

Winter Canola Program

Winter canola is uniquely positioned to be included in current cropping systems for farmers in the Mid-South, improving farm income potential while creating an opportunity to diversify and grow more agricultural feedstocks for lower-carbon biofuel.





BENEFITING FARMERS, AGRICULTURE, AND ENERGY



AGRICULTURE - VITAL TO LOW-CARBON ENERGY

As the world prioritizes carbon emissions reduction and transitions to lower-carbon energy sources, the demand for renewable biofuels derived from agricultural crops is steadily increasing. Pioneer has joined forces with Bunge Chevron Ag Renewables to unlock winter canola as a biofuel feedstock available to a wider market. Pioneer is building on a century of breeding and agronomic expertise to deliver winter canola hybrids uniquely suited to the Mid-South. Plus, the partnership with Bunge Chevron Ag Renewables can help provide market stability and contract assurances that all production from enrolled canola acres will be purchased.



WINTER CANOLA - A GROWING OPPORTUNITY

There are a number of benefits that make growing winter canola hybrids a wise choice, from their high yield potential to their ability to hold more nutrients, water, and carbon in the earth to boost soil health and sustainability. Winter canola has been a profitable rotation crop for European farmers, and field tests have proven that it can have the same results for Mid-South farmers, too.



WHAT'S IN IT FOR THE GROWERS?

- Increase total farm profitability and diversify income sources.
- · Access a clear path to market for harvested crop.
- Participate in growing renewables feedstock market.
- Improve soil through plant diversity and water filtration.
- $\bullet \quad \text{Maximize productivity through multi-year crop rotation}.$
- Access federal crop insurance for qualified participants.
- Receive agronomic guidance and stewardship support through local area experts.

HOW TO PARTICIPATE IN THE PROGRAM:

- Contact Alex Hibler at Bunge (270-214-1667) to sign up for a specific number of acres. Or visit Pioneer.com/Grower and submit the form.
- Contract acres of production at a fixed price based on the July 2025 Canola Futures, +/- local area basis. "Act of God" clause is included and additional pricing alternatives are available.
- Deliver any and all crop production to a Bunge facility and get paid by Bunge Chevron Ag Renewables. Grain delivered subject to quality grading standards.





PRODUCTION GUIDELINES	
Planting Dates	Sept. 10 – Oct. 1 on well-drained soils
Seedbed Prep	Firm seedbed required
Seeding Rate	2.5 – 3 lbs/acre (depending on seed size) to achieve final stand of 5 – 7 plants/sq ft in late fall
Row Spacing	7.5" – 15"
Seeding Depth	1/4" – 1/2"
Weed Control	Preemergence herbicide application is important. Clean seedbed is vital for stand establishment and weed control. Avoid fields with Italian ryegrass or wild mustard/radish.
Fertility	An application of nitrogen (along with any other recommended fertilizer components) will be necessary before the bolt phase (stem elongation). This application could be split depending on year. Fall (per acre): Nitrogen=25 lbs, P=80 lbs, K=120 lbs, Sulfur=25 lbs, Boron=2 lbs. Adjust per soil test. Spring (per acre): Applied prior to stem extension – Nitrogen=100 lbs (split applied around 30 days apart to maximize yield), first application to include Sulfur=25 lbs, Boron=2 lbs.
Insect Management	Treat per scouting thresholds for aphids and/or cabbage pod weevils.
Fungal Disease Management	Fungicide is highly recommended at early bloom for sclerotinia and other diseases. Application timing: 30% – 50% bloom. An additional application of herbicide may be necessary depending on weed spectrum.
Harvest	Late May to early June: Use a desiccant to ensure even moisture/maturity for ease of harvest. Grain moisture needs to be at or below 10% to ensure proper storage.
1.2	Lumiderm [®] /



Lumiderm[®]

