



SPRING CEREAL GUIDE

TABLE OF CONTENTS

- 1 The Snobelen Farms Difference
- 2 Our Seed Team
- 3 Variety Characteristics
- 4 Variety Descriptions
- 6 Plant Populations & Desired Plant Populations
- 7 Pounds of Seed Per Acre
- 8 Plant Nutrition
- 9 Seeding Depth
- 10 Diseases
- 12 Insects
- 14 Green Feed

Lucknow

- Head Office
- Food grade soybean facility Receiving facility
- Cleaning, processing, and packaging seed
- Seed treating

Palmerston



- I.P. receiving facility
- Cleaning, processing, and packaging pedigreed seed
- Seed treating



THE SNOBELEN FARMS DIFFERENCE

Snobelen Farms Ltd. is an independent, family-owned company that was founded in 1971. We specialize in commercial grains, pedigreed seed, and the production, processing and sales of food grade soybeans for markets across Canada and internationally. We take pride in combining years of experience with attentive customer service to complement the premium quality of our agricultural products. With eight locations we are able to serve the needs of growers across Ontario.

We Specialize in:

- Multiplying, processing, and selling the best genetics for our area.
- Testing and growing the varieties that work for the farmer and the end users
- Selling certified seed to farmers and retailers across Ontario



The Canadian Identity Preserved Recognition System Plus HACCP (CIPRS+ HACCP) consists of a check mark held by two hands over a grain field. The use of the CIPRS+ HACCP mark must indicate that the company is "certified under CIPRS+ HACCP".

OUR SEED TEAM



Calvin
Brown
Seed Business
Manager
Associate Diploma Agriculture
Business, University of Guelph
cbrown@snobelenfarms.com
Cell: 519-851-0300
@SnobelenSeeds



Brendan
Zettler
Production
Agronomist
B.Sc. Agriculture,
University of Guelph
Certified Crop Advisor, Ontario
bzettler@snobelenfarms.com
Cell: 519-389-7591
©formosafarmer



Sherri
Haldenby
Seed Administrator
Lucknow
shaldenby@snobelenfarms.com
Lucknow Office:
1-800-582-5669
Cell: 519-525-1367
Maidenbysherri



Teresa
Teune
Seed Administrator
Palmerston
B.Sc. Agriculture,
University of Guelph
tteune@snobelenfarms.com
Palmerston Office:
1-877-343-3630

VARIETY CHARACTERISTICS

				100		100	4 W			
		1	Fusarium Data Combined DON	Test Weight	Height	Heading	Maturity	Lodging	Straw Yield	
				Oats	;					
ì	AAC Basil	White	11 11/1/1	A	M	M	E	AA	AA	
	AAC Bullet	White		AA	S	AM	E	AA	А	
	CDC Haymaker	Forage	119	N/A	VT		VL	ВА	N/A	
1	Everleaf 126	Forage		N/A	VT	1/2	VL	ВА	N/A	
	Spring Wheat									
	Quantum		s s	AA	S	М	E	AA	AA	
	Starlite	VI	MS MS	AA	М	E	E	A	Α	
	Barley									
	AAC Cranbrook	6R		A	M	М	E	AA	AA	
	Bornholm	2R		ВА	S	М	E	AA	ВА	
-1	Massy	6R	1	A	M	M	M	AA	AA	
4	Esma	2R		A	S	M	E	AA	Α	
	DS812	6R	May.	A	M	M	M	AA	AA	
/	AAC Vitality	6R		ВА	1	L	1	ВА	Α	

Test weight, Lodging, Straw Yield: AA=Above Average, A=Average, BA=Below Average Height: S=Short, M=Medium, T=Tall, VT=Very Tall Heading & Maturity: E=Early, M=Medium, L=Later, VL=Very Late

Heading & Maturity: E=Early, M=Medium, L=Later, VL=Very Lat Fusarium Data: S= Susceptible, MS= Moderately Susceptible

