COVER CROPS FOR PREVENTED PLANTING

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Frequent and excessive spring rainfall can cause farmers to question if they can stick to their cropping plan or consider other strategies. Prevented planting could be a viable option under consideration for many growers. For additional guidance on prevented planting and crop insurance considerations, watch the Michigan State University Extension (MSUE) Virtual Breakfast presentation by Roger Betz, MSUE Farm Management Educator <u>here</u>. Prevented planting rules and guidelines should be reviewed and can be found in the Risk Management Agency (RMS) website document, *Prevented Planting Insurance* **Provisions.** Consult your Farm Service Agency (FSA) and crop insurance agent when considering options for prevented planting acres.

Cover Crops and Prevented Planting

When faced with prevented planting, farmers should consider using cover crops on these acres to avoid further soil degradation and improve soil resiliency. The period following prevented planting provides an opportunity to benefit from cover crops during the remainder of the growing season. Some of these benefits include:

- Protection from wind and water erosion
- Increased soil organic matter
- Improved soil structure
- Increased soil permeability
- Increased water holding capacity
- Reduced nutrient losses
- Improved soil biological activity
- Build up soil nitrogen

Many of these benefits will lead to increased soil resiliency (the ability for soil to adjust to climatic or practice changes) in the coming years.



Crop Insurance Restrictions

Farmers who decide to utilize preventative planting should first consult their crop insurance restrictions. Many of the plant species that can be used could also be used for grazing and harvested for feed. For 2019 only, RMA has adjusted the rules regarding grazing and haying specifically:

- Silage, haylage and baleage should be treated in the same manner as haying and grazing for this year.
- Producers can hay, graze or cut cover crops for silage, haylage or baleage on prevented plant acres on or after September 1 and still maintain eligibility for their <u>full</u> 2019 prevented planting indemnity.
- 3. These adjustments have been made for 2019 only.



When considering prevented planting acres for forage production or emergency forage, consult <u>MSU Forage Connection</u> website and the MSUE News Emergency Forage articles – <u>Part 1</u>, <u>Part 2</u> and <u>Part 3</u>.

Selecting Cover Crops

When selecting cover crops for prevented planted acres, choose a cover crop based on your goals for a particular field. Table 1 below lists cover crops to consider for prevented planting in Michigan and ratings for various goals and attributes. In general:

- Grasses build soil organic matter quickly while generating the most above and below ground biomass. Oats can be planted at any time and is a least cost option. Other summer grasses such as sorghum-sudangrass can be planted early summer. Summer grasses will winter-kill, but their residues will continue to provide some protection through the winter and next spring. Winter cereals and annual ryegrass can be planted mid- to late summer and are winterhardy requiring termination next spring.
- Legumes fix atmospheric nitrogen providing a source for next year's crop. Red clover or berseem clover can be planted early summer, while for late summer planting consider crimson clover, sweet clover, hairy vetch or winter peas.
- Brassicas, such as radishes and rapeseed, have taproots to breakup compaction and improve permeability, and are also excellent nitrogen scavengers. Brassicas can be planted mid- to late summer. Planting radish before August can result in bolting and going to seed, limiting the size of the taproot.

Some cover crops are sensitive to some residual herbicides. If you have already applied residual herbicides, consult herbicide labels for plant back restrictions (see Resources).

Resources

The MSUE Cover Crops and Soil Health Team have compiled recommendations that can be used for preventative planting. Since farming practices vary from farm to farm specific questions can be directed to MSUE educators that specialize in cover crops. Other resources that can assist with cover crop selection and use are:

MSUE Cover Crops Website

www.covercrops.msu.edu

Midwest Cover Crops Council Decision Tool www.mccc.msu.edu

Midwest Cover Crops Field Guide

Available from the Purdue Extension Education Store, www.edustore.purdue.edu

Managing Cover Crops Profitably, 3rd Edition
https://www.sare.org/Learning-
Center/Books/Managing-Cover-Crops-Profitably-3rd-Edition

Cover Crop Termination 2019

https://www.canr.msu.edu/resources/cover-croptermination-2019

Corn Herbicide Carryover Table

Available from Penn State University Extension, https://extension.psu.edu/corn-herbicides-and-rotation-to-cover-crops

Soybean Herbicide Carryover Table

Available from Penn State University Extension, https://extension.psu.edu/soybean-herbicides-and-rotation-to-cover-crops



Table 1: Selected Michigan cover crops for prevented planting with ratings for goals, advantages and potential problems. Key: P – POOR, F – FAIR, G – GOOD, VG – VERY GOOD, E – EXCELLENT, VH – VERY HIGH, H – HIGH, M – MODERATE, L – LOW, N - NONE

				Go	als			Potential Advantages								Potential Problems			
Species *	Summer Annual or Cool Season **	Winter Kill	N Scavenger	Soil Builder	Erosion Fighter	Weed Fighter	Good Grazing	Quick Growth	Subsoiler	Free P&K	Loosen Topsoil	Suppresses Nematodes	Suppresses Soil Diseases	Allelopathic	Attract Beneficials	Bears Traffic	Becomes a Weed	Attracts Harmful Insect/Nematodes	Contributes to Crop Diseases
Annual Ryegrass	SA	No	VG	VG	VG	VG	VG	VG	G	G	Ε	G	G	G	F	Ε	VH	N	L
Barley	CS	No	VG	VG	Е	VG	VG	VG	G	G	VG	F	G	VG	G	G	L	М	М
Oats	SA	Yes	VG	G	VG	Ε	G	Ε	Р	F	VG	Р	G	VG	Р	G	N	L	L
Rye	CS	No	Ε	Ε	Ε	Ε	G	Ε	F	VG	Ε	VG	VG	Ε	F	VG	М	L	L
Wheat	CS	No	VG	VG	VG	VG	VG	VG	G	VG	VG	F	F	F	F	G	L	М	M
Sorghum-Sudan	SA	Yes	Ε	Ε	Ε	VG	VG	Ε	Ε	G	G	VG	VG	Ε	G	G	L	L	N
Buckwheat	SA	Yes	Р	G	F	Ε	Р	Ε	Р	E	VG	F	Р	VG	Ε	Р	VH	L	N
Radish	SA	Yes	Ε	VG	VG	Ε	G	VG	Ε	VG	G	VG	G	VG	F	F	L	L	Ν
Rapeseed	CS	No	VG	G	VG	VG	G	VG	G	F	G	VG	G	VG	G	F	М	М	Ν
Berseem Clover	SA	Yes	G	VG	VG	VG	Ε	Ε	VG	VG	G	F	F	G	VG	G	L	М	L
Crimson Clover	SA	Maybe	G	VG	VG	VG	G	Ε	F	G	G	F	G	F	VG	F	L	Н	L
Red Clover	CS	No	G	VG	G	VG	Ε	F	VG	VG	G	F	F	G	VG	G	L	М	L
Sweetclovers	CS	No	F	Ε	VG	VG	F	G	Ε	Ε	Ε	F	F	F	VG	G	М	М	N
Winter Pea	CS	No	F	G	VG	G	VG	VG	F	F	VG	G	VG	F	VG	F	N	L	М
Hairy Vetch	CS	No	F	VG	G	G	G	F	G	G	VG	F	G	G	Ε	Р	Н	L	N

^{*}There are other cover crops species that can be used. Consult an <u>MSUE Cover Crop Educator</u> and/or see Resources for more information.

^{**}Cool Season plants that are planted in June- July may not have much plant growth and species such as radish and rapeseed may bolt and produce flower without much root growth.



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