# HEDGE ROW PLANTING SPECIFICATIONS

## General Specifications

Hedgerows can be planned in combination with other practices to develop complete resource management systems that enhance landscape aesthetics, reduce soil erosion, improve sediment trapping, improve water quality, and provide wildlife habitat. Hedgerows containing a mixture of native shrubs and small trees provide the greatest environmental benefits. Consider the amount of shading a hedgerow will provide at maturity. Shading may impact growth of adjacent plants, microclimate, and aesthetics. Limiting vegetative management (renovation) events to one-third of a hedgerow's length and width will prevent sudden elimination of the practice's wildlife habitat function. Consider avoiding the use of plants that spread by root suckers as hedgerow may expand beyond the desired treatment area.

## Species Selection

Match the species to the intended purpose(s), site/soil conditions, and other factors such as planting date, maintenance needs, wildlife use, aesthetics, etc. See **Table 1 and 2,** for species adaptability.

Priority should be given to use plant materials that have been selected and tested in tree/shrub improvement programs. When possible, care should be taken that the seed sources come from the same geographic area in which the seedlings will be planted.

Seedlings grown by the Louisiana Department of Agriculture and local commercial nurseries will be acceptable. Seedlings obtained from other sources should be from seed sources within a 150-mile North-South zone of the planting site and must be suited for the "Hardiness Zone" of the site.

## Spacing

A. Between rows:
- Trees, 10 – 12 feet
- Shrubs, 6 – 8 feet

B. Within rows:
- Trees, 10 – 12 feet
- Shrubs, 4 – 6 feet

Use staggered spacing in multiple-row hedgerows. Wider spacings may be used when planting only for the wildlife food production: trees should be planted a minimum of 16 feet apart within rows and shrubs should be planted a minimum of eight feet apart within rows.

NOTE: Shrub lespedeza plantings should be a minimum of six feet wide. The seedlings should be planted only one to two feet apart, both between and within rows.

## Species Composition

No more than two rows should be planted to the same species, unless site conditions limit the number of available species. Give consideration to planting pollinating species

Planting a single species row makes subsequent maintenance and renovation is easier to implement. However, single row, single species plantings are considerably more prone to failure from drought, disease, and/or insects.

Mixing compatible species within the row can reduce the severity of some insect and disease infestation and spread. Alternating tree and shrub species, within the same row is recommended only if they have similar growth rate, crown characteristics, life span, and are consistent with landowner objectives. In the leeward rows, trees and shrubs may be planted in groups or segments of rows (5 or more plants of one species in a series) to enhance wildlife values or the visual resources of the site.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

**Site Preparation**

Site preparation may include the whole row, strips, or individual treatments such as mulching at the planting site. Prepare the site mechanically, by applying herbicides, or a combination of the two, refer to Tree/Shrub Site Preparation (CPS 490) specifications.

If possible, the planting site should be prepared the fall before planting.

If the site is in small grain, corn or similar clean tilled crop, and is reasonably weed free, plant trees into the stubble. It may, however, be necessary to disk a narrow strip to kill weeds or volunteer grain, or to prevent residue from clogging the planter. If fabric mulch is used, disking will be needed.

Sites in row crops should require little site preparation other than light tillage, particularly if fabric mulch will be used.

In areas of grass, the competing vegetation should be controlled by tillage or application of an approved herbicide 3 feet on each side of the planting row.

All invasive and brush species must be completely controlled before planting.

**Soil Considerations**

- Sandy Soils

When fabric mulch is not used, maintain as much organic matter on the soil surface as possible.
If necessary, plant a cover crop the summer before the trees are planted to improve soil water capacity

- Loamy, Clay Loam, and Clayey Soils

To create a desirable rooting zone and to increase moisture retention, tree rows should be deep tilled, particularly if they are compacted or have a hardpan or dense clayey subsoil within 10 inches of the surface. Plant a cover crop the following the deep till to improve soil water capacity.
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**Maintenance Details**

Competitive vegetation will be controlled for at least 3 years after planting. Specific recommendations for vegetative control should be listed in all tree planting plans for the first 3 years.

Livestock shall be excluded from the planting area.

Protect from rodents with wire cages, tube protectors, or similar devices. Fine mesh wire on the bottom of a livestock protection fence may be also used. Mowing in and around the planting site may be necessary to prevent the creation of hiding habitat for rodents. Protection should be carried out until the trees or shrubs are fully established.