Oats CHARACTERISTICS

AAC Bullet

- White hulled milling oat
- Good Crown Rust resistance
- Very strong straw
- Excellent yields, heavy kernel weight
- · Medium height

CDC Haymaker

- · Forage oat
- Large, plump seed with high seed weight
- Tall structure with later maturity
- High yield potential

AAC Basil

NEW

- · White hulled oat
- Excellent lodging scores
- Very strong yield
- Medium plant height

Everleaf 126

- · Forage oat
- High crude protein and digestible fiber
- Exhibits Crown Rust resistance and other leaf disease tolerance
- Medium to tall plant stature

Spring Wheat CHARACTERISTICS

Starlite

- Excellent yield potential
- Snobelen Farms Exclusive variety
- Great milling quality

Quantum

- Very good yield potential
- Early maturity
- Feed quality HRS
- Short plant stature
- Excellent standability

Barley CHARACTERISTICS

Esma

- Two-row
- Short statured with excellent lodging score
- · Heavy test weight

Massy

- Six-row
- Excellent standability
- Superior replacement variety for Dignity in mix grain

Vitality

- Six-row
- Excellent standability
- · Medium height
- Average yield

Bornholm

- Two-row
- Early maturity
- Very heavy test weight
- Excellent yield potential

DS812

- Six-row
- Industry leading grain yield
- Noted for standability
- · High straw index

AAC Cranbrook

NEW (

- Six-row
- Excellent yield potential
- Excellent lodging score
- Medium plant height

PLANT POPULATIONS

	Millions of Seeds/Acre	Plants/Foot of Row on 7.5" row spacing
Oats	0.8-1.2	11.5-17.2
Barley	1.0-1.4	14.3-20.1
Mixed Grain	0.8-1.4	11.5-20.1
Spring Wheat	1.2-1.6	17.2-23.0
Winter Wheat	1.4-1.8	20.1-25.8

SEEDS PER FOOT ROW

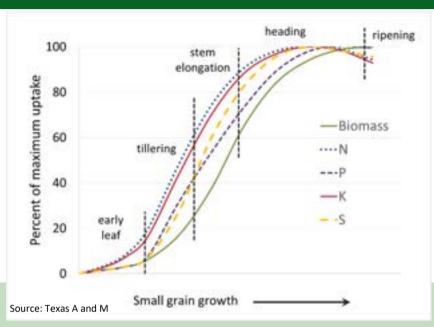
Desired Plant Population (Seeds / foot of row) in 7.5 inch row spacing

		•				
Seeds Per Acre	809K	1.012M	1.213k	1.416k	1.619k	1.861k
Seeds / Foot Row	12	14	17	20	23	26

POUNDS OF SEED PER ACRE

Pounds of seed to be planted per acres assuming 15% stand loss and 95% germination										
Seeds/lb.	800k	900k	1M	1.1M	1.2M	1.3M	1.4M	1.5M	1.6M	1.7M
	lbs/ac									
8,000	123.8	139.3	154.8	170.3	185.8	201.2	216.7	232.2	247.7	263.2
8,500	116.6	131.1	145.7	160.3	174.8	189.4	204.0	218.5	233.1	247.7
9,000	110.1	123.8	137.6	151.4	165.1	178.9	192.6	206.4	220.2	233.9
9,500	104.3	117.3	130.4	143.4	156.4	169.5	182.5	195.5	208.6	221.6
10,000	99.1	111.5	123.8	136.2	148.6	161.0	173.4	185.8	198.1	210.5
10,500	94.4	106.1	117.9	129.7	141.5	153.3	165.1	176.9	188.7	200.5
11,000	90.1	101.3	112.6	123.8	135.1	146.4	157.6	168.9	180.1	191.4
11,500	86.1	96.9	107.7	118.5	129.2	140.0	150.8	161.5	172.3	183.1
12,000	82.6	92.9	103.2	113.5	123.8	134.2	144.5	154.8	165.1	175.4
12,500	79.3	89.2	99.1	109.0	118.9	128.8	138.7	148.6	158.5	168.4
13,000	76.2	85.7	95.3	104.8	114.3	123.8	133.4	142.9	152.4	161.9
13,500	73.4	82.6	91.7	100.9	110.1	119.3	128.4	137.6	146.8	155.9
14,000	70.8	79.6	88.5	97.3	106.1	115.0	123.8	132.7	141.5	150.4
14,500	68.3	76.9	85.4	93.9	102.5	111.0	119.6	128.1	136.6	145.2

