



Fertilizer
Canola

and

Links you should know about

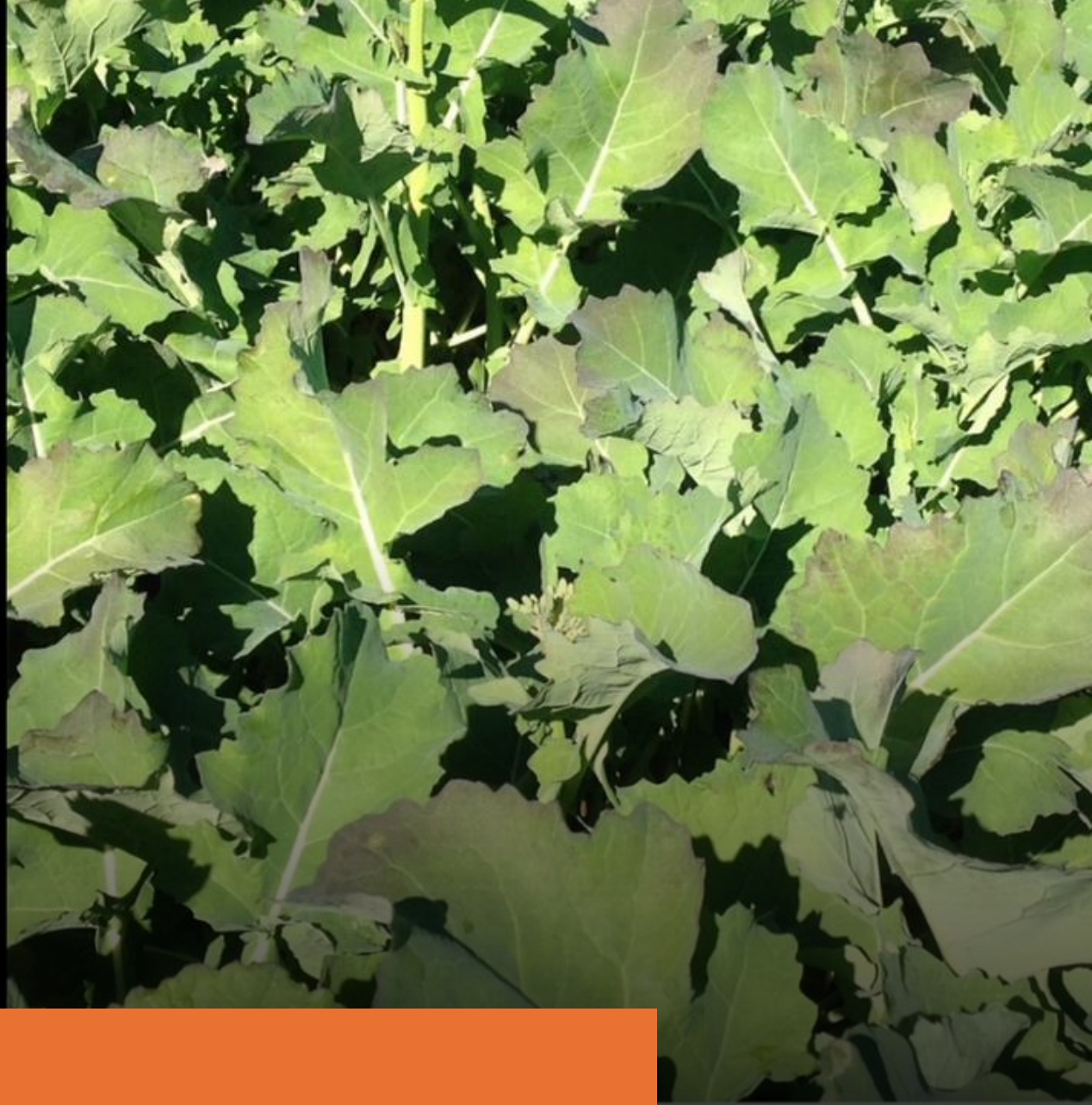
- <https://www.youtube.com/watch?v=ultCzE6b1J0>
- <https://www.ndsu.edu/agriculture/sites/default/files/2023-03/sf1122.pdf>
- <https://www.canolacouncil.org/canola-encyclopedia/fertility/>

People you should know and follow

- John Heard- soil fertility specialist with Manitoba Agriculture
- Jason Voogt- independent crop consultant Manitoba
- Brunel Sabourin -independent crop consultant/researcher Manitoba
- Naeem Kalwar-Soil Health specialist Langdon
- Kristie Sundeen- Pioneer agronomist
- Jordan Varberg-BASF researcher
- Brady Goettl-NDSU extension soil specialist
- John Breker- Agvise



