

NUTRIENT MANAGEMENT PRACTICES FOR CORN PRODUCTION

Benefits of sulphur in corn

- Increases grain protein content.
- Enhances nitrogen uptake.
- Supports grain formation.
- Essential for healthy green plants.
- Sustains high corn yields.

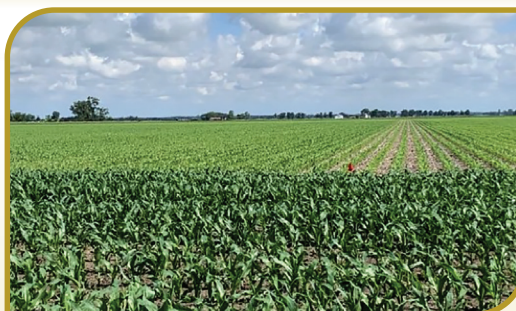
SULPHUR the 4th major crop nutrient

Symptoms of sulphur deficiency in corn



A corn plant with pale green, new leaves resulting from sulphur deficiency.

- As sulphur is not mobile in plants, symptoms first appear on younger leaves.
- Interveinal chlorosis on the youngest leaves.
- Entire leaves become uniformly pale green or yellow.
- The entire plant may become pale green as the deficiency persists.



Sulphur deficient corn shown in the back portion of the image. Corn in foreground has sufficient S. Courtesy: Camberato (Purdue)



Young corn plants showing interveinal chlorosis on the youngest leaves as a result of S deficiency. Courtesy: J. Schwartz

Right Source

Sulphate-containing fertilizers can be used when corn 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 11 to 28 kg S/ha (10–25 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 Sulphur content of available fertilizer, current soil fertility, and target yields.

Right Time

Apply S fertilizer before or after seeding. Available nutrients should be near crop roots during uptake periods. In-crop applications can correct S deficiencies.

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.