

Cool-Season Forage Legume Management Guide

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Overseeding warm-season perennial grasses with cool-season legumes offers several benefits:

- ◆ Grazing can begin 4 to 6 weeks earlier grazing in the spring, which reduces the winter feeding period.
- ◆ Legumes typically have higher nutritive value than do most grasses.
- ◆ Legumes fix nitrogen from the atmosphere and make it available to the pasture system.
- ◆ A good stand of legumes can help control spring weeds by competing for space, water, sunlight and nutrients.

For optimum production, prepare the soil six months before planting, plant the appropriate seed, and manage grazing to use the grasses most efficiently.

- ◆ Test the soil before planting to determine whether it needs any nutrients and if limestone is needed to raise soil pH. It takes 4 to 6 months for limestone to raise soil pH, which needs to be about 6 to 7 for most legumes.
- ◆ Avoid using herbicides such as Grazon® P+D (Gunslinger), Milestone®, GrazonNext™, Surrmount®, Redeem, Chaparral™ or any other

product containing Cimarron® (Ally) during the summer before planting legumes.

- ◆ Apply little or no nitrogen fertilization to the pasture during the summer.
- ◆ Because forage legumes are more site specific than are grasses, select legumes that are adapted to the soil type and field location.



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For fall planting, summer pastures must be less than 3 inches tall by late September to early October for overseeding. Disk the pasture lightly to reduce summer grass competition and to expose some bare soil for enhanced seed-soil contact.

- ◆ If possible, buy coated, pre-inoculated seed. If not, buy the appropriate inoculant and apply it to the seed immediately before planting. Plant seed within 24 hours of inoculation.
- ◆ Plant small-seeded legumes (ball, white) on the soil or pasture surface. Plant medium-size seeds (arrowleaf, crimson) about ¼ to ½ inch deep; plant large seed (vetch) about 1 inch deep.
- ◆ For a pure stand of cool-season legumes, mix 15 to 20 pounds of annual ryegrass per acre with ⅔ of the recommended clover-seeding rate. Annual ryegrass provides earlier grazing, reduces the chance of bloat, can act as a carrier for clover seed in a planter not equipped with a small seed box, and reduces the clover-seeding rate by a third.

After planting

- ◆ If overseeding an undisturbed grass sod, let the cows continue to graze until the daily low temperatures are about 40 degrees F. Grazing will reduce the competition from summer grasses with the emerging ryegrass and clover seedlings.
- ◆ Do not apply nitrogen fertilizer to a pure legume stand.

- ◆ In a ryegrass-legume mixture, apply about 60 pounds of nitrogen fertilizer per acre about Thanksgiving if needed to enhance ryegrass growth.

Grazing

The cool-season pasture will not be available for grazing until February or March. The most efficient use of cool-season grasses is for cows calving in January and February. If you rotate grazing using multiple pastures, more nutrients will be recycled into the soil.

Volunteer reseeding

The best legume species for reseeding are those that produce a high percentage of hard seed that will not germinate during the summer. Examples are ball, white, arrowleaf and rose clover.

It is important to produce a good legume seed crop in the spring. Ball, subterranean, rose, and white clovers can flower and produce seed under continuous grazing. For arrowleaf, crimson, and most other legumes, the stocking rate will have to be reduced to produce an adequate seed crop.

Graze the summer grass to 3 inches high by October to allow sunlight to reach the soil surface for volunteer clover seedlings

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