

# Native Seeds Work

## What is a Native Plant?

The City of Fort Collins defines a native plant as “A plant species that occurs naturally in a particular region, state, ecosystem, and/or habitat without the direct influence of human actions.” Our native plants have been here for millions of years and have evolved with our soils and precipitation, allowing them to establish and thrive without much input from humans.

## Why Use Native Plants?

Natives provide critical habitat for wildlife and pollinators. Our wildlife and native plants evolved with each other. While wildlife and pollinators use non-native plants, only native plants sustain them in a healthy way and provide larval/adult food sources, crucial nesting sites, and shelter.

Natives preserve our natural landscapes. Natives grow in harmony with other natives providing us and wildlife with beautiful and diverse landscapes. Non-native plants like smooth brome reduce diversity and the quality of habitat by creating monocultures and moving beyond planted sites into natural landscapes.

Seeding natives saves you time and money by eliminating the need to irrigate, and they don't require fertilizers. Plants in natural ecosystems depend on precipitation instead of irrigation. Native live plantings and gardens surrounded by hardscape may require supplemental irrigation.

## What to Expect

Native seeds germinate and establish within 2-3 growing seasons. If they do not, check that the mix selected is the correct mix for site and then reseed.

- Expect some bare soil between plants, this is natural for many native plant communities.
- Expect plants to go dormant in hot, dry conditions-they will turn brown but are still alive.
- Expect randomness in your seed plantings. Native plants grow commingled with each other instead of in isolated pockets of the same species.
- Excessive grazing or continual disturbance will not allow plants to establish.

## Custom Native Seed Mixes

The City of Fort Collins Natural Areas Department has 25 years of experience developing and testing a variety of native seed mixes. Species selected for these mixes reliably and quickly established in Natural Area restorations, are available from many seed companies and are budget friendly. The mixes are native and custom blended for the Fort Collins Growth Management Area at elevations of 4,800-7,500 feet.

Interested in seeing more native species? Check out the City of Fort Collins Recommended Plant List <https://www.fcgov.com/vegetation/> and select “Fort Collins” or “Colorado” under Nativity in the left navigation menu.

### UPLAND MIX

- All soil types
- Area is dry majority of growing season

\$143- \$400/acre

### MESIC MIX

- All soil types
- Area is periodically moist during growing season

\$207 - \$750/acre

### WETLAND MIX

- All soil types
- Area is saturated to 6 inches of standing water for the majority of the growing season

\$2,084- \$2,940/acre

### ALKALINE MIX

- Soils with a presence of white mineral deposits on surface or in proximity
- Area is dry to saturated for the majority of the growing season

\$149- \$2,843/acre

### DETENTION BASIN MIX

- All soil types (blend of Upland and Mesic)
- Low height requires less mowing

\$188- \$554/acre

### POLLINATOR/RAIN GARDEN

- Sandy-Loam soils
- Area is dry to moist for the majority of the growing season

\$305-2,710/acre

*Prices will vary due to availability and quantity ordered.*

# Establishing Native Seeds

## 1 SELECT NATIVE SEED MIX

Choose a pre-formulated native seed mix (see previous page) based on your site conditions.

## 2 MEASURE, CALCULATE AND ORDER

Measure the square footage of the site and calculate how much seed you need to purchase. Select a native seed company and let them know which of the native seed mixes you require. They may be able to assist with calculating how much seed you need.

## 3 PREPARE SEED BED

It's important for seeds to have a good contact with the soil. Eliminate weeds or other vegetation that might impede soil contact. The soil should be firm. Compacted soil doesn't allow the seed to be placed into the soil; fluffy soil may allow the seed to be planted too deep. There is no need to fertilize. Native plants have evolved with our low-nutrient soils. Fertilizer will benefit non-native weeds more than native plants.

## 4 SEEDING

Plant seed on dry, bare ground from late October through early May. Seeds may be planted using a rangeland seed drill or by hand-broadcasting. If using a seed drill, it is best to plant perpendicular on slopes. This will aid in erosion control. Make sure the top inch of soil is not frozen. Plant seeds between ¼-½ inch deep. Native plants need sunlight to germinate, so planting deeper may inhibit growth. If using the broadcast method, lightly rake the area, evenly spread the seed, and lightly rake the seed in. You want to ensure good seed-to-soil contact so be careful not to bury the seed or cluster it into uneven patterns.

