

Sources of Sulfur for Plants

The atmosphere has been the greatest source of sulfur for developing plants. As fuels are burned for heat, power, or transportation, sulfur escapes as sulfur dioxide gas. This dissolves in rainwater and reaches soil as sulfate-sulfur. This is typically concentrated in industrial areas or areas with extensive use of fossil fuels. As air pollution controls have been established, less sulfur dioxide is released into the atmosphere, less mixes with rainwater and less sulfur is reaching the soil. As a result, sulfur deficiency or shortages are being seen and sulfur needs to be added by other means.

The best way to determine if you have a sulfur deficiency is through plant analysis. When combined with soil testing, you should have a good estimate of how much sulfur needs to be broadcast onto the soil.

Some excellent sources of sulfur for use in plants are ammonium sulfate, potassium magnesium sulfate and calcium sulfate or gypsum. Gypsum, which is 16% sulfur is either mined for a natural occurring source or is produced by Flue Gas Desulfurization (FGD). The FGD process is a byproduct of air pollution equipment which collects the sulfur along the sides of the pollution columns and is then extracted when they are cleaned. Gypsum is 17-20% calcium and is useful in loosening soil for better drainage and rooting of plants as well as a good source of sulfur.