



Perennial Ryegrass Seed (Western Oregon--West of Cascades)

Nitrogen is the most important nutrient affecting the yield of this crop. Fertilizer trials have shown that the time of nitrogen application is important.

The K content of fertilizer is expressed as the oxide (K_2O) on fertilizer labels. Multiply K_2O by 0.83 to convert to K.

NITROGEN (N)

Fall application

Apply 30 to 40 lbs N/A in the fall to established stands.

Higher rates of fall applied N can be used where ryegrass fields are grazed during the winter months.

Spring application

Do not make spring applications of N until grazing has been completed.

The application of nitrate N to poorly drained soils where water is still standing can result in some volatilization loss of N.

Split applications of N have given good results:

Apply 40 to 50 lbs N/A in March.
Apply 40 to 50 lbs N/A in April.

PHOSPHORUS (P)

P, when applied to established stands, should be broadcast in the fall.

If the OSU soil test for P reads (ppm)	Apply this amount (lb/A) $P_2O_5 \times 0.44 = P$	
0 to 15	40-60	18-26
15 to 30	30-40	13-18
over 30	none	

POTASSIUM (K)

K, when applied to established stands, should be broadcast in the fall.

If the OSU soil test for K reads (ppm)	Apply this amount (lb/A) $K_2O \times 0.83 = K$	
0 to 100	60	50
over 100	none	

ON NEW SEEDINGS

Banding low rates of fertilizer below the seed at planting has increased seedling vigor. With 6 or 7 inch row spacing:

1. Apply 20 to 40 lbs N/A banded at planting.
2. With OSU soil test for P below 45 ppm--Include 30 to 40 lbs P_2O_5 /A in the band.
3. With OSU soil test for K below 150 ppm--Include 15 to 30 lbs K_2O /A in the band.

SULFUR (S)

A minimum of 7 to 15 lbs of S/A should be included in the fertilizer program each year.

MAGNESIUM, BORON, AND ZINC

To date, no response has been observed from applications of these nutrients to grass seed crops in western Oregon.

LIME

When the pH of the soil is below 5.5 or the OSU soil test for calcium (Ca) is below 5.0 meq Ca/100g soil, apply lime and work into the seedbed before planting.

A lime application is effective over several years.

The use of N fertilizers for grass seed crops will tend to increase soil acidity (decrease soil pH). This should be considered in establishing or renovating perennial grass seed fields.

The surface application of lime to established seed fields could increase the soil pH in the surface one-half inch of soil and thereby increase the possibility of N loss from ammonium

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N and urea due to volatilization. Also, broadcasting lime on established stands of perennial grasses is not as effective as mixing lime with the soil.

Evaluate the soil acidity problem before making new plantings. The lime application should allow for some decrease in soil pH during the life of a perennial stand of grass.

The P, K, and lime recommendations are based on soil test values from the Soil Testing Laboratory, OSU, Corvallis, Oregon.

Recommendations based on experiments conducted by T. L. Jackson, Oregon Agricultural Experiment Station, and observation of growers results.

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