## 5 MAINTENANCE

Depending on your site requirements, you may need to mulch, hydromulch or use an erosion control mat.

There is no need to irrigate. Native plants have evolved with our precipitation events. Irrigation will benefit non-native needs more than native plants and will set back the establishment period of native seeds.

Weed control, especially noxious weeds, is important during establishment. Hand pull or spot spray weeds with an herbicide. This helps to limit the amount of herbicide put into the environment and allows the native wildflowers to establish.

Mowing can be beneficial to the establishment of your native seed. Make sure not to mow when conditions are dry and hot. Try not to mow more than once or twice a growing season; any more may stress plants that are trying to establish. It will benefit your project if you allow the plants to flower and seed prior to mowing.

## SEED COMPANIES

Arkansas Valley (Denver)  
[avseeds.com](http://avseeds.com)  
877-907-3337

Granite Seed (Denver)  
[graniteseed.com](http://graniteseed.com)  
720-496-0600

Pawnee Butte Seeds (Greeley)  
[pawneebutteseed.com](http://pawneebutteseed.com)  
800-782-5947

Western Native Seed (Coaldale)  
[westernnativeseed.com](http://westernnativeseed.com)  
719-942-3935

Buffalo Brand Seed (Greeley)  
[buffalobrandseed.com](http://buffalobrandseed.com)  
970-356-4710

## SEED INSTALLATION

Custom Services of Colorado  
[coloradograssseeder@gmail.com](mailto:coloradograssseeder@gmail.com)  
303-775-0505

Fortress Development Solutions  
[kate.graves@fortressds.com](mailto:kate.graves@fortressds.com)  
970-217-9390

Habitat Management Inc.  
[office@habitatmanagementinc.com](mailto:office@habitatmanagementinc.com)  
303-770-9788

Larimer County Contractor list  
[larimer.gov/naturalresources/  
weeds/applicators](http://larimer.gov/naturalresources/weeds/applicators)

## For more information

Native Plant Revegetation Guide  
for Colorado  
[cpw.state.co.us/Documents/CNAP/  
RevegetationGuide.pdf](http://cpw.state.co.us/Documents/CNAP/RevegetationGuide.pdf)

City of Fort Collins Recommended  
Plant List  
[fcgov.com/vegetation](http://fcgov.com/vegetation)

# Native Seed Mixes

NATIVE UPLAND SEED MIX				
	Common Name	Scientific Name	lbs PLS/acre	
Wildflowers	Purple Prairie Clover	<i>Dalea purpurea</i>	0.81	
	Indian blanketflower	<i>Gaillardia aristata</i>	1.85	
	Blue flax	<i>Linum lewisii</i>	0.83	
	Rocky Mtn. penstemon	<i>Penstemon strictus</i>	0.35	
	Mexican hat	<i>Ratibida columnifera</i>	0.20	
Grasses	Sideoats Grama	<i>Bouteloua curtipendula</i>	1.15	
	Blue Grama	<i>Bouteloua gracilis</i>	0.25	
	Buffalograss	<i>Buchloe dactyloides</i>	3.27	
	Inland Saltgrass	<i>Distichlis stricta</i>	0.35	
	Bottlebrush squirreltail	<i>Elymus elymoides</i>	0.95	
	Indian Ricegrass	<i>Eriocoma hymenoides</i>	1.13	
	Prairie Junegrass	<i>Koeleria macrantha</i>	0.08	
	Green Needlegrass	<i>Nassella viridula</i>	1.01	
	Switchgrass	<i>Panicum virgatum</i>	0.71	
	Sand Dropseed	<i>Sporobolus cryptandrus</i>	0.04	
		<b>Total for Mix</b>	<b>12.98</b>	
<b>ACCEPTABLE SUBSTITUTES FOR WILDFLOWERS</b>				
Substitutes	Fringed sage	<i>Artemisia frigida</i>	0.05	
	Plains coreopsis	<i>Coreopsis tinctoria</i>	0.17	
	Prairie aster	<i>Machaeranthera tanacetifolia</i>	0.49	
	<b>ACCEPTABLE SUBSTITUTES FOR GRASSES</b>			
	Canada Wild Rye	<i>Elymus canadensis</i>	1.60	
	Mountain muhly	<i>Muhlenbergia montana</i>	0.11	
Western Wheatgrass	<i>Pascopyrum smithii</i>	1.61		
Requirements	<p>*Contractor is responsible for locating and purchasing all species listed in mix. If a species can't be located, contractor must replace each missing species with the acceptable substitutions (listed above). Contractor is responsible for providing seed tags to appropriate City staff, if required for project. This mix is based on 70 seeds/ square foot and is only calculated for one acre. This mix is based on the contractor using a drill seed application. Mix should be doubled if hand broadcasted. Contractor is responsible for calculating the appropriate seed amounts to purchase. Please note that the pounds per acre are in PLS (Pure Live Seed) and must be ordered that way. All materials furnished shall be free of Colorado State noxious weeds as defined in Article III, Section 21-40 of the Code of the City of Fort Collins. (CS 2024)</p>			