Nitrogen



Resources

- Dr. Franzen Cap N at 150 lbs/A for eastern ND
- Agvise
 - 2000 lb/A yield goal 140 N total
 - 2400 lb/A yield goal 170 N total
 - 2800 lb/A yield goal 195 N total
- John Heard 3.3 lbs N/bushel of yield



Farmer harvested
2200 lb/acre canola-
going to wheat

- Composite Soil Sample 101 lbs/A N
- Zone Sample results
 - Dark Green 42
 lbs/A N
 - Light Green 68
 lbs/A N
 - Blue 147 lbs/A N
 - Red/Orange 337 lbs/A N



Sulfur

- Most important nutrient outside of N
- NDSU recommends 15-30 lbs/A as sulfate
- 24-30 lbs/A for today's hybrids seems good

Nitrogen and Sulfur application

- Spring > Fall for sulfur application
- Spring has become the market for spring urea with canola
- Broadcast > Band (unless strip till)
- Trying to get all your sulfur needs in a starter is hard due to N amount
- Use 21-0-0-24 or ATS as main source
 - If using starters that contain elemental sulfur/sulfate sulfur- count the sulfate portion

Guidelines for seed-placed nitrogen with canola

	1” spread* (Disc or knife)**			2” spread* (Spoon or hoe)			3” spread* (Sweep)		
	Row spacing								
	6”	9”	12”	6”	9”	12”	6”	9”	12”
	Seedbed utilization								
	17%	11%	8%	33%	22%	17%	50%	33%	25%
Light soil (sandy loam)	10 (0)	5 (0)	0 (0)	20 (10)	15 (0)	10 (0)	30 (20)	20 (10)	15 (0)
Medium soil (loam to clay loam)	15 (0)	10 (0)	5 (0)	30 (20)	20 (10)	15 (0)	40 (30)	30 (20)	20 (10)
Heavy soil (clay to heavy clay)	20 (10)	15 (0)	10 (0)	40 (30)	30 (20)	20 (10)	50 (40)	40 (30)	30 (20)

The first number in each yellow box is the safe seed-row placed nitrogen rate, in lb./ac. of actual N, for Alberta and Saskatchewan. Numbers in (brackets) are Manitoba recommendations.

*Width of spacing varies with air flow, moisture level, soil type, amount of residue and other soil conditions.

**Some openers give less than 1" spread.



Phosphorus

- It is important to get some on with the starter but mostly limited to 30-50 lbs of MAP
- Canola very good at scavenging for P due to many small hairs on roots

AGVISE Phosphorus recs

Yield	Nitrogen	Olsen		AGVISE Band													
		0-3	4-7	8-12-15	11												
800	55	20	15	10	10*	10*	10*	10*	0	25	20	10	5	0	0	0	0
1200	85	30	25	20	15	10*	10*	10*	0	35	25	20	10	0	0	0	0
1600	110	35	30	25	20	10	10*	10*	0	50	35	25	10	0	0	0	0
2000	140	45	40	30	25	15	10*	10*	0	60	45	30	15	0	0	0	0
2400	170	55	45	35	25	20	10*	10*	0	75	55	35	15	0	0	0	0

NDSU Phosphorus recs

Soil N + Supplemental N lb/A 2 feet depth	Olsen-P, ppm				
	VL	L	M	H	H
	0-3	4-7	8-11	12-15	16+
----- lb P ₂ O ₅ /acre -----					
120*	60	44	28	12	0
150**	60	44	28	12	0

Source: 2024 Getting It Right Canola



Potassium

- All sources:
unless you
are less than
120 ppm K
soil test
levels,
doesn't pay
to put it on.



Micros

- NDSU and Manitoba don't recommend any micros with canola
- If there is one that would have the most potential it is boron



Seeding
Canola

Want 5-8 live plants per square foot. 4 plants is bare minimum

- <https://www.ag.ndsu.edu/langdonrec/archive/documents/crop-production-management/row-spacing-and-seeding-rate-influence-on-spring-canola-performance-in-the-northern-great-plains>
- Air Seeder vs Planter
- Row width considerations
- Seeding depth



	SEED SIZE RANGE			
	A	B	C	D
RECOMMENDED SEEDING RATE to achieve ~ 10 Seeds/ft ²	4.2 Lbs./Acre	4.7 Lbs./Acre	5.2 Lbs./Acre	5.7 Lbs./Acre
SEED SIZE (range midpoint)	108,000 Seeds / Lb.	98,000 Seeds / Lb.	88,000 Seeds / Lb.	80,000 Seeds / Lb.
UNIT BAG WEIGHT	42.2 Lbs.	47.0 Lbs.	51.8 Lbs.	56.7 Lbs.
SEEDS PER UNIT	4.25 Million Seeds (Minimum)			
ACRES SEEDED PER UNIT	APPROXIMATELY 10 ACRES			



