

**STRATEGIES FOR CASH CROP PLANTING
FOLLOWING A COVER CROP,
INCLUDING “PLANTING GREEN”**



**COVER CROP
TRAINING MODULE**

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PRESENTATION OVERVIEW

General factors affecting planting success for commodity crops following cover crops

Approaches to planting when terminating early

Overview and benefits of "planting green" into a living cover crop

Management tips for planting green

Terminating the Cover Crop with Herbicides



Photo credit: Edwin Remsburg (SARE image library)

General Factors for Successful Commodity Planting After Cover Crops

- ❑ Termination timing
- ❑ Termination method
- ❑ Is any pre-plant tillage being done?
- ❑ Planter setup
- ❑ Nutrient management adjustments
- ❑ Responding to moisture conditions



Photo credit: Cory Ritter (IL)

Early Cover Crop Termination Minimizes Residue



Photo credit: Edwin Remsburg (SARE image library)

Corn Emerging from Moderate Cover Crop Residue



Photo credit: Edwin Remsburg (SARE image library), pictures farmer Jim Hershey, PA

Pre-Plant Tillage of Cover Crops

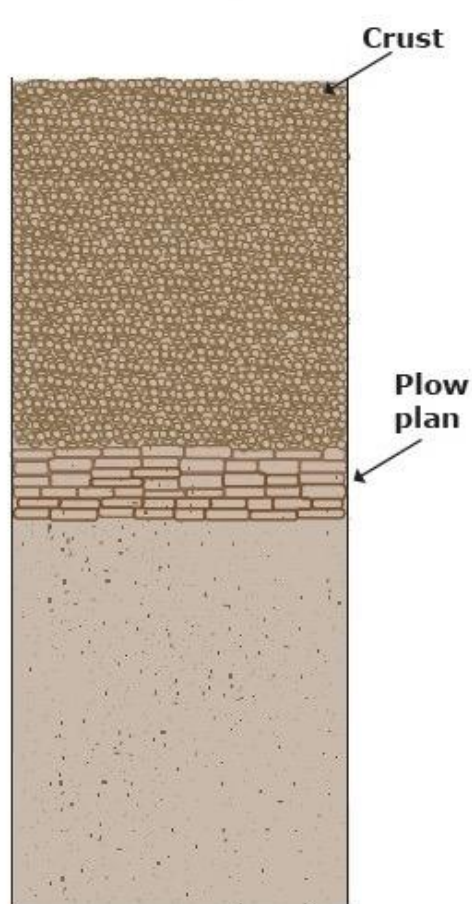
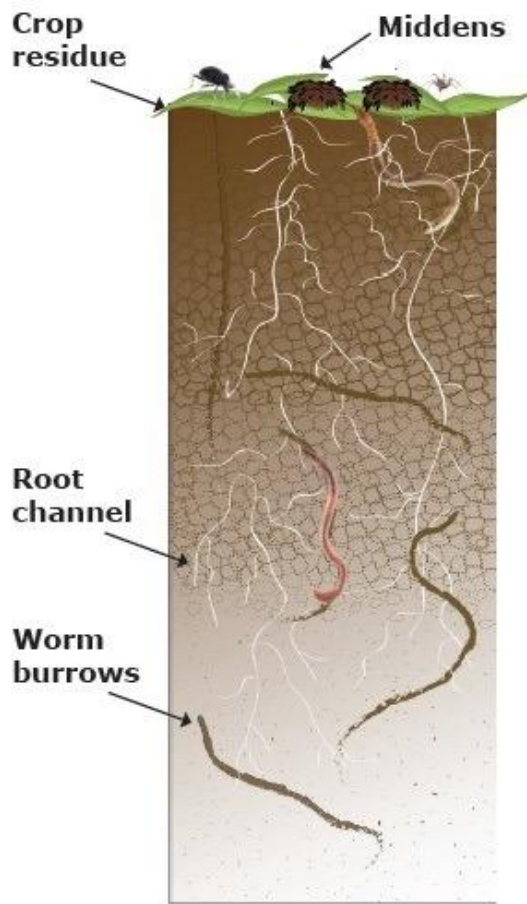


Photo credit: Edwin Remsburg (SARE image library)



