

**Manitoba Corn Growers Association**  
**CORN NITROGEN RATE ON MANURED GROUND**  
**Replicated Strip Trial Protocol**

**Objective:**

The purpose of this project is to quantify the agronomic and economic impacts of a spring nitrogen application on fall applied manure to corn in alternating strips across the field.

- An example is shown on the right where 120 lbs of N is applied in the fall from manure (Base Rate N) vs. 40 lbs of additional N at planting vs. 80 lbs of additional N applied at planting.
- The **width** of a strip must be at least as wide as the combine pass, preferably wider. Length should be approximately 1,320 feet (1/4 mile).
- Harvesting must ensure at least **one “pure” combine pass** from each treatment (not mixing yields from two different treatments).

1	Base Rate N (Ex. 120 lbs/ac N) - Fall Applied
	Base Rate N + 40 lbs/ac - At Planting
	Base Rate N + 80 lbs/ac - At Planting
2	Base Rate N + 40 lbs/ac - At Planting
	Base Rate N (Ex. 120 lbs/ac N) - Fall Applied
	Base Rate N + 80 lbs/ac - At Planting
3	Base Rate N (Ex. 120 lbs/ac N) - Fall Applied
	Base Rate N + 40 lbs/ac - At Planting
	Base Rate N + 80 lbs/ac - At Planting
4	Base Rate N + 40 lbs/ac - At Planting
	Base Rate N + 80 lbs/ac - At Planting
	Base Rate N (Ex. 120 lbs/ac N) - Fall Applied

**Farmer Requirements:**

- Areas containing waterways and headlands should be avoided. All other factors in the trial area must be managed the same (planting date, variety, etc.).
- **If possible**, accurately record where all treatments were applied using GPS mapping equipment.
- All strips must be harvested on the same day with the rows.
- If available, harvest with a calibrated yield monitor equipped with GPS.
- Allow the Manitoba Corn Growers Association to use collected data for research, educational, and informational purposes.

**TAC Agrees to:**

- Accurately record where all treatments are applied, including the time of application, seeding date, variety, etc.
- Collect aerial images from each field and provide them to the farmer at no cost.
- Set up trial with farmers in field, soil sample, weigh individual strips with weigh wagon, conduct plant counts.
- Provide a report analyzing the statistical and economical treatment differences.
- Keep data in a confidential manner that can't be linked back to the individual producer by other parties.
- Make this **minimum work for farmers**.

**Benefits to the farmer:**

- Access to latest research which can be adapted to their farm.
- Creating a crop production database for your local area.
- There is a structure to coordinate resources and discussions.
- Higher quality of data – multiple evaluations across several farms under different management styles, soil types and cropping history.
- Share not only data but also personal errors and triumphs.

Please contact Jordan Karpinchick at Tone Ag Consulting  
if you are interested in doing a trial at 204-433-7189 or 204-807-5395.  
You can also email us at [jordankarpinchick@toneag.com](mailto:jordankarpinchick@toneag.com).

