

Seeding Rates of Oats in Northeastern Ontario

(Cochrane SCIA Project 2008)

Purpose: The objectives of this project; to evaluate different seeding rates of oats and their impact on yield and quality. Lower seeding rate: target 200plants/m² (or 800,000 seeds/ac) medium seeding rate: target 250 plants/m² (or 1M seeds/ac) higher seeding rate: target 300 plants/m² (or 1.2Mseeds/ac) OMAFRA recommendations between 200-300 plants/m²

1. We also split the plots in two to evaluate 2 nitrogen rates; lower rate 45lbs and higher rate 65lbs of actual N

Methods: 4 varieties were selected by the cooperator and AC Rigodon was chosen as the check.

- **Results:** Most of the seeding rates were above the OMAFRA / research recommendations. Seed cost per acre were higher
- No yield advantage to increase seeding rate. The plots confirmed that we should aim at the 800,000 – 1,200,000 seeds per acre for the best economical yield.
- Cost of Nitrogen \$612 per tonne (\$15.27/bag) for 34-0-0

2,205 x 34% = 750lbs actual N = \$.82/lb **Higher rate 200lbs** of 34-0-0= 68lbs of N, cost \$56/acre average yield was 2,608 lbs **Lower rate was 130lbs** of 34-0-0 = 45lbs of N, cost \$37/ac Average yield was 2,001 lbs

Conclusion: extra N cost \$19 per acre more for an additional yield of 607 lbs. If oats are trading at \$245 per tonne (\$.11/lb) = \$66/ac -\$19 fertilizer = **net \$48/acre**

Summary: Quality was good on all 4 varieties; they all made the Quaker grade. Bushel weight ranged from 43-45 lbs and moisture at harvest was at 15.5%

Next Steps: this is the 3rd consecutive year that the Cochrane Soil and Crop Improvement Association have had an oat demonstration project.

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