2019 SOYBEANS

VARIETY SELECTION AND POSITIONING

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Genetics x Environment x Management

= High-yielding soybeans

x

x

Genetics

Seed: Select high-performing seed bred for local conditions.

SCN protection: Guarding against yield loss with pest-resistant seed.

Environment

Pest management: Protecting crops against weeds, pests and diseases.

Soil type: Understanding and optimizing soil type.

Weather: Preparing for and responding to specific weather conditions.

Management

Fertility: Monitoring crop nutrition and taking appropriate action.

Stand establishment: Making Seedcare™ and planting decisions to start off strong.

Equipment: Calibrating precision equipment for peak performance.

Harvest management: Maximizing yield through timing and equipment.

Final population recommendations by management zone

YIELD ENVIRONMENT (BU/AC)				
Soil type	**Plant type**	**> 60**	**40–60**	**< 40**
Sand	Thin	150,000	175,000	200,000
	Branching	120,000	150,000	180,000
Clay	Thin	180,000	200,000	225,000
	Branching	140,000	165,000	190,000
Loam	Thin	160,000	180,000	200,000
	Branching	100,000	125,000	150,000

Increase population by 10% over recommendations above if:

- Field has poor drainage and history of early season establishment issues.
- Field has history of soil crusting and early season establishment issues.
- Planting soybeans later in the season (past June 15th).

Decrease population by 10–20% over recommendations above if:

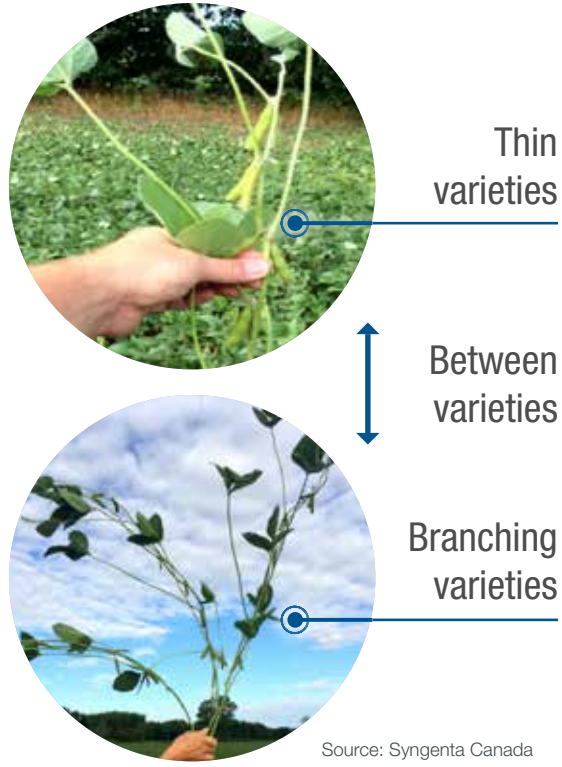
- Field has a high risk or history of white mould.

Row width considerations:

- Consider selecting branching type soybeans for rows 20" or greater to ensure maximum canopy closure.

Between varieties

- These varieties can be managed to act as either thin or branching.
- Row width 15 inches or less – consider them thin plant type.
- Row widths 20 inches or greater – consider them branching plant type.



Source: Syngenta Canada

These are general considerations. Always consider the specific situation on your field and exercise good agronomic practices.

Plant type by variety

ROUNDUP READY 2 XTEND SOYBEANS

VARIETY PLANT TYPES		
Thin	Between	Branching
	S006-M4X	
	S01-C4X	
	S07-K5X	
	S09-R8X	S09-C3X
	S12-P3X	
	S14-B2X	
	S14-T7X	
	S18-H3X	S18-G4X
		S19-T5X
	S20-L8X	
	S22-J4X	
		S25-B6X
	S27-M8X	S27-U2X
		S27-C9X
		S29-K3X
		S29-R5X
	S31-Y2X	S31-M1X

genuity ROUNDUP READY 2 YIELD SOYBEANS

VARIETY PLANT TYPES		
Thin	Between	Branching
S0009-M2		
	S007-Y4	S008-N2
	S009-J1	
S04-D3		
	S05-F9	
	S10-S1	
		S12-H2
	S14-A6	

VARIETY PLANT TYPES		
Thin	Between	Branching
S03-W4		
S07-D2		
S07-M8		
		S10-R2
	S14-H3	
	S16-F5	
S18-R6		
	S20-G7	
		S21-C3

These are general considerations. Always consider the specific situation on your field and exercise good agronomic practices.

Sclerotinia white mould

Source: Syngenta Canada

- Top yield-robbing disease in soybeans, with yield losses of up to 75%.
- Syngenta's research capabilities ensure growers have excellent solutions to *Sclerotinia* white mould.

How to manage:

- Select genetics with excellent tolerance where possible.
- In fields with *Sclerotinia* white mould history and high-risk environments, reduce populations by 10% for varieties with an "Excellent" rating and up to 20% for varieties with an "Average" rating.
- Consider applying Allegro® fungicide as part of a *Sclerotinia* white mould IPM strategy.

ROUNDUP READY 2 XTEND SOYBEANS

Excellent		Average
S006-M4X	S19-T5X	S09-R8X
S01-C4X	S20-L8X	S09-C3X
S07-K5X	S22-J4X	S18-G4X
S12-P3X	S25-B6X	S27-M8X
S14-B2X	S27-C9X	S27-U2X
S14-T7X	S31-M1X	S29-K3X
S18-H3X	S31-Y2X	S29-R5X

genuity ROUNDUP READY 2 YIELD® SOYBEANS

Excellent	Average
S0009-M2	S008-N2
S007-Y4	S009-J1
S04-D3	S05-F9
S10-S1	S14-A6
S12-H2	

Excellent	Average
S03-W4	S10-R2
S07-D2	S16-F5
S07-M8	S21-C3
S14-H3	
S18-R6	
S20-G7	

These are general considerations. Always consider the specific situation on your field and exercise good agronomic practices.

