increased Nitrogen fertilizer
- As Nitrogen increased, kernel weight increased.

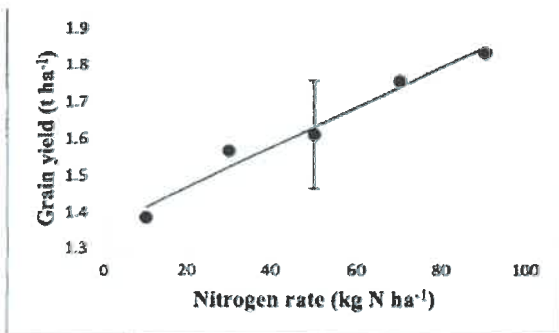


Fig. 3 Relationship of Nitrogen and Average Grain Yield at several locations across Saskatchewan for sunflowers from 2010 to 2012.

Error bar represents LSD 0.05

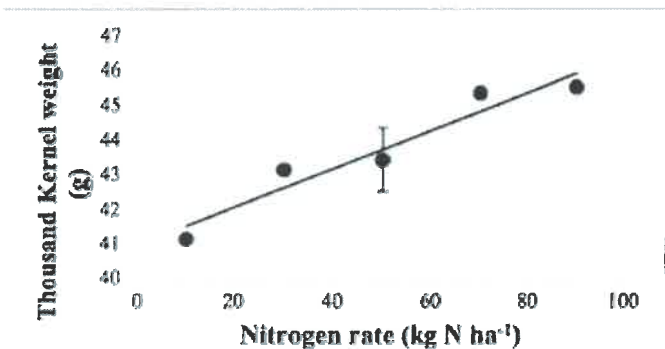


Fig.4 Relationship of Nitrogen Rate and Average Thousand Kernel Weight at several locations across Saskatchewan for sunflowers from 2010 to 2012

Error bar represents LSD 0.05

CONCLUSION:

Results from this research show that growers should use 90 kg/Ha-1 (81 bu/acre) of Nitrogen fertilizer.