

## Weekly Article

# U.S. Soybean Agronomist Give Research Update

2-16-2021

Hello, my Name is Richard Purdin with OSU Extension, Ag and Natural Resource Educator and Community Development Educator for Adams County. I hope to better inform local producers and the public of the latest news in the world of Agriculture. Old man winter must have really woke up on the wrong side of the bed this week, delivering ice, snow, and bitter cold temperatures. This winter weather can present a lot of challenges for producers trying to maintain livestock health and their own health too. I also wanted to say a big thank you to all the County and State road maintenance crews, working long hours maintaining our roadways. As a farmer I appreciate this because it allows me to be able to travel to other farms to check livestock and pick-up feed/supplies needed. With all this harsh weather farmers might be spending a little more time researching and planning for the upcoming planting season. Today I wanted to share a few key points addressed by the research from the Ohio Soybean Council, and soybean agronomist from across the nation. The following are some key research points from a multi-state study on row spacing, population rate, and planting date effects on yield.

- 1. Consider planting soybeans earlier-** Deciding when to plant soybeans should be based on field conditions, not based on when you are done planting corn. Soybeans can germinate when soil temperatures are at 50°F but optimal germination takes place at 60°F – 70°F. Soybeans planted in early May or late April will add one main stem node every 3.7 days after the first trifoliolate appears, this equates to more flower production. As we increase flowers, pod count per plant increases which in theory should increase yield.
- 2. Narrow rows spacing increases yield –** Soybeans grown in narrow rows will increase sunlight interception by the plant. When soybeans intercept more sunlight, they will conduct photosynthesis more efficiently. A 1-4 bushel/acre yield advantage has been shown from 7.5” rows compared to 30” rows. Soybeans grown in narrow rows have fast canopy closure, this aids in weed control but a 1-5 % yield loss can occur due to late herbicide or fertilizer applications due to crushing of the crop.
- 3. Lower the population-** As soybean genetics improve so does the price, seed cost can equate to 40% of variable cost in production. Soybeans planted in lower population will grow shorter but have more branches, producing nodes and pods per plant while soybeans grown in very high population with grow thin and tall, producing less pods and have a higher risk of lodging. Ohio planting populations

that create the highest yields are 100,000-120,000 for early May, 130,000 to 150,000 for early June, and 180,000 and up for double crop soybeans.

Some other details to go over:

- 2021 Tobacco GAP Training will be offered in person February 23<sup>rd</sup> 10:00 am-12:00pm located at Raines Farm and Greenhouse 2667 Nichols Ridge Road Seaman Ohio 45679. Please call the office to pre-register (937) 544 -2339 (seats will be limited to 20).
- Planning for Profit for Beef Cow/Calf operations March 2<sup>nd</sup> at 7:00 pm located at Seaman Community Methodist Church Fellowship Hall 63 Broadway St. Seaman, Ohio 45679. There is a \$5 dollar fee and space is limited to 20 people so please call the office at (937) 544 2339 to reserve a spot.
- 2021 Fertilizer/Pesticide Private Applicators in person course is planned for March 9<sup>th</sup> at the Cherry Fork Community Center (gym) 5:00pm – 9:00pm. If you need recertified, you should get an invitation in the mail (due to covid19 date is tentative and susceptible to change).
- OSU Extension Department of Agricultural, Environmental, and Development Economics will be presenting the 2021 Climate and Grain Market Outlook February 19<sup>th</sup> 10:00am-11:30am. Go to [https://osu.zoom.us/webinar/register/WN\\_Wli8sVbSR5i3yqTqtBrj6A](https://osu.zoom.us/webinar/register/WN_Wli8sVbSR5i3yqTqtBrj6A) to register for the virtual event.
- For producer who still have not yet elected a 2021 crop safety net program, there will be a in-person meeting at the Ohio Valley Career and Technical Center February 24<sup>th</sup>, 2021 at 6:30 pm. The meeting will discuss ARC/PLC options. To register go to <https://go.osu.edu/2021farmbill> or call the office at (937) 544 2339.
- CRP Grasslands signup will begin March 15<sup>th</sup>,2021 and conclude April 23<sup>rd</sup>,2021. Contact the Farm Service Agency for assistance in signing up for these programs.
- OSU Extension Beef Team will have their next Cow -Calf School via Zoom. It will be held February 22<sup>th</sup> at 6:00 pm. Making cull cow decisions and maximizing feeder calf values .Go to [https://osu.zoom.us/webinar/register/WN\\_N\\_CtcKYwQB2l60Afug10aA](https://osu.zoom.us/webinar/register/WN_N_CtcKYwQB2l60Afug10aA) to register.