

Additional Information:

Companion Crop Specifications

A companion crop may be established prior to or at the same time as a permanent seeding of grass, forbs, and/or legumes. The companion crop will be selected and managed to minimize competition with the permanent seeding.

Planned Companion Crop: None Planned Redtop Spring Oats Winter Wheat Rate per Acre (lbs): _____ Total Bulk Lbs to Seed: _____

Additional Information:

Applied

Companion Crop Planted:

Redtop Spring Oats Winter Wheat

Bulk Lbs Planted:

Total Lbs	Lbs/Ac
	0.0

Seeding Mix Summary														
Acres to be Seeded:		1.00												
Practice Adjustment Factor:		Broadcast Adjustment Factor:			Interseeding Adjustment Factor:								1	
Apply Adjustment Factors to:														
Planned Seed Mix				Seed Mix Purchased and Planted										
Species	Acceptable Cultivar(s)	PLS lbs/ac	Total PLS lbs Needed	Bulk lbs Seeded	% Purity	% Germ	% Dormant/ Hard Seed	PLS lbs Planted	Shortage/ Excess	% of Mix	Cultivar OR Origin for MO Source Identified Class Seed	Meets all Requirements		
Big Bluestem, <i>Andropogon gerardii</i>	Champ (statewide), Kaw (statewide), OZ-70 (statewide), Pawnee (north MO), Rountree (statewide), Yellow Tag (statewide)	2.420	2.420						-2.420					
Switchgrass, <i>Panicum virgatum</i>	Alamo (south MO - lowland sites), Blackwell (statewide), Cave-In-Rock (statewide), Kanlow (statewide - lowland sites), Nebraska 28 (north MO), Pathfinder (north MO), Trailblazer (north MO), Yellow Tag (statewide)	1.340	1.340						-1.340					

Virginia Wildrye, <i>Elymus virginicus</i>	Cuivre River (statewide), O'Ma'Ha (north MO), Yellow Tag (statewide)	4.350	4.350							-4.350		
Black-eyed Susan (B), <i>Rudbeckia hirta</i>		0.075	0.075							-0.075		
Blue Lobelia, <i>Lobelia siphilitica</i>		0.005	0.005							-0.005		
Blue Vervain, <i>Verbena hastata</i>		0.010	0.010							-0.010		
Brown-eyed Susan, <i>Rudbeckia triloba</i>		0.008	0.008							-0.008		
Canada Milkvech, <i>Astragalus canadensis</i>		0.020	0.020							-0.020		
Common Evening Primrose (B), <i>Oenothera biennis</i>		0.030	0.030							-0.030		
False Sunflower, <i>Helianthus helianthoides</i>		0.050	0.050							-0.050		
Foxglove Beardtongue, <i>Penstemon digitalis</i>		0.019	0.019							-0.019		
Golden Alexanders, <i>Zizia aurea</i>		0.023	0.023							-0.023		
Gray Goldenrod, <i>Solidago nemoralis</i>		0.005	0.005							-0.005		
Gray-headed Coneflower, <i>Ratibida pinnata</i>	Available: Sunglow (statewide)	0.040	0.040							-0.040		
Illinois Bundleflower, <i>Desmanthus illinoensis</i>	Available: Reno Germplasm (statewide)	0.150	0.150							-0.150		
Lanceleaf Coreopsis, <i>Coreopsis lanceolata</i>		0.050	0.050							-0.050		
Maximilian Sunflower, <i>Helianthus maximiliani</i>		0.011	0.011							-0.011		
New England Aster, <i>Symphotrichum novae-angliae</i>		0.008	0.008							-0.008		
Pale Purple Coneflower, <i>Echinacea pallida</i>		0.030	0.030							-0.030		
Partridge Pea (A), <i>Chamaecrista fasciculata</i>	Available: Riley (statewide), Lark Selection (statewide)	0.100	0.100							-0.100		
Prairie Cinquefoil, <i>Drymocallis arguta</i>		0.035	0.035							-0.035		
Purple Coneflower, <i>Echinacea purpurea</i>		0.100	0.100							-0.100		
Purple Prairie Clover, <i>Dalea purpurea</i>	Available: Kaneb (statewide)	0.104	0.104							-0.104		
Rattlesnake Master, <i>Eryngium yuccifolium</i>		0.020	0.020							-0.020		
Roundhead Lespedeza, <i>Lespedeza capitata</i>	Available: Kanoka (statewide)	0.020	0.020							-0.020		