Pod and stem blight

Source: University of Minnesota Extension

- Small black raised dots (pycnidia) often in rows on the stem and no pattern on the pods.
- Fungus overwinters in seed and crop residue.
- Warm, wet/humid weather during pod fill favours disease development.

How to manage:

- Variety selection
- Fungicide application
- Residue management

ROUNDUP READY 2 XTEND SOYBEANS

Excellent	Average
S006-M4X	S01-C4X
S12-P3X	S07-K5X
S14-B2X	S09-R8X
S14-T7X	S09-C3X
S18-G4X	
S22-J4X	

genuity ROUNDUP READY 2 YIELD SOYBEANS

Excellent	Average
S009-J1	S0009-M2
S04-D3	S007-Y4
S05-F9	S008-N2
S12-H2	S10-S1
	S14-A6

Excellent	Average
S07-M8	S03-W4
S18-R6	S07-D2
	S10-R2
	S14-H3
	S16-F5
	S20-G7
	S21-C3

These are general considerations. Always consider the specific situation on your field and exercise good agronomic practices.

Sudden death syndrome (SDS)

Source: Syngenta Canada

- Caused by the fungal disease *Fusarium virguliforme.*
- Potentially linked with soybean cyst nematode (SCN) as nematode feeding allows the entry of secondary pathogens.
- Leaf symptoms caused by toxins produced by the fungus.

How to manage:

- Choose varieties with SCN resistance
- Vibrance® Maxx/Cruiser Maxx® Vibrance® Beans + Clariva™ pn*

ROUNDUP READY 2 XTEND SOYBEANS

Excellent		Average
S09-R8X	S22-J4X	S25-B6X
S12-P3X	S27-M8X	S27-C9X
S14-B2X	S27-U2X	
S14-T7X	S29-K3X	
S18-G4X	S29-R5X	
S18-H3X	S31-M1X	
S19-T5X	S31-Y2X	
S20-L8X		

genuity ROUNDUP READY 2 YIELD® SOYBEANS

Excellent
S14-A6

Excellent
S16-F5
S21-C3

*Clariva is only for protection against soybean cyst nematode.

These are general considerations. Always consider the specific situation on your field and exercise good agronomic practices.

Brown stem rot (BSR)

Source: University of Wisconsin-Madison's Plant Disease Diagnostics Clinic.

- Pathogen survives in crop debris.
- Infection occurs early in season but foliar symptoms appear when pods begin to fill (R3-R4).
- Pith will show brown discoloration.

How to manage:

- Rotation
- Residue management
- Variety selection

ROUNDUP READY 2 XTEND SOYBEANS

Excellent	Average
S006-M4X	S09-C3X
S01-C4X	S09-R8X
S07-K5X	S12-P3X
S14-B2X	S18-G4X
S14-T7X	S18-H3X
S27-M8X	S19-T5X
S27-U2X	S20-L8X
S29-K3X	S22-J4X
S31-M1X	S25-B6X
	S27-C9X
	S29-R5X
	S31-Y2X

genuity ROUNDUP READY 2 YIELD SOYBEANS

Excellent	Average
S05-F9	S0009-M2
S10-S1	S007-Y4
S14-A6	S008-N2
	S009-J1
	S04-D3
	S12-H2

Excellent	Average
S10-R2	S14-H3
	S16-F5

These are general considerations. Always consider the specific situation on your field and exercise good agronomic practices.

Phytophthora root rot (PRR)

- Caused by soil-borne pathogen *Phytopthora sojae.*
- Most common on poorly drained soils.
- Can infect at all plant stages when conditions favour pathogen.
- Symptoms usually become apparent two weeks after heavy rains.
- Genetic selection against PRR should include: Major genes – Rps genes and field tolerance.

Source: Syngenta Canada

How to manage:

- Vibrance Maxx/Cruiser Maxx Vibrance Beans (Consider tank-mixing with Apron XL LS*)
- Variety selection
- Improve soil drainage

ROUNDUP READY 2 XTEND SOYBEANS

Excellent		Average
S01-C4X	S29-R5X	S006-M4X
S07-K5X	S31-M1X	S09-R8X
S09-C3X	S31-Y2X	S19-T5X
S18-G4X		S20-L8X
S12-P3X		S22-J4X
S14-B2X		S25-B6X
S14-T7X		S27-M8X
S18-H3X		S27-C9X
S27-U2X		S29-K3X

genuity ROUNDUP READY 2 YIELD SOYBEANS

Excellent	Average
S0009-M2	S008-N2
S007-Y4	S009-J1
S04-D3	
S05-F9*	
S10-S1	
S12-H2	
S14-A6	

Excellent	Average
S03-W4	S18-R6
S07-D2	S21-C3
S07-M8	
S10-R2	
S14-H3	
S16-F5	
S20-G7	

These are general considerations. Always consider the specific situation on your field and exercise good agronomic practices.

* Tank mix if target fields have a history of high *Phytophthora* pressure, or susceptible varieties are to be treated. Tank-mix either 100 mL of Vibrance Maxx RFC or 195 mL of Cruiser Maxx Vibrance Beans Seed Treatment with 31 mL of Apron XL LS Fungicide per 100 kg of seed.

THE FOLLOWING APPLIES TO ALL GENUITY® ROUNDUP READY 2 YIELD® AND ROUNDUP READY 2 XTEND® VARIETIES.

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