Table 1. Grass and forb species for hedge row plantings

| Name | Variety | Seeding Rates are pounds pure live seed (PLS) per acre unless otherwise noted. 1/,2/ | Native-Introduced | Season of Growth | Wildlife Use 3/ | Pollinator Use 4/ | MLRA 131A | MLRA 131B | MLRA 131C | MLRA 131D | MLRA 33A | MLRA 133B | MLRA 134 | MLRA 150A | MLRA 151 | MLRA 152A | MLRA 152B | Optimum Seeding Dates 5/, 6/ | coarse sand - loamy very fine sand | sandy loam - fine sandysilt | very fine sandy loam - silt | clay loam - silty clay loam | sandy clay - clay | 422 Hedgerow Planting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alfalfa, *Medicago sativa* | Cimarron VR, Florida 77, AmeriGraze 702 | 25 | I | C | X | X | X | X | X | X | | | | | | | | 9/1-11/1 | | X | X | X | | X |
| Black-eyed Susan, *Rudbeckia hirta* | Common, Local Ecotype | 1-2 | N | W | X | X | X | X | X | X | X | X | X | X | | X | X | 2/1-5/15 (9/1-5/31) | | | | | | X |
| Butterfly Milkweed, *Asclepias tuberosa* | Common, Local Ecotype | 8-10 | N | W | X | X | | X | X | X | X | X | X | X | | X | X | 2/1-5/15 (9/1-5/31) | X | X | X | X | | X |
| Compass Plant, *Silphium laciniatum* | Common, Local Ecotype | 8-10 | N | W | X | X | | | X | | | X | | X | | | X | 2/1-5/15 (9/1-5/31) | X | X | X | X | | X |
| Coralbean, *Erythrina herbacea* | Common, Local Ecotype | 1 | N | W | X | X | | | X | X | X | X | X | X | X | X | X | 2/1-5/15 (9/1-5/31) | X | X | X | X | X | X |
| Fragrant Goldenrod, *Solidago odora* | Common, Local Ecotype | 1 | N | W | X | X | X | X | X | X | X | X | X | X | | X | X | 2/1-5/15 (9/1-5/31) | X | X | X | X | | X |
| Goat's Rue, *Tephorsia virginiana* | Common, Local Ecotype | 8-10 | N | W | X | X | | | | | X | X | | X | X | X | X | 2/1-5/15 (9/1-5/31) | X | X | X | X | | X |
| Herbaceous mimosa, *Mimosa strigillosa* | Crockett Germplasm, Common, Local Ecotype | 8-10 | N | W | X | X | X | X | X | X | X | X | X | X | X | X | X | 2/1-5/15 (12/1-5/31) | X | X | X | X | X | X |
| Illinois Bundleflower, *Desmanthus illinoensis* | Sabine, Local Ecotype | 12-14 | N | W | X | X | X | X | X | X | X | X | X | X | X | X | X | 2/1-5/15 (12/1-5/31) | | X | X | X | X | X |
| Ironweed, *Vernonia baldwinii* | Common, Local Ecotype | 1-2 | N | W | X | X | X | X | X | X | X | X | X | X | | | X | 2/1-5/15 (9/1-5/31) | X | X | X | X | X | X |
| Lablab, *Lablab purpureus* | Rio Verde | 25-50 | I | W | X | X | X | X | X | X | X | X | X | X | | X | X | 4/1-8/1 | X | X | X | X | X | X |
| Maximillian Sunflower, *Helianthus maximiliani* | Aztec, Local Ecotype | 1-2 | N | W | X | X | X | X | X | X | X | X | X | X | | X | X | 2/1-5/15 (12/1-5/31) | | X | X | X | X | X |