Weed control considerations

- Fall post harvest burndown with Gly + Dicamba
- Sonalan/Treflan as PPI
- Spring burndown options
 - Gly + Aim
 - Paraquat
- Glufosinate + clethodim in-crop (LL)
- Stinger for perennials*
- Diquat as a desiccant



Clethodim- rates and timing make
a big difference



Burndowns and residuals

**Gly + dicamba + 2,4-D
burndown**



**Metribuzin +
Sulfentrazone PRE**



Canola is the gift
that
keeps on giving

Canola susceptible to many products
Groups 2, 4, 5, 6, 9, 10, 14, 22, 27)



Group 9

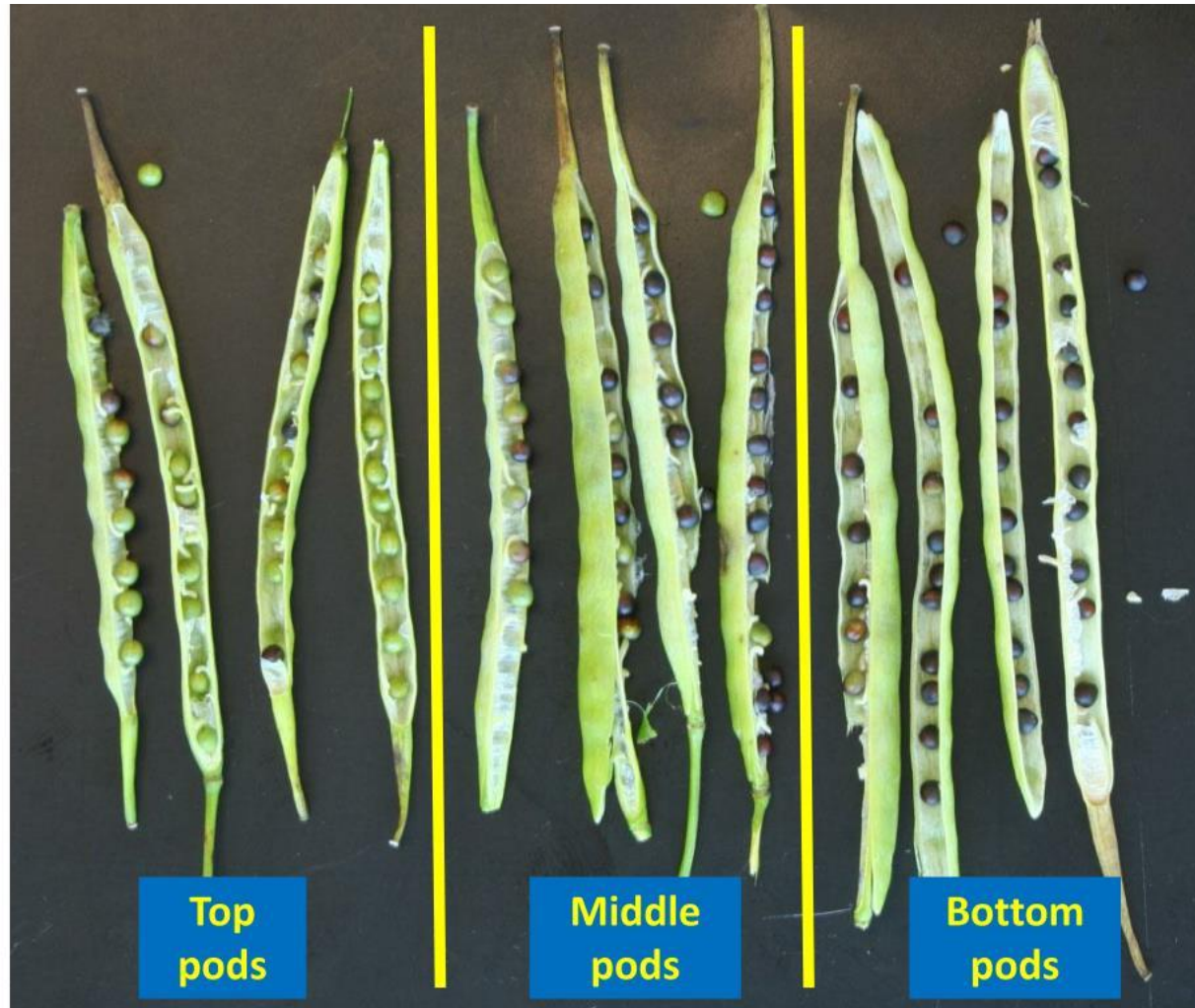


Group 27

Sprayer cleanout super
important



Desiccation





Harvest



**@rocknrollagr
nmy**

- SnapChat
 - X
 - Instagram
 - Tik Tok
-
- @AgMafiaLLC on X, IG, Tik Tok and FB
-
- @agmafia_snap
-
- Agronomists Happy Hour podcast