

# AGRICULTURAL GUIDE

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Pastures

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## Seeding mixtures for hay, pasture and silage

H. N. Wheaton and Jimmy C. Henning  
Department of Agronomy  
College of Agriculture

For best results from pasture and hay crops, keep seeding mixtures simple. Grasses and legumes that are sown in combination should be similar in palatability, maturity patterns and growing vigor. Because of the differences between grasses, it is recommended that each mixture contain only one grass and one or two legumes. For example, seeding tall fescue and orchardgrass in the same mixture results in spotty grazing and wasted forage because of differences in palatability.

The seeding rates listed are designed to serve as guides for the proper amount of seed to plant per acre to obtain forage stands with a proper balance between grasses and legumes. Soil and climate conditions may dictate some adjustments in seeding rates from one area to another.

### Seeding mixtures

1. **Alfalfa 10 pounds, and bromegrass 10 pounds, or orchardgrass 6 pounds.**

This mixture should be first choice for high yields on soils adapted to alfalfa. Use only one of the suggested grasses. Climatically bromegrass is not well adapted to all of Missouri. It is much better adapted to northern Missouri than southern Missouri, although there are isolated areas throughout the state where it produces well. Bromegrass has a higher fertility requirement than the other grasses. Mixtures containing alfalfa are better suited for hay than for pasture. Usually alfalfa will only survive for a few years under grazing conditions.

2. **Medium red clover 8 pounds, and orchardgrass 6 pounds or timothy 2 pounds (fall), 4 pounds (spring) per acre.**

Red clover will grow on less productive soils and where low pH, restricted soil drainage, and heaving may reduce stands and growth of alfalfa. Medium red clover is usually treated as a biennial, and after the second year there may be little clover remaining and the forage should be fertilized as a pure stand of grass. However, liberal use of potash on red clover tends to prolong its life and to encourage growth and development of volunteer plants.

3. **Tall fescue 15 pounds, red clover 8 pounds and ladino clover  $\frac{3}{4}$  pound per acre.**

Medium red clover will be predominant in this mixture for several years. It will furnish quality forage and serve as a source of nitrogen while the fescue is becoming established.

4. **Birdsfoot trefoil 5 pounds, timothy 2 pounds or orchardgrass 3 pounds and Kentucky bluegrass 1 pound per acre (Kentucky bluegrass optional).**

This is a permanent pasture mixture that will last for many years in areas where it is adapted. Birdsfoot trefoil is best adapted to the northern and central counties of Missouri. However, like bromegrass, there are isolated areas throughout the state where trefoil will thrive if it is not grazed too closely during the time when it is producing seed. One of the outstanding features of trefoil is that it does not cause bloat.

5. **Tall fescue 15 pounds, or orchardgrass 6 pounds and lespedeza 15 pounds and ladino clover  $\frac{1}{2}$  pound per acre.**

This mixture is best adapted to areas where fertility limits the use of alfalfa and red clover. Lespedeza is an annual and must produce seed each year for it to remain in the stand. In recent years, lespedeza production has been limited by leaf diseases and insects.

6. **Reed canarygrass 6 pounds, ladino clover 1 pound, and alsike clover 2 pounds.**

This mixture is especially adapted to areas too wet to grow other forage crops. Reed canarygrass will produce high yields, but it is less palatable than many other species.

7. **Reed canarygrass 6 pounds, and alfalfa 10 pounds, or red clover 10 pounds.**

Reed canarygrass may be used on upland soils as it is tolerant of drought provided there is ample rainfall in the spring. Grazing animals will perform

**Table 1**

Soil type	1	2	3
	Well-drained, upland soils	Bottomland, deep fertile soils	Well-drained, rocky and shallow soils
Big bluestem	2.0-3.0	3.0	1.0-1.5
Little bluestem	1.0-1.5		2.0-3.0
Switchgrass	0.5-1.0	3.0	
Indiangrass	0.5-1.0	1.0	0.5-1.0
Sideoats grama	1.0		1.0-1.5
Sand lovegrass			1.0

satisfactorily on reed canarygrass, if the plant is grazed before it reaches 12 to 15 inches in height to avoid coarseness.

**8. Redtop 4 pounds and Korean lespedeza 15 pounds per acre.**

This mixture is not as productive as the others listed and should only be used on extremely acid, droughty and unfertile soils.

## Special purpose pastures

### Swine

**Alfalfa 8 pounds, ladino clover 2 pounds and timothy 2 pounds or orchardgrass 4 pounds per acre.**

**Dwarf Essex rape 6 pounds per acre.**

Rape will also make an excellent emergency pasture for sheep. Sow on a prepared seedbed in the very

early spring. A combination of spring oats and rape for summer use makes an excellent combination.

### Summer annual pasture

**Sudangrass, sorghum-sudan-crosses or pearl millet 20-25 pounds.**

Sow during May or early June on a prepared seedbed and fertilize as for corn.

### Warm season grasses

Seeding rates for warm season grasses should always be calculated on the basis of pure live seed per acre (PLS).

### Seeding rate for hay or pasture

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|---|---------------------|
| 1. Big bluestem   | 7 lbs. PLS per acre |
| 2. Switchgrass  | 4 lbs. PLS per acre |
| 3. Indiangrass  | 7 lbs. PLS per acre |
| 4. Caucasian bluestem   | 2 lbs. PLS per acre |
| 5. Mixtures for wildlife and grass cover for critical areas are given in Table 1. |                     |