No-till Ecosystem

Tilled Ecosystem



NRCS

*Photo credit –
Edwin Remsburg*

“Planting green” - soybeans into standing rye



Photo credit – Dave Robinson

Planting Green into 6 Inch Cover Crop



Photo credit: Steve Groff

Planting Green into 6 Foot Cover Crop



Photo credit: Steve Groff

Planted Green Soybeans Emerging through Cereal Rye Biomass



Photo credit – Dave Robinson

Why Planting Green is Worth Considering

- Weed control improvements
- Soil moisture management
- Planting may be easier with cover crop stems still upright
- Cover crops can live long enough to flower, which is good for pollinators and beneficial insects
- Erosion control
- Soil biology enhanced
- Builds soil organic matter faster
- Opportunity for spring grazing

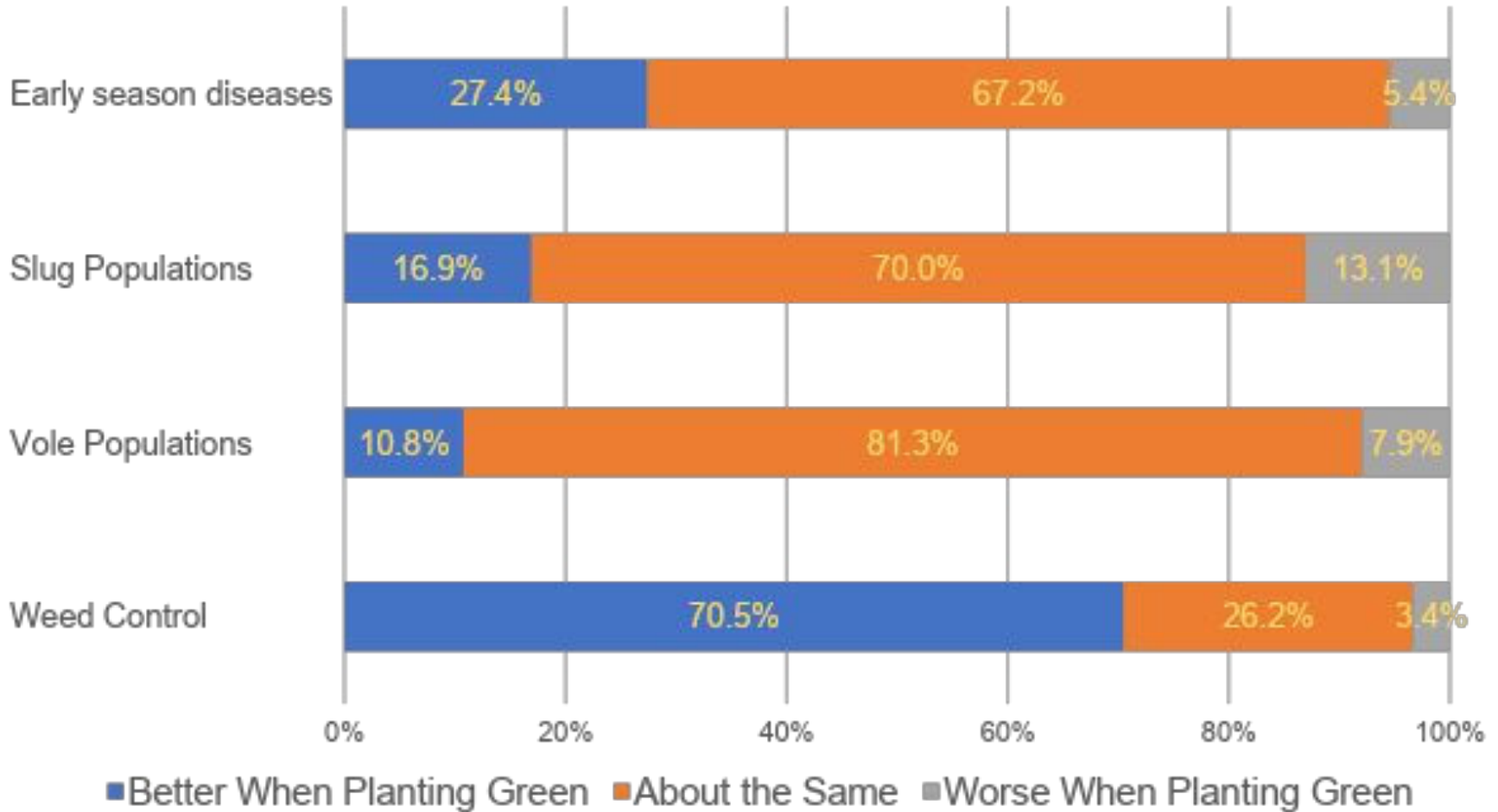


More Spring Cover Growth = More Grazing Income



Photo credit: Brett Peshek, Green Cover

Farmer Experiences with Planting Green and Pest Issues



Farmer responses from 2019-20 SARE/CTIC National Cover Crop Survey

Cover Crop Impact on Herbicide-Resistant Marestail



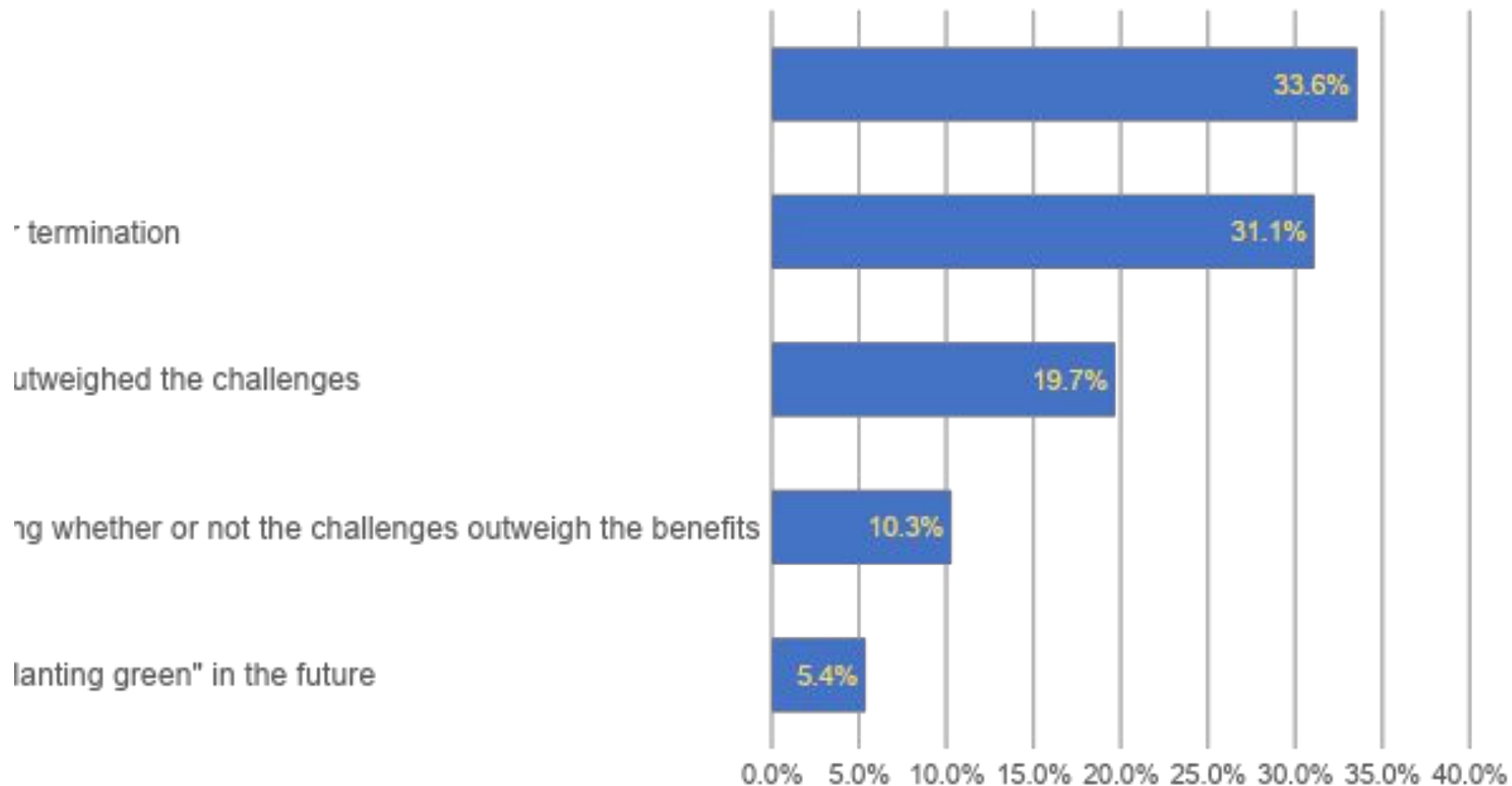
Corn following rye cover crop



Corn with no cover crop

Photo credits: Steve Groff

How Planting Green affects Cash Crop Management



Farmer responses from 2019-20 SARE/CTIC National Cover Crop Survey

Do you have to roll down the cover crop when planting green?