Table 1. Continued

| Name | Variety | Seeding Rates are pounds pure live seed (PLS) per acre unless otherwise noted. 1/,2/ | Native-Introduced | Season of Growth | Wildlife Use 3/ | Pollinator Use 4/ | MLRA 131A | MLRA 131B | MLRA 131C | MLRA 131D | MLRA 33A | MLRA 133B | MLRA 134 | MLRA 150A | MLRA 151 | MLRA 152A | MLRA 152B | Optimum Seeding Dates 5/, 6/ | coarse sand - loamy very fine sand | sandy loam - fine sandysilt | very fine sandy loam - silt | clay loam - silty clay loam | sandy clay - clay | 422 Hedgerow Planting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Perennial Peanut, *Arachis glabrata* | Florigraze, Arbrook | 60-80 bu rhizomes/ ac | I | W | X | X | | | | | X | X | X | X | | X | X | 1/1-3/1 | | X | X | | | X |
| Plains Coreopsis, *Coreopsis tinctoria* | Common, Local Ecotype | 1-2 | N | W | X | X | X | X | X | X | X | X | X | X | | X | X | 2/1-5/15 (9/1-5/31) | X | X | X | X | X | X |
| Prairie Clover: purple, *Dalea purpurea* | Cuero Select Germplasm, Local Ecotype | 3-4 | N | W | X | X | X | X | X | X | X | X | X | X | | X | X | 2/1-5/15 (12/1-5/31) | | X | X | X | X | X |
| Prairie Clover: white, *Dalea candida* | Common, Local Ecotype | 3-4 | N | W | X | X | X | X | X | X | X | X | X | X | | X | X | 2/1-5/15 (12/1-5/31) | | X | X | X | X | X |
| Purple Coneflower, Echinacea purpurea | Common, Local Ecotype | 5-7 | N | W | X | X | X | X | X | X | X | X | X | X | | X | X | 2/1-5/15 (9/1-5/31) | X | X | X | X | | X |
| Rough Coneflower, *Rudbeckia grandiflora* | Common, Local Ecotype | 1 | N | W | X | X | | X | X | X | | X | | X | X | | X | 2/1-5/15 (9/1-5/31) | X | X | X | X | | X |
| Sericea Lespedeza, *Lespedeza cuneata* | AU Lotan, Serala, Serala 76 | 20-30 | I | W | X | X | X | X | X | X | X | X | X | X | | X | X | 3/1-5/1 | X | X | X | X | X | X |
| Slender Mountain Mint, *Pycnanthemum tenuifolium* | Common, Local Ecotype | 2-3 | N | W | X | X | X | X | X | X | X | X | X | X | X | X | X | 2/1-5/15 (9/1-5/31) | | | X | X | X | X |
| Sunflower: swamp, *Helianthus angustifolius* | Common, Local Ecotype | 1-2 | N | W | X | X | X | X | X | X | X | X | X | X | X | X | X | 2/1-5/15 (9/1-5/31) | X | X | X | X | | X |
| Sunflower: ashy, *Helianthus mollus* | Cajun Sunrise Germplasm, Local Ecotype | 6-9 | N | W | X | X | X | X | X | X | X | X | X | X | X | X | X | 2/1-5/15 (9/1-5/31) | X | X | X | X | X | X |
| Thickspike Gayfeather, *Liatris pycnostachya,* Dense Blazing Star, *Liatris spicata,* Scaly Blazing Star, *Liatris squarrosa,* Elegans Blazing Star, *Liatris elegans* | Common, Local Ecotype | 1-2 | N | W | X | X | | x | x | x | x | x | x | x | | x | x | 2/1-5/15 (9/1-5/31) | x | x | x | x | x | X |
| Trailing Fuzzybean, *Strophostyles helvola* | Hopefield Selection | 15 | N | W | X | X | X | X | X | X | X | X | X | X | X | X | X | 2/1-5/15 (9/1-5/31) | | | X | X | X | X |
| Alyceclover, *Alysicarpus ovalifolius* | Common | 30 | I | W | | X | X | X | X | X | X | X | X | X | | X | X | 5/1-7/31 | X | X | X | | | X |
| Annual Lespedeza, *Kummerowia striata, K. stipulacea* | Common, Kobe, Korean | 25 | I | W | X | X | X | X | X | X | X | X | X | X | | X | X | 2/15-4/1 | X | X | X | X | | X |
| Austrian Winterpea, *Pisum sativum* ssp. *arvense* | Common | 30 | I | C | X | X | X | X | X | X | X | X | X | X | | X | X | 10/1-11/15 (9/1-11/30) | | X | X | X | | X |

