

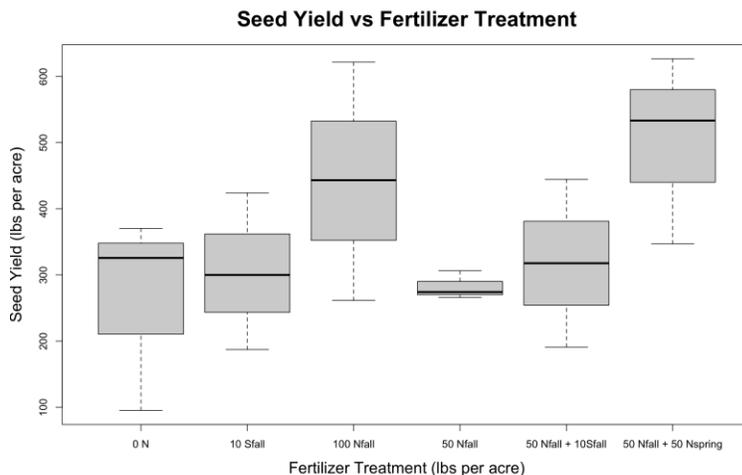
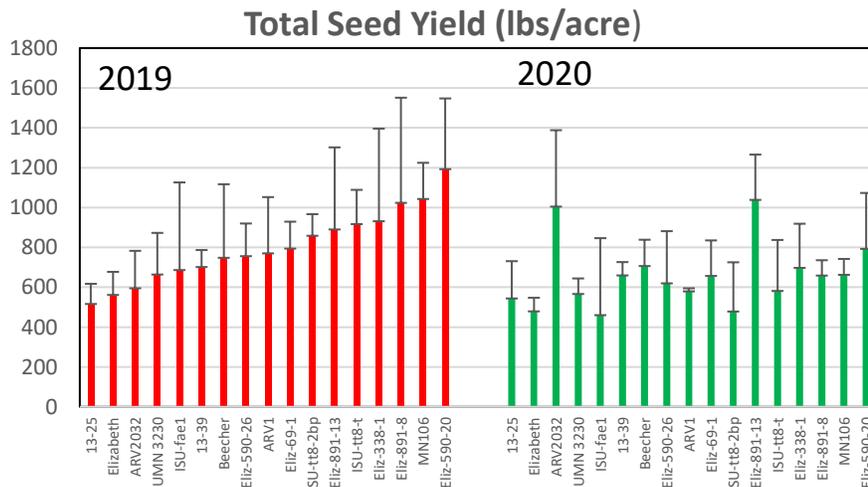
Field Day and Tour

Agenda:

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

*Hay wagons will be used to transport attendees to field plots. Some walking in the field is required to see all research plots. Appropriate footwear is required.

2019-20 Research Results



2021 Research Plot Tour

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

Timing of spring nitrogen application of 50 lbs. N, in addition to and without 50 lbs. N applied in Fall across 2 varieties (4 reps)

Multi state variety trials including top ten breeding lines from WIU, ISU, UMN, and CoverCress, Inc. (4 reps)

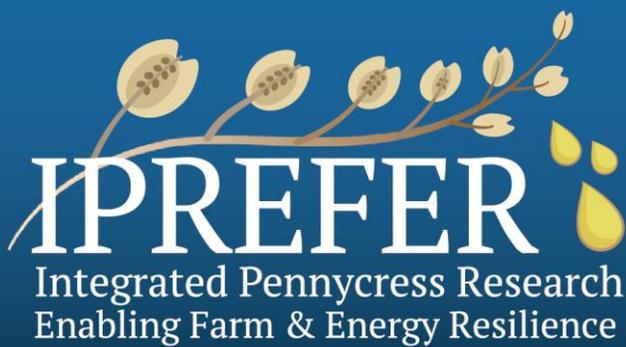
Gibberellic Acid (GA₃) seed treatments with leading breeding lines ARV2032 and tt8-t/ARV1. Soaking times of 0, ½ hr, 1 hr., and 12 hr. (4 reps)

Demonstration of new Plot combine for pennycress harvest and state trials.

Large strip trials of top 12 winter and spring breeding lines from 2020

ISU trait discovery plots

Greenhouse tour



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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