# Native Seed Mixes

NATIVE MESIC SEED MIX			
	Common Name	Scientific Name	Ibs PLS/acre
Wildflowers	Marsh sunflower	<i>Helianthus nuttallii</i>	1.12
	Wild bergamont	<i>Monarda fistulosa</i> var. <i>menthifolia</i>	0.17
	Black-eyed Susan	<i>Rudbeckia hirta</i> var. <i>pulcherrima</i>	0.14
	Smooth blue aster	<i>Symphyotrichum laeve</i> var. <i>geyeri</i>	0.24
	Blue verbena	<i>Verbena hastata</i>	0.15
Grasses	Big Bluestem	<i>Andropogon gerardii</i>	1.30
	Blue joint reedgrass	<i>Calamagrostis canadensis</i>	0.04
	Salt and pepper grass	<i>Deschampsia caespitosa</i>	0.07
	Inland Saltgrass	<i>Distichlis stricta</i>	0.35
	Thickspike wheatgrass	<i>Elymus lanceolatus</i>	1.36
	Switchgrass	<i>Panicum virgatum</i>	0.71
	Fowl bluegrass	<i>Poa palustris</i>	0.18
	Little Bluestem	<i>Schizachyrium scoparium</i>	0.70
	Yellow Indiangrass	<i>Sorghastrum nutans</i>	1.38
	Prairie Cordgrass	<i>Spartina pectinata</i>	1.00
		<b>Total for Mix</b>	<b>8.91</b>
<b>ACCEPTABLE SUBSTITUTES FOR WILDFLOWERS</b>			
Substitutes	Yarrow	<i>Achillea millefolium</i>	0.09
	Swamp milkweed	<i>Asclepias incarnata</i>	4.07
	Showy milkweed	<i>Asclepias speciosa</i>	4.21
	Showy fleabane daisy	<i>Erigeron speciosus</i>	0.21
	Rocky Mountain iris	<i>Iris missouriensis</i>	11.62
	<b>ACCEPTABLE SUBSTITUTES FOR GRASSES</b>		
	Giant mannagrass	<i>Glyceria grandis</i>	0.14
	Nuttall's alkali grass	<i>Puccinellia nuttalliana</i>	0.07
	Alkali Sacaton	<i>Sporobolus airoides</i>	0.11
Requirements	<p>*Contractor is responsible for locating and purchasing all species listed in mix. If a species can't be located, contractor must replace each missing species with the acceptable substitutions (listed above). Contractor is responsible for providing seed tags to appropriate City staff, if required for project. This mix is based on 70 seeds/ square foot and is only calculated for one acre. This mix is based on the contractor using a drill seed application. Mix should be doubled if hand broadcasted. Contractor is responsible for calculating the appropriate seed amounts to purchase. Please note that the pounds per acre are in PLS (Pure Live Seed) and must be ordered that way. All materials furnished shall be free of Colorado State noxious weeds as defined in Article III, Section 21-40 of the Code of the City of Fort Collins. (CS 2024)</p>		

