

Case study

Calcifert |  LKAB

# Treating salt-affected glasshouses with Calcifert Sulphur

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Rebalancing the soil within greenhouses reduces losses and produces a healthier crop with increased shelf life due to improved uptake of calcium.

LKAB Minerals



### The problem

The photograph below shows a situation not uncommon in glasshouses across the country. Salts are drawn to the soil surface where they are deposited due to evaporation through a mixture of circumstances including types of fertiliser used in irrigation and capillary action on the soil. These soils are termed as having a high exchangeable sodium percentage (ESP).

The normal treatment for this problem is to flood irrigate the soils in the glasshouses to help drive the sodium away from the surface. However this can have a limited effect as can be seen in the photo below where there are patches of poorly developed lettuce, leading to wastage at harvest.

### Treatment using Calcifert Sulphur

What flood irrigation does not do is alter the ESP. This has to be done by adding

soluble calcium to the soil, displacing sodium (Na) molecules from the soil colloid and replacing them with calcium (Ca). This then enables the sodium to leach from the soil as a soluble salt.

In this glasshouse of lettuce in West Lancashire, Calcifert Sulphur (calcium sulphate) was used at a rate equivalent to 1t/ha at planting in conjunction with irrigation. The results speak for themselves.

### Results

The grower reported the 'best crop in a decade' if not longer. Unevenness of heads can lead to losses at harvest time of up to 30% but this crop left little, if any, wastage due to the improved quality and evenness of the heads. A reduction in crop disease was also noted during the growing period with fungus such as botrytis much reduced.

### About Calcifert Sulphur

Applying Calcifert Sulphur granulated calcium sulphate is a quick and easy way to supply both calcium and sulphur to soil.

With a typical analysis of calcium as CaO: 39% and sulphur expressed as SO<sub>3</sub>: 56%, Calcifert Sulphur is one of the purest calcium sulphate products available on the market. Calcifert Sulphur has a neutralising value of zero, meaning it won't affect the pH of your soil.

It can be easily applied using a tractor-mounted fertiliser spreader, providing flexibility to farmers and growers.

### Contact

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Learn more at  
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