## SUL-PO-MAG VS. EPSOM SALT

When we think of fertilizers we usually only think of the Big 3 (**N**-Nitrogen, **P**- Phosphorus, **K** - Potassium) but the big picture is that we and the plants need many different types of nutrients.



Plants receive their food from the air, water and soil. There are 16 plant nutrients that are necessary for the best growth, development and food value. Air and water provide oxygen, hydrogen and carbon. Soil has the macronutrients which are used in large amounts-nitrogen, phosphorus, potassium, sulfur, calcium and magnesium.

Sul-Po-Mag is made from a naturally occurring mineral, langbeinite. It contains 22% Sulfur, 22% Potash and 11% Magnesium, without the salinity of Epsom salt. *Sul-Po-Mag* breaks down slowly so plants will get a **regular** supply of these nutrients, and it is completely soluble in water. It is also a great addition to any container planting you may decide on.

**Sulfur** is critical, *even more so than iron*, to the production of vitamins, amino acids that make up plant proteins and also activates certain enzymes systems. Sulfur is also a highly mobile nutrient that may move rapidly downward through the soil, especially through sandy surface layers. Sulfur will also lower the Ph of our alkaline Bay Area soils.

**Magnesium** helps strengthen cell walls, (think fat new canes!) and improves plants' uptake of nitrogen, phosphorus and sulfur.

**Potassium** will ensure stronger stems, aid in the production of sugar and protein <u>and</u> make the plant more disease resistant.

Epsom salt contains only magnesium and sulfur in the form of sulphate and is 100% water soluble. What isn't immediately used by the plant is washed from the soil surface during the rain, or leached away by rain or irrigation.

<u>Sulfur deficiency symptoms</u> are small, spindly plants with short, slender stalks. Growth rate is slow and young leaves may be light green to yellowish with even lighter-colored veins. Leaf spotting may occur. The #1 cause of gardenia failure is insufficient sulfur!

<u>Magnesium deficiency symptoms</u> are yellowing of the leaves between the veins, leaf curling, stunted growth and lack of sweetness in fruits grown.

<u>Potassium deficiency symptoms</u> can be squat, bushy growth; leaflets bluish green and slight intervenal chlorosis, marginal scorch and brown spots on the undersides of leaves.

Since Sul-Po-Mag is completely water-soluble and does not alter the pH of the soil, plants will love you more and produce healthier and happier leaves, canes and produce.

## PLANT WATER GROW