

Weekly Article

12-20-2021

More On Farm Research Results

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. This week marks the official beginning of winter, but one couldn't tell by the weather! The beginning of winter is coming in like a lamb with mild temperatures and dry conditions. Looking ahead in the near future many forecasts are showing this unusually mild weather to continue well into the new year, as always, I would take that forecast with a grain of salt. As 2021 starts to make its way out the door many farmers are happy to hold the door wide open and shut it as soon as it goes through but wait a second 2022 wants to come in and join the party! I have many hopes for 2022 and eager to start off fresh, unfortunately there are many challenges looming over farmers as they prepare for 2022. Extreme input cost, continued backlog in livestock processing, rising land prices, 40% higher equipment cost, and continued labor shortages are just few challenges that farmers are facing in the new year. With a 100-150% increase in chemical and uncertainty of even getting some highly used herbicides such as glyphosate, atrazine, and glufosinate, many producers are pondering the thought of doing more tillage next spring. This year I was fortunate enough to conduct some on farm research comparing the yield and crop growth difference between no-till and conventional tillage. I had some great partners in the research trial, the Ohio Valley Career and Technical Center FFA lead by Luke Rhonemus and Brad White. Before I get into the results, I want to say that the OVCTC FFA student were very hard working and eager to learn, I truly believe that the future of Agriculture will be in good hand when these young fold finish their education and enter the industry. As you unwrap your gifts and munch on your Christmas cookies this Christmas look over the results of this on farm research trial.

- There were 2 treatments, conventional tillage (3 passes with a disk and leveled with a harrow) and No-till. Each treatment was replicated 5 times.
- The whole plot area consisted of the same soil type and consistent on fertility. The same amount of fertilizer was applied to the whole plot area.
- The same variety of soybeans were planted on the same date (May 24th, 2021) at the same population (161,000 seeds per acre).
- During the growing season I conducted a stand count, No till = 115,200 plants/ac and tillage = 131,400 plants/ac
- During the growing season the plot received the same weed control products and moisture amount was consistent across the entire plot.

- Harvest took place on November 8th, 2021. The average grain moisture for Tillage plots = 13% and No till = 12.7%. The average Test weight of the entire plot = 54.5lbs/bushel and average yield = 66.76bu/ac.
- Yield of No-till = 64.3bu/ac and Tillage = 69bu/ac.

In summary just like every on-farm research there are many factors that take place out of the farmer's control. I believe one of the main factors reducing yields of the No-till plot was a weaker germination rate and reduced stand compared to the tillage plot. Economics also play a key role in making the decision to till or not to till. The gross income of the tillage plot = \$807.69 compared to the No-till = \$749.74., after cost of production the tillage plot incurred 15.70/ac more than the No-till plot. At the end of the day the tillage plot yielded a \$42.25/ac revenue above the No-till plot.

Some other details to go over.

- Private, Commercial, and Fertilizer applicator testing dates will be January 13, 2022, and March 10th, 2022, located at Ohio valley CTC. To register online by going to pested.osu.edu or call ODA (pesticide division) at 614-728-6987.
- January 11, 2022, private pesticide applicator/fertilizer applicator recertification 5:00pm-9:00pm held at the Ohio valley CTC 175 Lloyd Rd West Union, Ohio 45693 Cost is \$35 for both pesticide and fertilizer and \$15 for those just needing fertilizer recertification only. Please register with our office first by calling (937) 544-2339 and mailing your checks to 215 North Cross St RM104 West Union, Ohio, 45693.
- February 15th will be the second private pesticide/fertilizer applicator recertification, location of this event will be at the West Union Frisch's (back meeting room) 11157 St Rt 41, West Union, Ohio 45693. Register by calling (937) 544-2339 and mailing payments of \$35 for both Pesticide and fertilizer or \$15 dollars for fertilizer only to the office 215 North Cross St RM104 West Union, OH 45693.
- USDA NRCS announces deadlines for the Environmental Quality Incentive Program (EQIP), Conservation Stewardship Program (CSP), and Regional Conservation Partnership Program (RCPP). The Deadline to apply for these cost share programs is January 14th, 2022, call (937)544-2033 ext. 3 for details.
- 2022 Tobacco GAP recertification course will be March 31,2022 at Raines Farm and Greenhouse, 10:00am-12:00pm. This event will be open to both Adams and Brown County producers. Call the Adams County OSU Extension office to RSVP at (937) 544-2339.