Table 1. Continued

| Name | Variety | Seeding Rates are pounds pure live seed (PLS) per acre unless otherwise noted. 1/,2/ | Native-Introduced | Season of Growth | Wildlife Use 3/ | Pollinator Use 4/ | MLRA 131A | MLRA 131B | MLRA 131C | MLRA 131D | MLRA 33A | MLRA 133B | MLRA 134 | MLRA 150A | MLRA 151 | MLRA 152A | MLRA 152B | Optimum Seeding Dates 5/, 6/ | coarse sand - loamy very fine sand | sandy loam - fine sandysilt | very fine sandy loam - silt | clay loam - silty clay loam | sandy clay - clay | 422 Hedgerow Planting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clasping Coneflower, *Dracopis amplexicaulis* | Common, Local Ecotype | 2-3 | N | W | X | X | X | X | X | X | X | X | X | X | X | X | X | 2/1-5/15 (9/1-5/31) | X | X | X | X | X | X |
| Clover: arrowleaf, *Trifolium vesiculosum* | Amclo, Meechi, Yuchi, Apache | 8-10 | I | C | X | X | X | X | X | X | X | X | X | X | | X | X | 10/1-11/15 (9/1-11/30) | | X | X | X | | X |
| Clover: ball, *Trifolium nigrescens* | Common | 2-3 | I | C | X | X | X | X | X | X | X | X | X | X | | X | X | 10/1-11/15 (9/1-11/30) | | X | X | X | X | X |
| Clover: berseem, *Trifolium alexandrinum* | Bigbee | 12-16 | I | C | X | X | X | X | X | X | X | X | X | X | | X | X | 10/1-11/15 (9/1-11/30) | X | X | X | X | X | X |
| Clover: crimson, *Trifolium incarnatum* | Chief, Dixie, Tibbee, AU Robin | 16-20 | I | C | X | X | X | X | X | X | X | X | X | X | | X | X | 10/1-11/15 (9/1-11/30) | X | X | X | X | | X |
| Clover: red, *Trifolium pratense* | Kenland, Kenstar, Renegade, Cherokee, Concorde, Acclaim, Cinnamon, Southern Belle | 10-12 | I | C | X | X | X | X | X | X | X | X | X | X | | X | X | 10/1-11/15 (9/1-11/30) | | X | X | X | X | X |
| Clover: subterranean, *Trifolium subterraneum* | Mt. Barker, Nangeela, Tallarook, Woogenellup, Meteora | 16-20 | I | C | X | X | X | X | X | X | X | X | X | X | | X | X | 10/1-11/15 (9/1-11/30) | | | X | X | X | X |
| Clover: white or ladino, *Trifolium repens* | Louisiana S-1, Osceola, Regal,Regal Graze, Pinnacle, Canopy, California, Durana, Patriot, Colt, Crescendo | 3-5 | I | W | X | X | X | X | X | X | X | X | X | X | | X | X | 10/1-11/15 (9/1-11/30) | | | X | X | X | X |
| Cow Peas, *Vigna unguiculata* | Iron and Clay | 25-35 | I | W | X | X | X | X | X | X | X | X | X | X | | X | X | 4/1-7/1 | | X | X | X | | X |
| Partridge Pea, *Chamaecrista fasciculata* | Comanche, Lark Selection, Local Ecotype | 10-13 | N | W | X | X | X | X | X | X | X | X | X | X | | X | X | 12/1-5/31 | X | X | X | | | X |
| Purple Horsemint, *Monarda citriodora* | Common, Local Ecotype | 1-2 | N | W | X | X | X | X | X | X | X | | X | X | | | | 2/1-5/15 (9/1-5/31) | X | X | X | X | X | X |

