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Considering Sulphur

In crop production systems, we typically consider 16 elements essential for growth. Of those, Sulphur (S) is often considered the fourth major nutrient, right behind Nitrogen (N), Phosphorus (P), and Potassium (K).

While known to be important for production, the actual need of *supplemental S* in our Northeast Kansas cropping systems is a little more difficult to predict. Because it's a mobile nutrient, zero to six-inch soil sampling may not always provide an accurate picture of available soil Sulphur. While mostly an issue on low organic matter or coarser textured soils subject to leaching, that isn't *always* the case. Sulphur deficiencies *have* been noted on an increasing basis on finer textured soils and even in bromegrass with organic matters of three percent or higher.

While the best way to predict a need for Sulphur is via use of deep (zero to 24 inches) soil sampling, that may not be possible in all cases. When considering Sulphur applications, make decisions based on soil texture, soil organic matter levels and crop yields to provide a prediction of possible needs. To get a better idea of crop S needs, check out *Sulphur in Kansas*: <https://bookstore.ksre.ksu.edu/pubs/MF2264.pdf> (copies available upon request from District Offices). It provides excellent information on how to determine potential crop S needs as well as Sulphur product differences – including manure application averages.