PLANT NUTRITION



NUTRITION REMOVAL

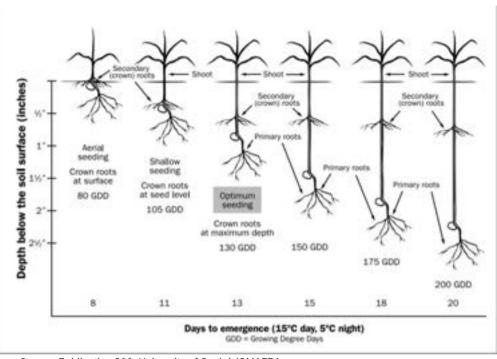
	Crop	P ₂ O _s	К	S
Grain	Barley	17	24	5
Grain	Oats	13	17	4
	Spring Wheat	18	16	6
	Barley	5	67	3
Straw	Oats	2	58	1
	Spring Wheat	4	43	2
	Barley	23	91	8
Combined	Oats	15	75	5
	Spring Wheat	22	59	8

Source: Dr. Tarlock Sing Sahota, Lakehead University

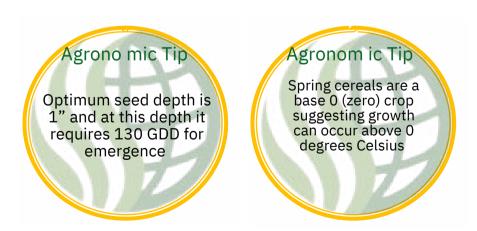
Nutrition removal expressed in lbs.

P205= Phosphorus, K20= Potassium, S04 (Sulphate Sulphur) per acre for a 100bu/ac barley crop, 100bu/ac oat crop and a 65bu/ac spring wheat crop.

SEEDING DEPTH



Source: Publication 811, University of Guelph/OMAFRA



DISEASES



Crown Rust

The first symptoms of crown rust are orange-brown pustules that appear scattered over the leaf surface. Leaf sheaths, and later the oat panicle, can also become infected. The disease is favoured by high temperatures (20–25°C) so epidemics usually occur in June–July. Late in the season black pustules appear within the existing crown rust lesions.

Agronomic Tip

Good seed-to-soil
contact and adequate

soil moisture for germination are essential



Stripe Rust

In Ontario, stripe rust does not overwinter. Instead urediniospores, the source of inoculum, are blown from the United States. Normally the first inoculum starts arriving at the beginning of June. Symptoms will normally appear about one week after infection. The urediniospores need several hours of moisture on plant leaves, along with temperatures near 10°C, to germinate and infect the host. After infection, small vellowish uredinia appear in linear rows the length of the leaf blade as result of fungal mycelia from the spores elongating in parallel with the leaf veins (see photo). A single infection can result in one stripe the length of the leaf. The head can also be infected and kernels are replaced with yellow spores. With severe early infections, plants can also be stunted.



Common Root Rot

This disease is caused by a complex of soil-borne fungi. The spores germinate in the soil. Seedlings become infected following germination. Spores are produced on diseased tissue and are spread by wind, water, cultivation, and infected seeds. Further infections continue throughout the growing season with new spores being produced on plant parts as they mature. Patchy emergence is usually the first indication that damage has occurred. Infections start on the roots and sub-crown internodes and move to the leaves. Seedlings may die before or soon after emergence even though they only show slight damage.

