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Oregon State University Fertilizer Recommendation for

Irrigated Pastures (Central Oregon)



Irrigated pastures are usually composed of a mixture of improved grasses and legumes. Maintaining a proper balance between grasses and legumes is essential to obtain maximum production.

Management is the key to production from irrigated pastures. Proper management of livestock and irrigation water can materially increase pasture production.

Nitrogen

Nitrogen has a tendency to stimulate the grassy portion of the pasture mixture. Continued use of high rates of nitrogen will have a tendency to drive the legume out of the stand.

The following fertilizer recommendations are for pastures containing an optimum balance between grasses and legumes.

1. 120 to 140 pounds of nitrogen should be applied annually.
2. Split applications of nitrogen with 40 to 60 pounds of nitrogen being applied in the fall or early spring and 60 to 80 pounds of nitrogen applied during the late spring or early summer have given better results than single applications.

Phosphorus

Legumes in a pasture mixture will usually respond to phosphorus.

1. Apply 40 to 60 pounds of P_2O_5 in the late fall or early spring when legumes in pasture need stimulation.

Sulfur

Sulfur is utilized dominantly by legumes. In only a few isolated cases has sulfur stimulated grass to any measurable degree.

1. Apply 40 to 60 pounds of sulfur in the fertilizer program.
2. Sulfur applications may be made in conjunction with other materials, but should be applied in the fall or early spring.
3. If a bloat problem develops because of excess legume growth, reduce the amount of sulfur applied.

(OVER)



Potassium

Most soil tests from central Oregon show adequate potassium level for pasture production. When soil test levels show less than 250 pounds of K per acre, application should be made on a trial basis. The recommended rate of application is 60 pounds of K_2O per acre.

Lime

The lime requirement for the establishment of irrigated pastures in central Oregon has not been determined. Additional experimental information is needed in a few areas in Deschutes, Crook, and Jefferson counties.

Boron

The need for boron has not been established in fertilizer trials on improved pastures.

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