# Native Seed Mixes

NATIVE ALKALINE SEED MIX				
	Common Name	Scientific Name	lbs PLS/acre	
Wildflowers	Indian blanketflower	<i>Gaillardia aristata</i>	1.85	
	Prairie aster	<i>Machaeranthera tanacetifolia</i>	0.49	
	Mexican hat	<i>Ratibida columnifera</i>	0.20	
	Scarlet globemallow	<i>Sphaeralcea coccinea</i>	0.61	
	American vetch	<i>Vicia americana</i>	12.20	
Grasses	Blue Grama	<i>Bouteloua gracilis</i>	0.25	
	Buffalograss	<i>Buchloe dactyloides</i>	3.27	
	Inland Saltgrass	<i>Distichlis stricta</i>	0.35	
	Bottlebrush squirreltail	<i>Elymus elymoides</i>	0.95	
	Thickspike wheatgrass	<i>Elymus lanceolatus</i>	1.36	
	Green Needlegrass	<i>Nassella viridula</i>	1.01	
	Switchgrass	<i>Panicum virgatum</i>	0.71	
	Nuttall's alkali grass	<i>Puccinellia nuttalliana</i>	0.07	
	Prairie Cordgrass	<i>Spartina pectinata</i>	1.00	
	Alkali Sacaton	<i>Sporobolus airoides</i>	0.11	
		<b>Total for Mix</b>	<b>24.43</b>	
<b>ACCEPTABLE SUBSTITUTES FOR WILDFLOWERS</b>				
Substitutes	Yarrow	<i>Achillea millefolium</i>	0.09	
	Cudleaf sagewort	<i>Artemisia ludoviciana</i>	0.05	
	Beeplant	<i>Cleomella serrulata</i>	2.16	
	Annual sunflower	<i>Helianthus annuus</i>	4.13	
	Black-eyed Susan	<i>Rudbeckia hirta</i> var. <i>pulcherrima</i>	0.14	
	<b>ACCEPTABLE SUBSTITUTES FOR GRASSES</b>			
	Canada Wild Rye	<i>Elymus canadensis</i>	1.60	
	Indian Ricegrass	<i>Eriocoma hymenoides</i>	1.13	
	Arctic rush	<i>Juncus arcticus</i> var. <i>balticus</i>	0.02	
	Western Wheatgrass	<i>Pascopyrum smithii</i>	1.61	
Requirements	<p>*Contractor is responsible for locating and purchasing all species listed in mix. If a species can't be located, contractor must replace each missing species with the acceptable substitutions (listed above). Contractor is responsible for providing seed tags to appropriate City staff, if required for project. This mix is based on 70 seeds/ square foot and is only calculated for one acre. This mix is based on the contractor using a drill seed application. Mix should be doubled if hand broadcasted. Contractor is responsible for calculating the appropriate seed amounts to purchase. Please note that the pounds per acre are in PLS (Pure Live Seed) and must be ordered that way. All materials furnished shall be free of Colorado State noxious weeds as defined in Article III, Section 21-40 of the Code of the City of Fort Collins. (CS 2024)</p>			

# Native Seed Mixes

NATIVE WETLAND SEED MIX				
	Common Name	Scientific Name	lbs PLS/acre	
Wildflowers	Swamp milkweed	<i>Asclepias incarnata</i>	6.97	
	Marsh sunflower	<i>Helianthus nuttallii</i>	1.93	
	Pennsylvania smartweed	<i>Persicaria pennsylvanica</i>	4.00	
	Blue verbena	<i>Verbena hastata</i>	0.26	
	Duck potato	<i>Sagittaria cuneata</i>	0.43	
Grasses	American sloughgrass	<i>Beckmannia syzigachne</i>	0.35	
	Alkali bulrush	<i>Bolboschoenus maritimus</i> ssp. <i>paludosus</i>	1.36	
	Nebraska sedge	<i>Carex nebrascensis</i>	0.34	
	Fowl mannagrass	<i>Glyceria striata</i>	1.74	
	Arctic rush	<i>Juncus arcticus</i> var. <i>balticus</i>	0.04	
	Torrey's rush	<i>Juncus torreyi</i>	0.03	
	Hardstem bulrush	<i>Schoenoplectus acutus</i>	0.78	
	Common three-square	<i>Schoenoplectus pungens</i>	0.78	
	Panicled bulrush	<i>Scirpus microcarpus</i>	0.04	
	Prairie Cordgrass	<i>Spartina pectinata</i>	1.71	
	<b>Total for Mix</b>		<b>20.76</b>	
<b>ACCEPTABLE SUBSTITUTES FOR WILDFLOWERS</b>				
<b>Double up on 1-2 species in mix</b>				
Substitutes	Joe Pye weed	<i>Eutrochium maculatum</i>	0.31	
	Wild bergamont	<i>Monarda fistulosa</i> var. <i>menthifolia</i>	0.30	
	Black-eyed Susan	<i>Rudbeckia hirta</i> var. <i>pulcherrima</i>	0.25	
	Duck potato	<i>Sagittaria latifolia</i>	0.43	
	<b>ACCEPTABLE SUBSTITUTES FOR GRASSES /GRASSLIKES</b>			
	Blue joint reedgrass	<i>Calamagrostis canadensis</i>	0.07	
	Woolly sedge	<i>Carex pellita</i>	1.33	
	Clustered sedge	<i>Carex praegracilis</i>	0.17	
	Giant mannagrass	<i>Glyceria grandis</i>	0.25	
	Softstem bulrush	<i>Schoenoplectus tabernaemontani</i>	0.57	
Sea arrowgrass	<i>Triglochin maritima</i>	0.67		
Requirements	<p>*Contractor is responsible for locating and purchasing all species listed in mix. If a species can't be located, contractor must replace each missing species with the acceptable substitutions (listed above). Contractor is responsible for providing seed tags to appropriate City staff, if required for project. This mix is based on 120 seeds/ square foot and is only calculated for one acre. This mix is based on the contractor using a broadcast seed application. Contractor is responsible for calculating the appropriate seed amounts to purchase. Please note that the pounds per acre are in PLS (Pure Live Seed) and must be ordered that way. All materials furnished shall be free of Colorado State noxious weeds as defined in Article III, Section 21-40 of the Code of the City of Fort Collins. (CS 2024)</p>			

