

A GUIDE TO SUCCESSFUL COVER CROPS

Create a Plan With a Conservation Agronomist

- COST SHARES
- SPECIES SELECTION
- SEEDING METHOD
- TERMINATION
- PLANTING CASH CROP



Species Selection

Grass: Fibrous roots scavenge excess nitrates and fight soil erosion.

OATS
Annual, will winterkill.

CEREAL RYE
Winter annual, will overwinter.

Legume: Low C:N ratios and fix organic N with inoculated seed.

HAIRY VETCH
Annual, winterkills in some areas.

RED CLOVER
Winter annual, overwinters if adequate establishment.

Brassica: Tuberous roots break through compaction layers and scavenge deep nutrients.

RADISH
Annual, will winterkill.

RAPESEED/CANOLA
Annual, cold tolerant but will winterkill.

Drought tolerant.

WINTER CAMELINA
Winter annual, will overwinter.



Cost Shares

Many organizations offer financial assistance, some can add on top of other programs whereas others cannot stack with another program.

PUBLIC FUNDS:

Farmers for Soil Health, IDALS Water Quality Initiative, NRCS EQIP, NRCS CSP

PRIVATE FUNDS:

Practical Farmers of Iowa, Truterra

PUBLIC & PRIVATE FUNDS:

Soil & Water Outcomes Fund, RCPP

Cost shares can pay \$5-\$90 per acre, with payments varying by location and cropping system. Our team of conservation agronomists is ready to help producers enroll in the best program for their operation.



Seeding Methods

METHOD	TIMEFRAME	SEED-TO-SOIL CONTACT
Aerial	Earlier pre-harvest	Less
Drill	Later post-harvest	Best
High Clearance Interseeding	Earlier pre-harvest	Moderate

Planting Cash Crop

RECOMMENDED COVER CROP SYSTEMS PRECEDING SOYBEAN CASH CROP:

Drill after harvest or broadcast interseed at the corn dough (R4) stage.

CAUTION against broadcast interseeding if the weather outlook is hot and dry; instead drill post-harvest.

Consider adding cereal rye in a mix with broadleaves to meet your specific goals.

Allow the cover crop to reach a minimum of 8–12 inches before terminating.

Use a pre-emergence herbicide when terminating cover crop. If biomass is large and evenly distributed across the field, then mechanical termination is an option.

RECOMMENDED COVER CROP SYSTEMS PRECEDING CORN CASH CROP:

Drill after harvest or broadcast interseed near soybean leaf drop stage.

CAUTION against broadcast interseeding if the weather outlook is hot and dry; instead drill post-harvest.

If broadcast interseeding, consider a broadleaf and grass mix, like oats and radish.

Allow the cover crop to reach a minimum of 8–12 inches before chemical termination.

Check planter set up in the field, especially planting depth and trench closure.

Apply 30%–50% of the crop's nitrogen needs as a split application with starter, broadcast or early side dress application.

Tips for Planting Cash Crops:



Frequently check planting depth



Manage residue and closing wheels



Adequate downforce pressure

Termination

WINTER KILL

If you plan to terminate your fall seeded cover crop with a hard winter freeze, choose species that will consistently winter kill.

Summer annuals, like oats or radish, are ideal in this situation.

CHEMICAL

If you plan to use herbicides to terminate cover crops in the spring, pay close attention to weather. An effective termination requires spraying when the cover crop is actively growing. Ideal conditions are consecutive daytime temperatures above 60° F and nighttime lows above 40° F.

Integrate this termination pass into your herbicide program to target both cover crops and early season weeds in the same pass.

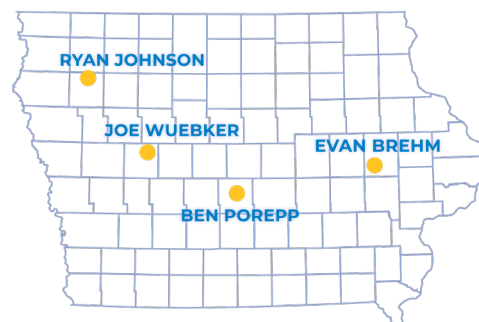
MECHANICAL

If you plan to mechanically terminate your cover crop in the spring, roller crimping is an option. This method flattens the plant on the soil surface. An ideal scenario is roller crimping a plant with the growing point well above the soil surface, like cereal rye at anthesis (flowering) or later.

Tillage may not be fully effective at terminating the cover crop alone; consult a conservation agronomist to plan accordingly.

Contact Us:

CONSERVATION AGRONOMIST NETWORK



Iowa Soybean Association

Mike Gilman - Team Lead

mgilman@iasoybeans.com | 515-577-5600

Ben Porepp

bporepp@iasoybeans.com | 515-802-2264

Evan Brehm

ebrehm@iasoybeans.com | 319-310-5468

Ryan Johnson

rjohnson@iasoybeans.com | 712-229-7184

Joe Wuebker

jwuebker@iasoybeans.com | 712-790-1415



Scan to learn more about cover crop research.