Photo credit – Rob Myers

Using Appropriate Closing Wheels is Critical



Photo credit - Rob Myers

Spiked Closing Wheels May Help



Need to Eliminate Hair Pinning Residue into Furrow



Photo credit: Steve Groff

Work to Achieve Proper Seed Depth



Photo credit: Steve Groff

Seed Firmer Helping Place Seed at Furrow Bottom



Photo credit: Steve Groff

If Using Row-cleaners, Try Non-Wrapping Type



Photo credit: Steve Groff

Planting Green and Nitrogen Management



Photo credit: Steve Groff

When planting corn into living covers, need to adjust nitrogen management, particularly when planting into reproductive cereal rye; add more nitrogen either with 2x2 applicator or banded over planting row

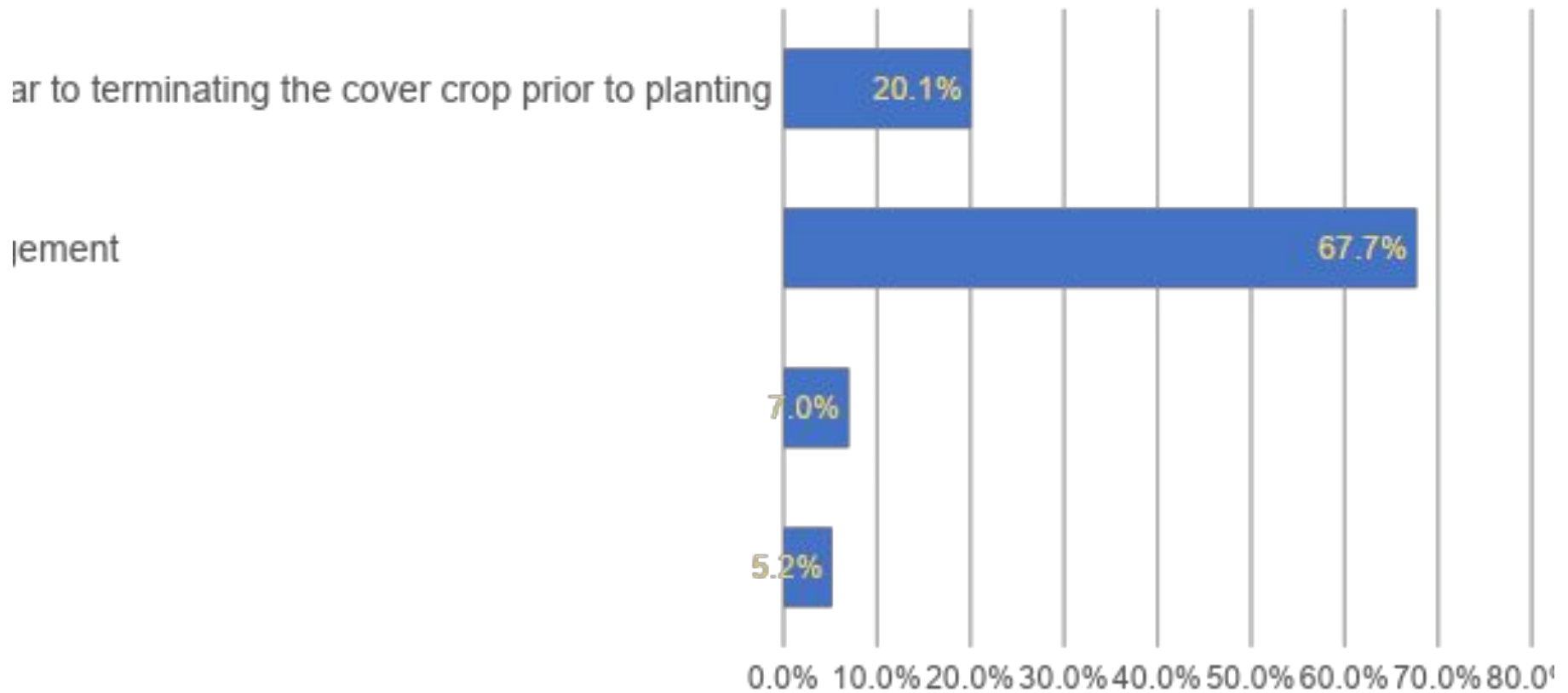
Planting Green and Soil Moisture



Evaluate soil moisture and projected weather conditions when deciding whether to plant green