Pictures & Descriptions derived from: University of Nebraska-Lincoln, Queensland Government, Alberta Government



Powdery Mildew

Symptoms of powdery mildew can be found on leaves, stems and heads, but leaves are most commonly infected. Typically, white pustules appear which produce a mass of spores with a powdery appearance. As the mildew pustules become older, they darken to a grey or brown colour. Eventually, black spore cases (cleistothecia) can be found embedded in the mildew pustule, usually towards the end of the season.

Agronomic Tip

Early planting promotes tillering, large head production and advance flowering (avoiding the hot and dry conditions typical of late June and July)

INSECTS



Cereal Aphid

Oat aphids are the most abundant species of cereal aphids and vary from mottled yellow-green through olive-green and dusky brown, to a blackish green, and are characterised by a reddish patch on the tip of the abdomen. Symptoms include patches of plants with furled leaves and may have a 'sooty' appearance. Oat aphid colonies develop on the outside of tillers from the base upwards on stems, nodes and backs of mature leaves, starting any time between seedling stage and grain filling. Feeding damage often has no obvious signs or symptoms, although heavily-infested plants may be covered in black sooty moulds. which live on the sugary honeydew excreted by aphids. Plants may also show signs of barley yel-



True Armyworm

Armyworm larvae feed nocturnally and damage from small larvae may not be evident at first. In wheat and other small grains. look for early signs of feeding and/or larvae on the soil surface. Damage may be concentrated in lodged areas or areas with dense growth. Check all fields closely by looking for both leaf defoliation and head-clipping. Two factors increase risk of true armyworm infestations each year. The first is cool, wet April conditions which are detrimental to the natural enemies of armyworm. The second is strong storm fronts that carry in large numbers of moths from the southern US where they overwinter.

low dwarf virus (BYDV).



Cereal Leaf Beetle

Larvae are yellowish-orange, but this color is usually obscured by a layer of feces and mucus, giving them a shiny appearance. This layer protects them from natural enemies and drying out and has been known to ruin a favorite pair of pants as fields with heavy infestations are walked. Cereal leaf beetle has one generation per year. Adults pass the winter in leaf litter in wood lots, hedgerows, and similar areas. In March and mid-April as temperatures increase, adults fly to grain fields to lay eggs, which hatch and young larvae begin to feed. Young larvae do not inflict much damage, but older larvae have voracious appetites and can cause extensive damage. CLB larvae and adults feed between the veins of the newest leaves on host plants.

Larvae cause the most damage by removing long strips of tissue from the upper leaf surface, while leaving the translucent cuticle of the lower surface intact. This feeding pattern produces a characteristic "frosted" appearance. Tips of damaged leaves frequently turn white, giving heavily infested fields a frost-damaged appearance.

Pictures & Descriptions derived from: University of Nebraska-Lincoln, Queensland Government, Alberta Government Agronomic Tip

Responsive to management including planting dates, plant density, fertility, fertilizer placement, fungicides and weed control

Green Feed



Forage Supreme

A three way mix of oat, barley and forage peas. We always use dark forage peas and the best yielding oats and barley in this high-quality mix. Barley with smooth awns provides excellent feed value and palatability

Forage Oats & Forage Peas

Provides great tonnage and feed value for livestock producers

Mixed Grain

Snobelens offers many different blends to fit customers needs, whether under seeding, extra forage or for grain

Available Blends

- 50% Oats & 50% Barley OR 35% Oats & 65% Barley
- 33% Oats, 34% Barley & 33% Spring Wheat
- Forage Supreme: 35% Barley, 35% Cereal Oats, 30% Forage Pea
- 70% Oat & 30% Peas OR 50% Oats & 50% Peas
- Custom mixed available contact the office for more information

In our blends we strive to match varieties that have similar heading dates to maximize your palatability and quality of feed

All our spring cereals are available in 50 lbs bags or 2,000 lbs soft totes



Notes





LUCKNOW 1-800-582-5669 P. 519-528-2092 F. 519-528-3542 Box 29, 323 Havelock Street Lucknow, Ontario NOG 2H0

PALMERSTON 1-877-343-3630 P. 519-343-3630 F. 519-343-2037 5220 Highway 23 Palmerston, Ontario NOG 2P0