INSECTICIDE SEED TREATMENT

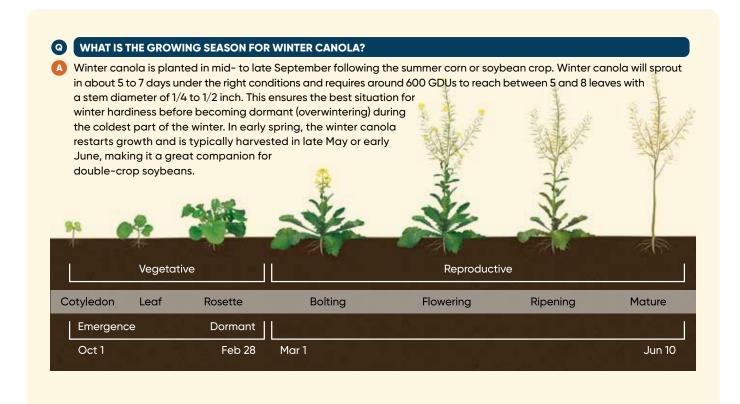
PROTECTION WITH LUMIDERM® INSECTICIDE SEED TREATMENT

With Lumiderm-treated canola seed, get the full advantage for the highest yield potential. This enhanced protection is critical during the first few weeks of seedling growth to allow the canola crop to thrive. Lumiderm has also led to substantial increases in plant vigor and biomass.

FREQUENTLY ASKED QUESTIONS

WHAT IS WINTER CANOLA? HOW IS IT DIFFERENT THAN SPRING CANOLA?

Winter canola is planted in the fall and overwinters to be harvested in the early summer. By comparison, spring canola is planted in early spring and harvested in the fall. The plants are similar in terms of their biological makeup, although winter canola has better tolerance to cold and freezing. Due to its longer growing season, winter canola yields are about 20% to 30% higher than those of spring canola. Winter canola can be used in your current double-cropping system (as a rotational crop following corn or soybean) or on acres that are fallow in winter.





ODES WINTER CANOLA REPLACE WINTER WHEAT IN THE ROTATION?

A No. Winter canola can be used in rotation with winter wheat since it needs 2 to 3 years before planting in the same field for disease prevention.

Q DO I NEED DIFFERENT EQUIPMENT TO PLANT AND HARVEST WINTER CANOLA?

No, you will not need new or different equipment to plant and harvest winter canola. You can use traditional wheat, corn, and soybean planting and harvest equipment with minimal retrofits. Incorporating winter canola into a rotation is easy because it fits right into current cropping systems. It follows traditional timing and equipment used for winter wheat crop rotations.

WHAT KIND OF YIELDS CAN I EXPECT FROM WINTER CANOLA?

A Based on university trials in the Mid-South, we anticipate yields of 45 to 55 bu/acre, with potential to be higher based on individual operations.

Q HOW IS THE WINTER CANOLA PROGRAM DIFFERENT THAN COMPETITOR PROGRAMS?

Pioneer® is building on a century of breeding and agronomic expertise to deliver a winter canola hybrid that's uniquely suited to the Mid-South, increasing your chances of a successful harvest. Plus, the partnership with Bunge and Chevron Ag Renewables can help provide market stability and contract assurances that all production from enrolled canola acres will be purchased. Simply put: Competitor programs don't have access to Pioneer technology and agronomic support, and they don't have the downstream market that's been established through this partnership with Bunge and Chevron Ag Renewables.

Q DOES WINTER CANOLA REPLACE CORN OR SOYBEANS IN RENEWABLE FEEDSTOCK PRODUCTION?

No. Demand for corn and soybeans is forecasted to continue to be strong, and winter canola isn't a replacement for those crops.



JOIN US IN THIS PROGRAM!

Take the necessary steps to bring even more innovation and revenue to your farm operation. Visit Pioneer.com/Grower to learn more.

CONNECT WITH US GRAIN MARKETING AGRONOMIC SUPPORT AND ADVICE ALEX HIBLER KYLE HOLMBERG Winter Canola Commercial Field Agronomist at Pioneer Manager at Bunge at Pioneer Malex.hibler@bunge.com kyle.holmberg@corteva.com Mobile: 270-214-1667 Mobile: 317-671-1719