Showy Ticktrefoil, <i>Desmodium canadense</i>	Available: Alexander Germplasm (statewide)	0.040	0.040							-0.040		
Smooth Aster, <i>Symphyotrichum laeve</i>		0.010	0.010							-0.010		
Stiff Goldenrod, <i>Oligoneuron rigidum</i> , <i>Solidago rigida</i>		0.006	0.006							-0.006		
Upright Prairie Coneflower, <i>Ratibida columnifera</i>		0.060	0.060							-0.060		
White Prairie Clover, <i>Dalea candida</i>		0.040	0.040							-0.040		
Wild Bergamot, <i>Monarda fistulosa</i>		0.070	0.070							-0.070		

Total Planned: 9.249 9.249

Planned Grasses PLS/ft ² :	<u>25.97</u>	Total PLS lbs. Forbs Planted:	_____
Planned Forbs/Legumes PLS/ft ² :	<u>16.00</u>	Total % of Mix:	_____
Planned Total PLS/ft ² :	<u>41.97</u>	% of mix of annual/biennial species:	_____

Customer and Seed Dealer Please Note:

Only viable, high quality and adapted seed will be used. All seed shall have a current seed test within 10 months of the planting date that lists germination, purity, and hard seed as a percentage for determining pure live seed and lists the percent of weed seed present that meets State seed quality law standards. Seed test results must be provided to the customer and USDA for confirmation that seed planted meets specifications outlined in this plan. Seed must be clean and relatively free of weed seed and contaminants. Seed that has become wet, moldy, or otherwise damaged in transit or storage is not acceptable. Certified seed is preferred but not required unless Missouri Source Identified Class Seed, or yellow tag, is denoted as being required.

Legume seed shall be inoculated with the proper, viable Rhizobium bacteria species prior to planting according to Missouri Agronomy Technical Note MO-36, "Legume Inoculation." Pre-inoculated seed shall be planted prior to the expiration date on the inoculum tag or be re-inoculated with the appropriate inoculum within 24 hours prior to seeding. Inoculated seed will not be exposed to direct sunlight. Inoculation of legumes may be waived when a current pasture inventory (JS-AGRON-24 or similar inventory) shows that the legume species to be seeded occupies more than 5 percent of the vegetative cover on the site prior to seeding.

For "Acceptable Cultivar(s)," north Missouri (MO) is all counties north of Bates, Henry, Benton, Morgan, Moniteau, Cole, Osage, Gasconade, Franklin, and St. Louis Counties. South Missouri is all counties including and south of those listed. Refer to Native Cultivars or Selections Information Sheet (IS-MO723N) for guidance on selecting the appropriate native grass cultivars to meet objectives. In all cases where a cultivar(s) is/are noted under the Acceptable Cultivar(s) heading above, Missouri Source Identified Class Seed (yellow tag seed) may be used instead of a cultivar variety or selection.

The following information applies only if "Locally adapted Missouri Source Identified Class Seed (yellow tag) required" is shown under the "Acceptable Cultivar(s)" heading above: Locally adapted Missouri Source Identified Class Seed, or yellow tag, is defined as a native plant that source genetically originated in Missouri, was not introduced, and existed within the state borders prior to arrival of settlers. All seed from herbaceous material shall comply with Missouri seed laws including Missouri Crop Improvement Association guidance. All seed will comply with AOSCA (Association of Official Seed Certifying Agencies) certification procedures (including appropriate tagging) to include third-party verification by the Missouri Crop Improvement Association of source, genetic identity, and genetic purity of wildland collected or field or nursery grown plant germplasm materials. Seed must be Missouri origin (grown in Missouri) and certified as Missouri Source Identified Class. Source Identified Certification means: parent seed is collected from natural remnant Missouri populations; no selection, testing, or breeding for specific traits; production fields are inspected to verify species, source, and lack of noxious weeds; and seed is certified for purity and germination. If Missouri origin (grown) source identified class seed is not available, Missouri source identified class seed may be obtained from adjoining states.

