



SULPHUR

The role of sulphur in crop production

S is especially important to plants with high oil content

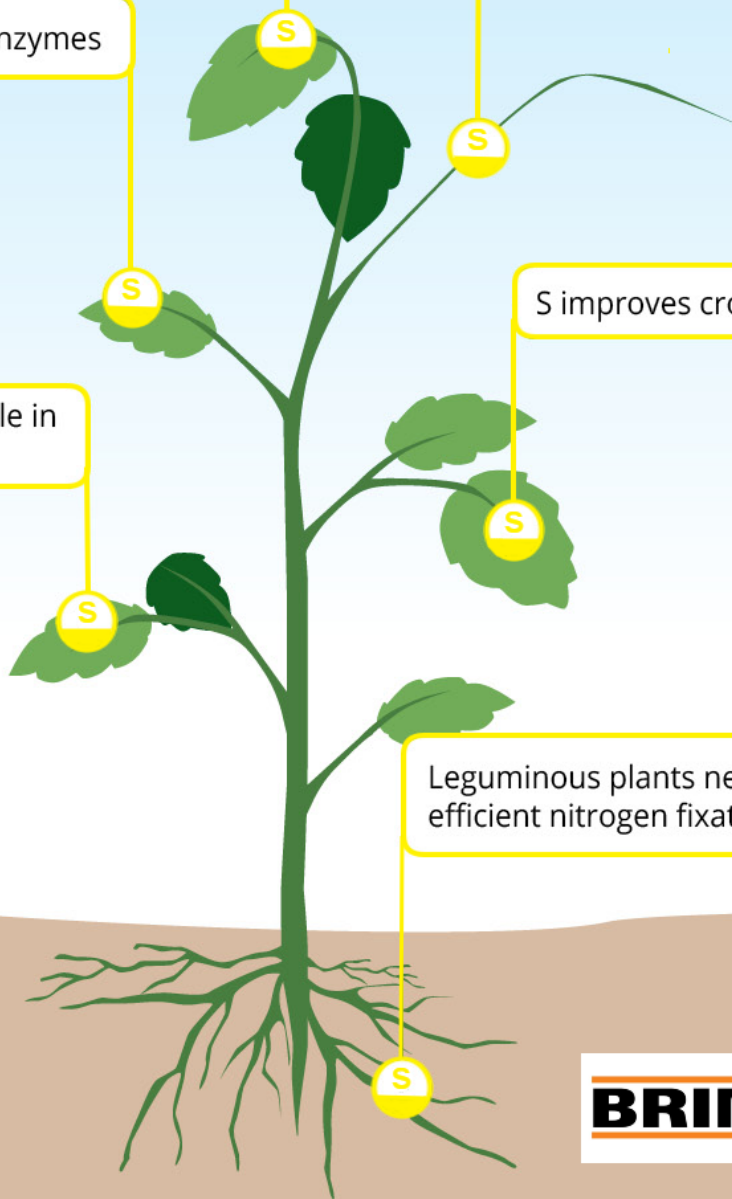
S is vital to the formation of amino acids and is crucial in the production of proteins

S activates a number of enzymes

S has an important role in photosynthesis

S improves crop winter hardiness

Leguminous plants need S for efficient nitrogen fixation





SULPHUR

deficiency symptoms

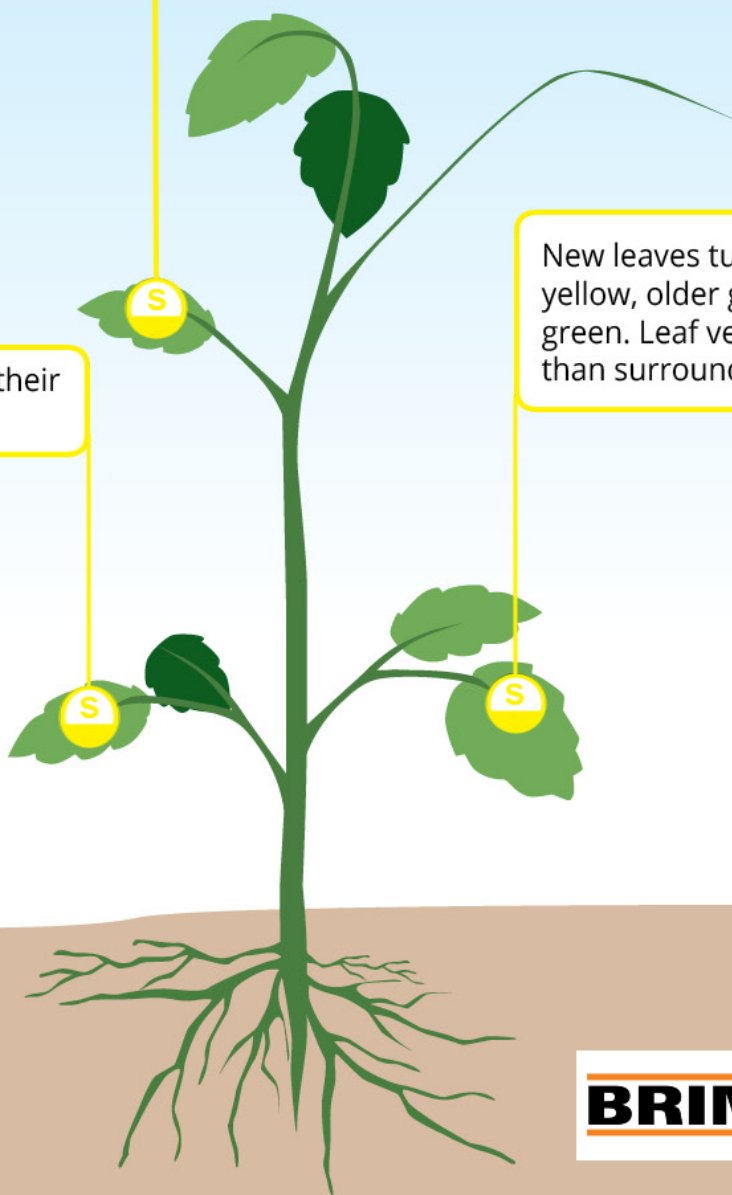


S deficiency in citrus

Since sulphur is immobile within the plant, deficiency symptoms appear on younger leaves

Plants are small and their growth is stunted

New leaves turn pale yellow, older growth stays green. Leaf veins lighter than surrounding areas



Sulphur in soil and in the plant

Sulphate behaves like nitrate in the soil. In the plant nitrogen and sulphur are both essential building blocks for proteins. Sulphur deficiency will severely reduce the efficient use of nitrogen and limit protein synthesis.

Sulphur can only be taken up by plants from the soil solution as sulphate (SO_4^{2-}). As with readily-available nitrate, it can be liable to loss through leaching. Spring application of sulphate fertilizer is therefore recommended so that the plant can take it up during its period of active growth, the same principle applies to nitrate. Sulphur is required, together with nitrogen, for the formation of proteins and the uptake timings for both are similar.

