



## Crimson Clover-Vetch-Austrian Peas (Western Oregon--West of Cascades)

These annual legumes are grown for seed and forage in western Oregon. They may respond to applications of fertilizers and lime. The fertilizer and liming needs can be estimated through the use of soil tests.

### PHOSPHORUS (P)

The need for P fertilization can be determined by a soil test.

P applications are most effective when the P is banded about 1 inch to the side or below the seed.

Do not include boron in band application.

If the OSU soil test for P reads (ppm):	Band this amount (lbs/A) $P_{2O_5} \times 0.44 = P$	
0-15	60-80	26-35
15-30	40-60	18-26
over 30	none	

The P content of fertilizer is expressed as the oxide ( $P_{2O_5}$ ) on fertilizer labels. Multiply  $P_{2O_5}$  by 0.44 to convert to P.

When P is not banded close to seed, it should be broadcast before seeding and application rate should be increased 50 percent.

### POTASSIUM (K)

K should be broadcast and worked into the seedbed prior to seeding.

If the OSU soil test for K reads (ppm):	Apply this amount (lbs/A) $K_2O \times 0.83 = K$	
0- 75	80-100	66-83
75-150	60-80	50-66
over 150	none	

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.

### SULFUR (S)

20-30 lbs S/A should be included in the fertilizer program each year.

If the S requirement is not supplied by the P or K fertilizer material, then S can be applied through a fall or early spring application of gypsum.

### MAGNESIUM (Mg)

The application of Mg is recommended when the soil test value for Mg is less than 0.8 meq/100g soil.

Mg, usually in the form of potassium magnesium sulfate, can be banded near the seed at 20-30 lbs Mg/A.

Where lime is required and the soil is low in Mg, dolomite lime, which contains Mg, can be used as a liming material.

### BORON (B)

Adequate B is necessary in legume production, particularly when a seed crop is being grown.

If the OSU soil test for B reads (ppm):	Apply this amount of B (lbs/A)
0-0.5	2
0.5-1.5	1-2
over 1.5	0

B should be broadcast in the fall or early spring. B should not be banded.

### LIME

Annual legumes will respond to applications of lime when grown in acid soils.

On sandy soils apply 1 1/2 to 2 tons lime/A when the pH is below 5.8

On silt loam or clay loam soils apply 2 to 4 tons of lime/A when the soil is below 5.8 or calcium is less than 5 meq/100g soil.

Apply lime before seeding and work into the seedbed. A lime application is effective over several years.

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

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