# Native Seed Mixes

NATIVE DETENTION BASIN SEED MIX				
	Common Name	Scientific Name	lbs PLS/acre	
Wildflowers	White prairie clover	<i>Dalea candida</i> var. <i>oligophylla</i>	0.65	
	Purple Prairie Clover	<i>Dalea purpurea</i>	0.81	
	Indian blanketflower	<i>Gaillardia aristata</i>	1.85	
	Prairie aster	<i>Machaeranthera tanacetifolia</i>	0.49	
	Stiff greenthread	<i>Thelesperma filifolium</i>	0.96	
Grasses	Sideoats Grama	<i>Bouteloua curtipendula</i>	1.15	
	Blue Grama	<i>Bouteloua gracilis</i>	0.25	
	Buffalograss	<i>Buchloe dactyloides</i>	3.27	
	Inland Saltgrass	<i>Distichlis stricta</i>	0.35	
	Bottlebrush squirreltail	<i>Elymus elymoides</i>	0.95	
	Indian Ricegrass	<i>Eriocoma hymenoides</i>	1.13	
	Prairie Junegrass	<i>Koeleria macrantha</i>	0.08	
	Little Bluestem	<i>Schizachyrium scoparium</i>	0.70	
	Alkali Sacaton	<i>Sporobolus airoides</i>	0.11	
	Sand Dropseed	<i>Sporobolus cryptandrus</i>	0.04	
		<b>Total for Mix</b>	<b>12.79</b>	
<b>ACCEPTABLE SUBSTITUTES FOR WILDFLOWERS</b>				
Substitutes	Fringed sage	<i>Artemisia frigida</i>	0.05	
	Plains coreopsis	<i>Coreopsis tinctoria</i>	0.17	
	Blue flax	<i>Linum lewisii</i>	0.83	
	Black-eyed Susan	<i>Rudbeckia hirta</i> var. <i>pulcherrima</i>	0.14	
	Scarlet globemallow	<i>Sphaeralcea coccinea</i>	0.61	
	<b>ACCEPTABLE SUBSTITUTES FOR GRASSES</b>			
	Salt and pepper grass	<i>Deschampsia caespitosa</i>	0.07	
	Idaho fescue	<i>Festuca idahoensis</i>	0.41	
	Rocky Mountain fescue	<i>Festuca saximontana</i>	0.35	
	Requirements	<p>*Contractor is responsible for locating and purchasing all species listed in mix. If a species can't be located, contractor must replace each missing species with the acceptable substitutions (listed above). Contractor is responsible for providing seed tags to appropriate City staff, if required for project. This mix is based on 70 seeds/ square foot and is only calculated for one acre. This mix is based on the contractor using a drill seed application. Mix should be doubled if hand broadcasted. Contractor is responsible for calculating the appropriate seed amounts to purchase. Please note that the pounds per acre are in PLS (Pure Live Seed) and must be ordered that way. All materials furnished shall be free of Colorado State noxious weeds as defined in Article III, Section 21-40 of the Code of the City of Fort Collins. (CS 2024)</p>		

