

## **Potential Pitfalls of Growing Soybean after Soybean**

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I am getting quite a few questions about growing soybeans for a second year in a row. Most of this is due to the USDA forecast for a record U.S. corn planting in 2020 and \$3.00 corn at harvest. While second and third year soybean fields are planted every year, it is not a recommended practice. University research shows a range of yield loss from 0-10% for second year soybeans compared to a corn soybean rotation. We know that weather plays a huge factor here and this potential loss can be even greater if the conditions are right. Those of you who have ever had a severe white mold infestation know what I am talking about!

If you intend to grow soybean after soybean, try to remember what issues you might have had last year. Think about nodulation, fertility, emergence, diseases, weed control and insects. These problems could be amplified in year two if you do not make the appropriate adjustments. Here are some considerations to think about to protect your potential soybean yield.

A fungicide seed treatment will be crucial. We have seen the benefits of planting soybeans earlier if the conditions are right. However, wet weather at emergence means that damping off diseases such as Pythium, Fusarium, Rhizoctonia and Phytophthora can be more prevalent and reduce plant populations. Make sure that you have chosen an appropriate variety with adequate resistance to these early diseases.

Are your phosphorus and potassium levels adequate? You may have already spread your potash this fall if you originally intended to plant corn. If not, you really should take a soil test to see how much you need to add. In a corn-soy rotation, we usually rely on soybeans to be able to scavenge leftover nutrients from the previous corn crop. Make sure there are no deficiencies!

Growers have not had to deal with soybean cyst nematode (SCN) as a pest in New York. However, last year I took a soil sample from five fields and two came back positive, (Monroe and Wayne Counties), but at very low levels. Crop rotations help keep SCN numbers reduced. Two years of soybeans would provide an opportunity for SCN populations to increase. *(Additional Note: Sixteen soybean fields in Jefferson, St. Lawrence and Lewis Counties were sampled in 2019 and very low levels of SCN were detected in two fields in Jefferson County- Mike Hunter)*

How was your weed control last year? Did you have any escapes of lambsquarters, ragweed or even resistant tall waterhemp? All of those weed seeds will be waiting there and would have probably been controlled with your corn herbicide program. Make sure you have a pre-emergence residual herbicide program in place and be prepared to come back with an effective post program if necessary. Just a reminder, if you used Prefix, Warrant Ultra, Reflex or Flexstar

on your soybeans last year, you can't use them again this year. The maximum use rate for these products may be applied in ALTERNATE years for our region.

Soil borne diseases like white mold, brown stem rot and sudden death syndrome can cause significant yield reductions even in corn-soybean rotations. Make sure you have adequate resistances/tolerances in your seed variety. Lowering your planting population, widening rows and utilizing foliar fungicides when needed can help reduce white mold infection.

Mike Staton, from Michigan State, has a more detailed article on changes to make to your weed and disease programs to maximize yields in a soybean following soybean rotation.

[https://www.canr.msu.edu/news/recommendations\\_for\\_planting\\_soybeans\\_after\\_soybeans](https://www.canr.msu.edu/news/recommendations_for_planting_soybeans_after_soybeans)



Fusarium wilt in soybean (Mike Stanyard)