

Michigan Supplemental Enhancement Activity Resource Conserving Crop Rotation (MI CCR99)

This enhancement supplement will be used to support the National CSP enhancement sheet for Resource Conserving Crop Rotation (RCCR).

Approved Resource-Conserving Crops: For use on Cropland only (does not include permanent hayland, orchards or vineyards)

1. A Perennial Grass:

Perennial Grasses-Cool	Perennial Grasses-Warm
Creeping Meadow Foxtail	Big Bluestem
June grass	Eastern Gamagrass
Kentucky Bluegrass	Indiangrass
Meadow Fescue	Little Bluestem
Meadow Foxtail	Switchgrass
Orchardgrass	
Red Fescue	
Redtop	
Reed Canary grass	
Ryegrass, Perennial, Italian	
Smooth Bromegrass	
Tall Fescue	
Timothy	
Wheatgrass	

2. A Legume Grown for use as Forage, Seed for Planting, or Green Manure:

Perennial Legume	Green Manure	
Alfalfa	Annual Medic*	Sorghum or Sorghum Sudan*
Alsike Clover	Berseem Clover*	Sweet Clover (b)
Birdsfoot Trefoil	Crimson Clover*	60/40 mix (Red Clover/Sweet Clover) (b)
Crown Vetch	Field Peas*	80/20 mix (Red Clover/Sweet Clover) (b)
Kura Clover	Hairy Vetch**	
Ladino Clover	Mammoth Red Clover (b)	
Medium Red Clover	Medium Red Clover (b)	
White Clover	Soybeans*	

*summer annual, **winter annual, (b) biennial

3. A Legume-Grass Mixture (lbs/ac):

Mixtures 1/	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Legumes															
Alfalfa 2/	6								6	6	6	3	6		6
Alsike Clover		4					4								
Birdsfoot Trefoil 2/ 3/						3									
Ladino Clover				1	2			1				3			
Red Clover			5	3										3	
Cool-Season Grasses															
Wheatgrass															8
Kentucky Bluegrass						5		2				2.5	2		
Orchardgrass				3			4			3				3	
Redtop	6	2												3	
Smooth Bromegrass	2		8		8				6				6		
Timothy								4			4	2.5		3	
Total lbs./ac/mixture	14	6	13	7	10	8	8	7	12	9	10	11	14	12	14

1/ use long-term winter hardy varieties. 2/ Needs to be inoculated with rhizobia bacteria. 3/ See Michigan DNR publication.

4. A small grain grown in combination with a grass or legume green manure crop whether inter-seeded or planted in rotation. (Use approved grass and legumes from 1 & 2)

Legumes in rotation examples:

1. Winter small grain frost seeded with red/sweet clover- *pollinator benefits fix N*
2. No-till drilling seed after wheat or small grains: *crimson clover, hairy vetch to capture or fix Nitrogen from manure or other sources.*³
3. Sow red clover after small grain harvest or frost seed- *to fix Nitrogen for corn or other crops*

Modification of an existing RCCR to a higher conservation level approved crops

Table 1. Michigan High-Residue Producing Crops:

Alfalfa	Soybeans
Alfalfa/Bromegrass or Alfalfa / (grass) mixtures	Spring Barley
Corn Grain; CG narrow rows; Corn seed	Sweet Clover
Grain Sorghum	Sweet Corn
Oats	Winter Cereal Rye
Red Clover	Winter Wheat

Table 2. A Cover Crop* following an annual crop:

Legumes	Non-legumes
Annual Alfalfa	Annual Ryegrass
Annual Medic	Barley
Berseem Clover	Buckwheat
Crimson Clover	Cereal Rye
Field Peas	Corn
Hairy Vetch	Field Bromegrass
Mammoth Red Clover	Forage Turnips
Medium Red Clover	Oats
Soybeans	Oil Seed Radish
Sweet Clover	Pacific Gold Mustard
60/40 (RC/SC)	Rape
80/20 (RC/SC)	Sorghum: Sorghum Sudan Grass; Sudan Grass

*Cover crop seeding rates, dates, and types shall follow the NRCS-MI 340 Cover crop standard and/or MSU guidelines.