Western Illinois University

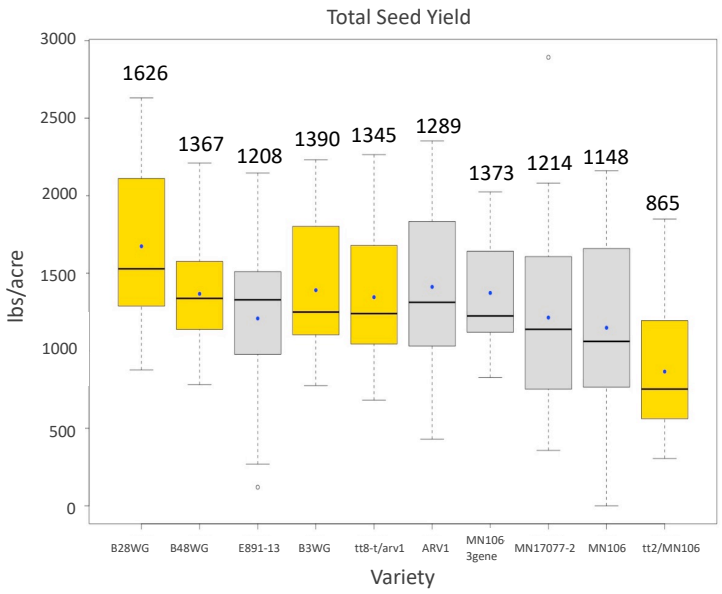
14th Annual Pennycress Field Day
May 25, 2023 - 10am-12pm
WIU Agriculture Field Laboratory, Macomb, IL

Field Day and Tour

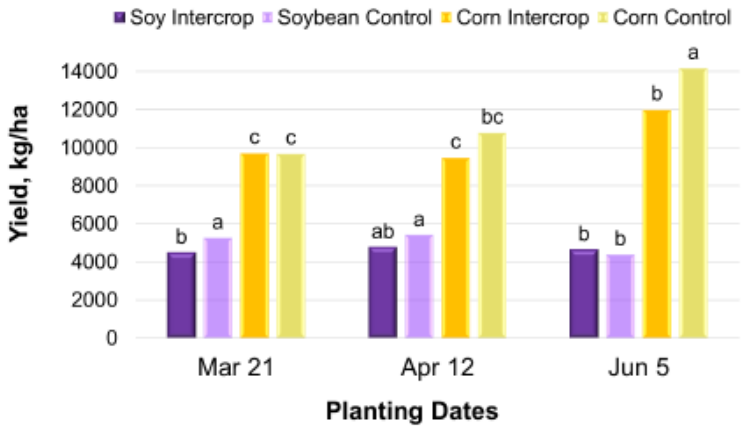
Agenda:
9:30-10:00am - Networking- Coffee, juice, snacks, and donuts
10:00-10:30am – Update from previous growing season
10:30-12:00pm – Field tour of research plots*

* Some walking in the field is required to see all research plots. Appropriate footwear is required. A people mover will be provided for the longer distances.

2022 Multi-State Trials



2022 ISA Intercropping Soybean and Corn into Golden Pennycress



2023 Research Plot Tour

Herbicide impact on pennycress establishment

Intercropping soybeans into pennycress (ISA)

Fall applied sulfur treatments on GE tt2/AOP2 MN106 line (4 reps)

Variety trails of breeding lines and wild populations of pennycress (4 reps)

Spring applied nitrogen application of 10, 20, 30, 40, 50, and 60 lbs. N (4 reps)

ISU trait discovery plots

Winter wild populations for IPREP project looking for improved stress traits

Soybean planting date study (CoverCress)

Covercrop/pennycress impact on soil characteristics (NREC)

Intercropping pennycress into soybeans (ISA)

Demonstration of new Plot combine and planter

IPREFER
Integrated Pennycress Research
Enabling Farm & Energy Resilience

Pennycress – The Midwest's First Cash Cover Crop

Pennycress (*Thlaspi arvense* L.) is a high-yielding oilseed crop that can be grown as an ecosystem benefiting winter cash cover crop throughout the U.S. Midwest Corn Belt. Pennycress is unique among cover crops in that it can generate income, which will incentivize farmer adoption. Integration of pennycress into existing corn-soybean rotations would extend the growing season on established croplands, avoiding food crops displacement, while yielding up to 2 billion gallons of oil annually towards the 25-year goal of 50 billion gallons of biofuels.

IPREFER is a USDA-National Institute of Food and Agriculture Coordinated Agricultural Project funded at the $10 million over five years (2019-2024). CAP projects facilitate the development of regionally-based industries producing advanced biofuels, industrial chemicals, and other biobased products. IPREFER's 49-member research and extension/outreach team concentrate on optimizing off-season pennycress production and overcoming supply chain bottlenecks, with an overarching goal of commercializing pennycress as the Midwest's first "cash cover crop" within five years.

The IPREFER research program focuses on improving pennycress germplasm and agronomic management, ecosystem services characterization, and supply chain establishment with an emphasis on post-harvest seed management. We are developing education and extension networks that enhance pennycress adoption and profitability by providing science-based guidance to producers and other stakeholders, training farmers, workers, and scientists, and highlighting new career opportunities.

At IPREFER, we place a strong emphasis on working directly with producers and industry. This relationship will integrate research-based knowledge to improve on-farm economics and highlight environmental benefits. The integration of pennycress as a cash cover crop will positively impact the profitability of production agriculture and contribute to the economic health of rural communities. Pennycress production also has the potential to decrease soil erosion and nutrient runoff, support pollinator health and biodiversity, suppress spring weeds, and increase energy security by diversifying the nation's energy portfolio.

Learn more about the IPREFER project at our website iprefercap.org and by following us on Twitter at @IPREFER_CAP.

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