Table 1. Continued

| Name | Variety | Seeding Rates are pounds pure live seed (PLS) per acre unless otherwise noted. 1/,2/ | Native-Introduced | Season of Growth | Wildlife Use 3/ | Pollinator Use 4/ | MLRA 131A | MLRA 131B | MLRA 131C | MLRA 131D | MLRA 33A | MLRA 133B | MLRA 134 | MLRA 150A | MLRA 151 | MLRA 152A | MLRA 152B | Optimum Seeding Dates 5/, 6/ | coarse sand - loamy very fine sand | sandy loam - fine sandysilt | very fine sandy loam - silt | clay loam - silty clay loam | sandy clay - clay | 422 Hedgerow Planting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Radish, *Raphanus sativus* | Tillage Radish, Common | 8-10 | I | C | X | X | X | X | X | X | X | X | X | X | | X | X | 2/1-11/1 | | X | X | X | X | X |
| Singletary Pea, *Lathyrus hirsutus* | Common | 50 | I | W | X | X | X | X | X | X | X | X | X | X | | X | X | 10/1-11/15 (9/1-11/30) | | | X | X | X | X |
| Smartweed, Pennsylvania, *Polygonum pennsylvanicum* | Common | 5-10 | N | A | X | X | X | X | X | X | X | X | X | X | X | X | X | 3/1-6/30 | X | X | X | X | X | X |
| Soybeans, *Glycine max* | Common | 35-60 | I | W | X | X | X | X | X | X | X | X | X | X | | X | X | 4/1-7/1 | | X | X | X | X | X |
| Sunflower, *Helianthus annuus* | Common, Peredovik, Giant | 30 | N | W | X | X | X | X | X | X | X | X | X | X | | X | X | 4/1-7/31 | X | X | X | X | X | X |
| Sunn Hemp, *Crotalaria juncea* | Tropic Sun | 30-50 | I | W | X | X | X | X | X | X | X | X | X | X | | X | X | 4/1-9/1 | | X | X | X | | X |
| Sweet Clover; yellow, *Melilotus indicus* | Common | 15-25 | I | C | X | X | X | X | X | X | X | X | X | X | | X | X | 10/1-11/15 (9/1-11/30) | | | X | X | X | X |
| Vetch: common , *Vicia sativa* | Common | 35-50 | I | C | X | X | X | X | X | X | X | X | X | X | | X | X | 10/1-11/15 (9/1-11/30) | X | X | X | X | | X |
| Vetch: hairy , *Vicia villosa* | Common | 20 | I | C | X | X | X | X | X | X | X | X | X | X | | X | X | 10/1-11/15 (9/1-11/30) | X | X | X | X | X | X |

Table 2. Tree and woody shrub species for hedge row plantings

| Name | pH 1/ | Flood Tolerance 2/ | Seedling Height-in (Root Collar Diameter) | Root Length-inches (No. Laterals) | Native-Introduced | Wildlife Use 3/ | Pollinator Use 4/ | MLRA 131A | MLRA 131B | MLRA 131C | MLRA 131D | MLRA 33A | MLRA 133B | MLRA 134 | MLRA 150A | MLRA 151 | MLRA 152A | MLRA 152B | Planting/Seeding Dates 5/ | Coarse | Moderately Coarse | Medium | Moderately Fine | Fine | 422 Hedgerow Planting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| American Beautyberry, *Callicarpa americana* | 4.8-7.0 | I | 12"-24" (3/8"-1/2") | 8" (4-8) | N | X | X | X | X | X | X | X | X | X | X | X | X | X | 12/15-3/15 | X | X | X | X | X | X |
| Elderberry, *Sambucus nigra* | 5.0-7.0 | I | 12"-24" (3/8"-1/2") | 8" (4-8) | N | X | X | X | X | X | X | X | X | X | X | X | X | X | 12/15-3/15 | X | X | X | X | X | X |
| Persimmon, *Diospyros virginiana* | 4.4-7.0 | T | 12"-24" (3/8"-1/2") | 8" (4-8) | N | X | X | X | X | X | X | X | X | X | X | X | X | X | 12/15-3/15 | X | X | X | X | X | X |
| Plum, *Prunus sp.* | 5.0-8.0 | I | 12"-24" (3/8"-1/2") | 8" (4-8) | N | X | x | X | X | X | X | X | X | X | X | | X | X | 12/15-3/15 | X | X | X | X | X | X |
| Rabbit Eye Blueberry, *Vaccinium ashei* | 4.0-7.0 | I | 12"-24" (3/8"-1/2") | 8" (4-8) | N | X | x | X | X | X | X | X | X | X | | | X | X | 12/15-3/15 | | X | X | X | | X |
| Redbud:eastern, *Cercis canadensis* | 4.5-7.5 | I | 12"-24" (3/8"-1/2") | 8" (4-8) | N | X | X | X | X | X | X | X | X | X | X | X | X | X | 12/15-3/15 | X | X | X | X | X | X |
| Red Maple, *Acer rubrum* | 4.5-7.5 | MT | 12"-24" (3/8"-1/2") | 8" (4-8) | N | X | x | X | X | X | X | X | X | X | X | X | X | X | 12/15-3/15 | X | X | X | X | X | X |
| Red Mulberry, *Morus rubra* | 4.4-7.5 | WT | 12"-24" (3/8"-1/2") | 8" (4-8) | N | X | x | X | X | X | X | X | X | X | X | X | X | X | 12/15-3/15 | X | X | X | X | X | X |
| Yaupon, *Ilex vomitoria* | 4.5-7.0 | MT | 12"-24" (3/8"-1/2") | 8" (4-8) | N | X | X | X | X | X | X | X | X | X | X | X | X | X | 12/15-3/15 | X | X | X | X | | X |