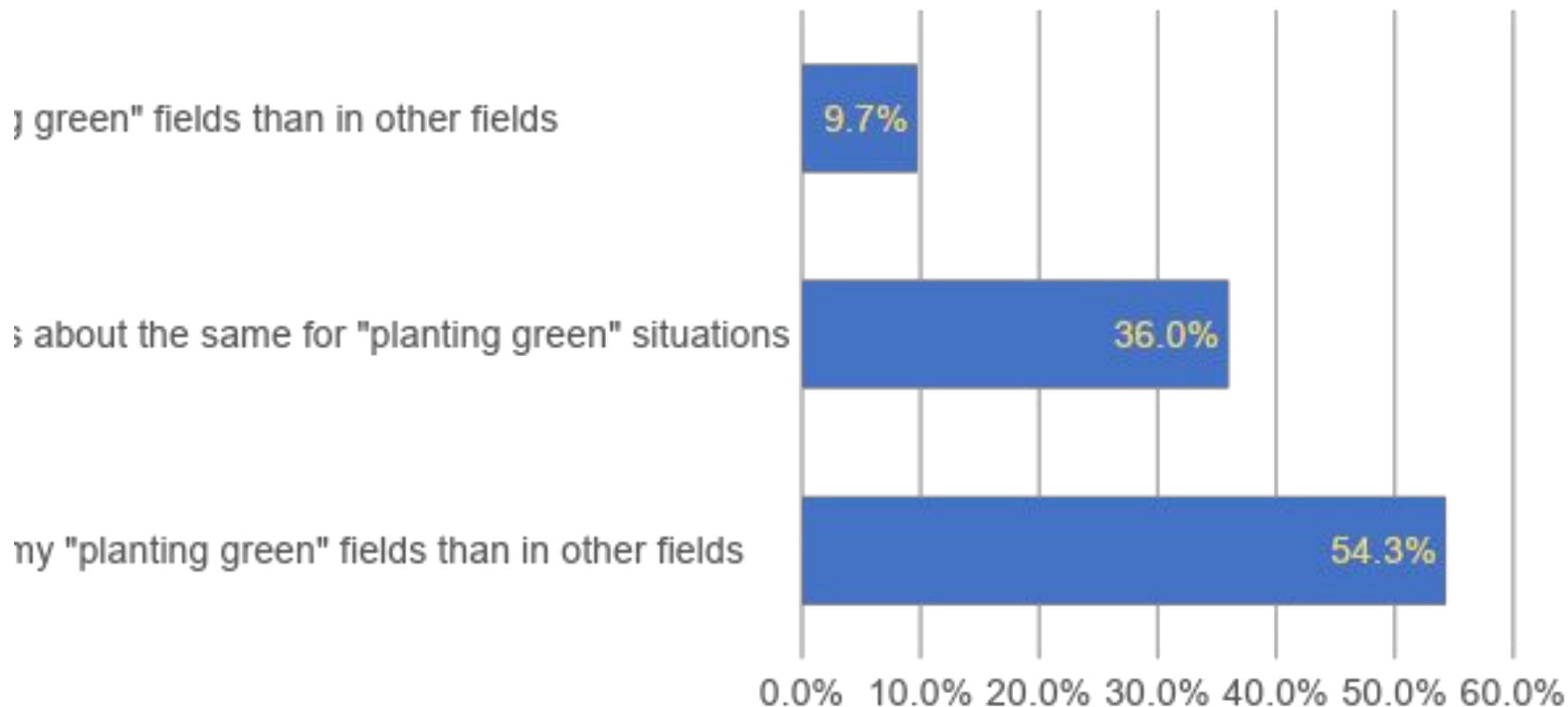
Photo credit: Steve Groff

How has planting green impacted soil moisture at the time of planting your cash crop?



Data from 2019-20 SARE/CTIC National Cover Crop Survey

In terms of ease of planting your cash crop in "planting green" situations when soil is wet, what has been your experience compared to fields where the cover crop was either terminated earlier or not present?



Summary on Termination Timing before Planting

- Adjust termination timing to fit spring moisture conditions and goals for weed management, as well as overall cover crop growth
- Terminate cover crop early if goal is to simplify planting or avoid nitrogen tie-up with winter cereal cover crop (such as cereal rye before corn)
- Avoid terminating a tall cover crop 10-14 days before cash crop planting, otherwise there is risk of a wet matt of cover crop residue preventing the soil from drying out before planting
- When planting into cover crop residue, for better soil health, try no-till planting instead of pre-plant tilling

Summary on Planting Green

Planting green can be an effective strategy to maximize cover crop benefits, including weed control, but:

- Be prepared to modify planter settings, possibly removing coulters, changing closing wheels, adjusting or removing residue (trash) cleaners
- Adjust nutrient management, especially if corn into a cover crop like cereal rye
- Monitor soil moisture and weather forecast
- Spray and/or roller crimp shortly after planting
- Scout for insects or other emergence issues
- Focus on getting the furrow closed
- Enjoy the benefits of extra cover crop growth!