<b>NATIVE POLLINATOR/ RAIN GARDEN SEED MIX</b>			
	<b>Common Name</b>	<b>Scientific Name</b>	<b>lbs PLS/acre</b>
Wildflowers	Prickly poppy	<i>Argemone polyanthemus</i>	0.90
	Rocky mountain beeplant	<i>Cleome serrulata</i>	0.80
	White prairie clover	<i>Dalea candida</i>	0.50
	Purple prairie clover	<i>Dalea purpurea</i>	1.00
	Engelmann's daisy	<i>Engelmannia peristenia</i>	1.10
	Sulfurflower	<i>Eriogonum umbellatum</i>	0.25
	Joe pye weed	<i>Eutorochium maculatum</i>	0.25
	Blanketflower	<i>Gaillardia aristata</i>	1.20
	Foothills/Prairie sunflower	<i>Helianthus pumilus</i>	0.90
	Dotted gayfeather	<i>Liatris punctata</i>	0.60
	Blue flax	<i>Linum lewisii</i>	1.00
	Tansyleaf aster	<i>Machaeranthera tanacetifolia</i>	0.50
	Stemless evening primrose	<i>Oenothera caespitosa</i>	1.50
	Rocky mountain penstemon	<i>Penstemon strictus</i>	0.50
	Prairie coneflower	<i>Ratibida columnifera</i>	0.40
	Mexican hat	<i>Ratibida columnifera pulchra</i>	0.10
	Black-eyed susan	<i>Rudbeckia hirta</i>	0.10
	Scarlet globemallow	<i>Sphaeralcea coccinea</i>	0.50
	Blue aster	<i>Symphyotrichum laeve</i>	0.20
Grasses	Sideoats grama	<i>Bouteloua curtipendula</i>	0.75
	Blue Grama	<i>Bouteloua gracilis</i>	0.80
	Sand dropseed	<i>Sporobolus cryptandrus</i>	0.05
	Sand bluestem	<i>Andropogon hallii</i>	1.50
	Indian ricegrass	<i>Achnatherum hymenoides</i>	1.00
	Bottlebrush squirreltail	<i>Elymus elymoides</i>	1.00
	Junegrass	<i>Koeleria macrantha</i>	0.10
		<b>Total for Mix</b>	<b>17.50</b>
Substitutes	<b>ACCEPTABLE SUBSTITUTES FOR WILDFLOWERS</b>		
	Wild bergamont	<i>Monarda fistulosa</i>	0.25
	Showy milkweed	<i>Asclepias speciosa</i>	1.50
	Missouri goldenrod	<i>Solidago missouriensis</i>	0.30
	Hairy goldenaster	<i>Heterotheca villosa</i>	1.50
	Showy fleabane daisy	<i>Erigeron speciosus</i>	0.50
	Annual sunflower	<i>Helianthus annuus</i>	2.50
	Stiff greenthread	<i>Thelesperma filifolium</i>	1.00
	American vetch	<i>Vicia americana</i>	4.00
	Plains coreopsis	<i>Coreopsis tinctoria</i>	0.30
	<b>ACCEPTABLE SUBSTITUTES FOR GRASSES</b>		
	Switchgrass	<i>Panicum virgatum</i>	0.50
	Little bluestem	<i>Schizachyrium scoparium</i>	1.25
	Green needlegrass	<i>Nasella viridula</i>	0.60
Rocky mountain fescue	<i>Festuca saximontana</i>	0.15	
Requirements	<p>Note: All materials furnished shall be free of Colorado State Noxious Weeds as defined in Article III, Section 21-40 of the Code of the City of Fort Collins. This mix is based on 130 seeds/ft<sup>2</sup> and is only calculated for one acre; contractor is responsible for calculating the appropriate seed amounts to purchase. Substituted species can be doubled for one or two species that are in the original mix. Entire mix may be drill seeded to a depth of 1/4 inch deep. If hydroseeding occurs, seed must not be mixed with a mulch for application. They must be applied in two passes: first pass seed, second pass mulch.</p> <p>* PLS = Pure Live Seed.</p>		