

4 NUTRIENT MANAGEMENT PRACTICES FOR ALFALFA PRODUCTION

Benefits of sulphur in alfalfa

- Required for amino acid and protein synthesis.
- Improves nodule development.
- Increases chlorophyll production.
- Essential for healthy green plants.
- Sustains high alfalfa yields.

SULPHUR the 4th major crop nutrient



Symptoms of sulphur deficiency in alfalfa

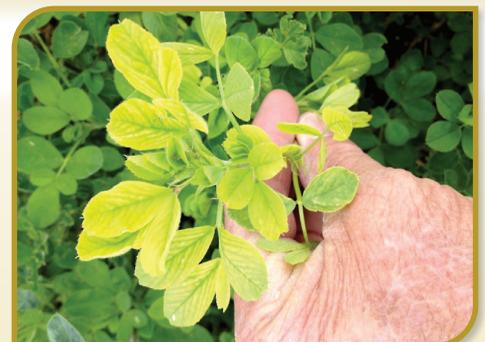
- As sulphur is not mobile in plants, younger leaves appear pale green or yellow. Uniform chlorosis may occur as a sulphur deficiency progresses.
- Plants may appear stunted and spindly.
- Reduced shoot development. • Reduced nodulation.
- Sulphur deficiency is more common in sandy soils with low organic matter.



Sulphur deficiency may appear as stunted plants that appear pale green or yellow. Courtesy: IPNI



Stunted, light green, and spindly alfalfa plants (right) as a result of sulphur deficiency. Courtesy: Field Crops News



Sulphur deficiency symptoms in alfalfa include chlorosis, or yellowing, of the uppermost leaves. Courtesy: UC Cooperative Extension

Right Source

Sulphate-containing fertilizers can be used when alfalfa needs sulphur (S) for immediate crop uptake. Elemental S will become available to the crop depending on the degree of S oxidation into sulfate during a cropping season.

To ensure the selected fertilizer contains S, check the label for details on S content.

Right Rate

Apply 22 – 34 kg S/ha (20 – 30 lbs S/ac) depending on soil fertility and observed S deficiency in previous seasons.

Consult your local crop advisor to determine right rate for your farm based on the S content of available fertilizer, current soil fertility, and target yields.

Right Time

Sulphur can be applied by incorporating it with other fertilizers at establishment or broadcast after a cut.

Avoid application of S fertilizers during periods of very high rainfall to avoid leaching loss of applied S.

Right Place

Surface and incorporation of soluble sulphate fertilizers are equally effective.

Granular elemental S requires dispersion of the S particles within the soil for oxidation to take place.