The Bean Report

Your source for soybean and pulse crop agronomy and research.

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Planting Progress

This spring has been a challenging one to say the least. The crop insurance deadline for full coverage on soybeans has arrived and seeding is not yet complete in some parts of the province. It is estimated that soybean planting is 80-90% complete throughout the Central region, 70-80% complete throughout Eastman and 30-40% throughout Western Manitoba.

It was originally projected for us to see a 20% increase in soybean acres, from 1.05 million acres in 2013 to 1.2-1.3 million acres in 2014. It is likely we will not this full increase but rather will be closer to 2013 levels. This will mostly be affected by Western Manitoba, where seeding plans are shifting away from long season crops.

The earliest planted soybean fields (May 5-10) have emerged but those planted within the past week are not far behind, demonstrating the importance of warm soil. Emergence is moving quickly now with the moisture and heat.

Dry bean planting is moving along, estimated to be 50-60% complete. With continued reports of large seed size, especially in navy beans, it is important to carefully calculate seeding rates and make sure that planting equipment can handle the larger seed size.

2014 CROP INSURANCE SEEDING DEADLINES Source: MASC									
	Sc	oybeans	Dry	beans	Field Peas				
	Full	Extended	Full	Extended	Full	Extended			
Area 1	June 6	June 7– June 11	June 10	June 11-15					
Area 2	May 30	May 31– June 4	June 6	June 7-11	lune 10	June 16-20			
Area 3	May 30	May 31– June 4	June 6	June 7-11	June 16				
Insurance test area	May 30	none	June 6	none					

Considerations for delayed seeding of soybeans

- Consider bumping up your seeding rate by 10-15% and if you have the option, narrow the rows. In corn
 production you hear the phrase "knee high by the 4th of July", well in soybeans it's "row closure". This
 rule ensures maximum photosynthesis is occurring by the soybean plants, which is going to give you yield.
 Good canopy closure is also important for better weed competition.
- 2. Yield potential is likely reduced. For the 1st week of June, expect 60-90% relative yield, depending on your risk area. Late planting reduces the vegetative growth and also increases vulnerability to early frost (number of frost-free days is reduced). However, this is not specific to soybeans, yield potential of most crops will decline to some extent when planted in June.

SOYBEAN relative yield (%) and total acres (0's) planted according to Risk Area & seeding date. 2008-2012. Source: MASC												
	RR	/alley	Southwest							Interlake		
Seeding Date	Risk Area 12		Risk Area 1		Risk Area 2		Risk Area 3		Risk Area 4		Risk Area 15	
(Week/Month)	Yield	Acres	Yield	Acres	Yield	Acres	Yield	Acres	Yield	Acres	Yield	Acres
01/05	96	1,447	-	-	-	-	-	-	49	50	-	-
02/05	109	14,788	84	109	110	371	92	40	123	792	137	994
03/05	101	27,180	101	379	102	2,718	114	689	104	2,055	118	6837
04/05	88	8,021	105	1511	102	1,400	97	1,334	82	2,026	87	4,132
01/06	90	11,427	90	278	60	102	96	627	79	144	85	359

- 3. Delay in maturity. There are many factors involved in soybean maturity (heat, moisture, day length etc.), which makes it difficult to predict how our cultivars will mature relative to planting date. Data from the US shows that a 3-5 day delay in planting results in a 1 day delay in maturity. However, here in Manitoba we should be concerned with the fact that delayed planting reduces the number of frost free days, regardless of the factors affecting maturity. Variety choice should reflect frost-free days in your area.
- 4. DO NOT BROADCAST. There are numerous reasons why soybean seed should not be broadcast. First, soybean is a large seed, that requires a lot of moisture and good seed-soil contact for germination. Second, desiccation (drying) may affect the inoculant viability, resulting in poor nodulation and lack of nitrogen. Third, root development may be shallow and result in lodging, weed and disease pressure.
- 5. Re-consider fertility rates for all crops. As mentioned, June planting generally means a reduction in yield potential. Reduced yield potential = less nutrient uptake and removal. You may want to consider reducing your fertility rates to match your new yield goals. This may provide a better economic return for you.
- 6. Timely weed removal due to rapid weed growth and delayed canopy closure.



Authority® (FMC) registered for use in soybeans

Authority is a Group 14 (sulfentrazone) pre-emergent soil applied herbicide for control of kochia, lambsquarters, redroot pigweed and wild buckwheat.

Here is an announcement and description of how Authority works from FMC's Account Manager Brad Ewankiw:

FMC is happy to announce that Authority has been registered for soybeans in Western Canada. All use pattern details remain the same as for sunflowers, peas and

flax. Now growers can use the products with soybeans as well which is especially important now that glyphosate resistant kochia has been confirmed in MB.

How Authority Works

- Applied on soil surface creating chemical barrier. It is important to not break this barrier best to spray AFTER planting, but ok to spray before with minimal disturbance seeding
- Rainfall activates molecule (~10 mm), therefore good to apply before a rainfall event
- Weed uptake through roots and shoots. Prevents emergence by controlling weeds at germination and will provide 6-8 weeks of control depending on weed species
- Watch seeding depth in fields at risk of developing saturated soil conditions. As is the case with most soil applied products, the residual barrier set up by sulfentrazone happens in the first inch of soil. To ensure maximum crop safety on saturated soils encourage your growers to seed below the treated layer. We have observed rare cases where temporary crop response occurred when the crop was seed very shallow and the soil became saturated with moisture prior to crop emergence.

See page 86 of the Crop Protection Guide for label directions.

Rolling soybeans

Scattered thunderstorms throughout May have prevented some growers from getting into roll bean fields after planting and now they are starting to emerge. Here's a look back into the Soybean School West archives on a discussion of why rolling is important and how to time, either right after seeding or having to wait until the crop is well up.

Soybean School West: Why rolling matters and timing it right

An in-depth article from U of Minnesota on types of land rollers, rolling timing, economics and impacts of rolling on soil can be found <u>here</u>.

May weather: cool and wet

From May 1-25, most areas of southern Manitoba received 55-65% of normal growing degree days. Precipitation was quite extreme throughout the province. Areas north of Brandon, around Riding Mountain and Eastern Manitoba received 125-200% of normal precipitation while the Red River Valley was normal to below normal. Forecasters are expecting seasonal temperatures throughout the summer.