

BIOSTIM MAGNESIUM

The Magnesium Challenge

- Mg can leach from strongly acidic (5.1-5.5pH) sandy soils. Particularly in high rainfall /cold wet conditions.
- Low Mg will cause plants to draw chlorophyll from older leaves – which gives the yellowing of leaf veins, then premature leaf fall, reducing photosynthesis capacity.
- Low Mg can lead to smaller tougher fruit
- Competition in the soil between Ca, K and Mg impacts their respective uptake. Too much of one nutrient will suppress the uptake of the other. A balanced supply of these 3 nutrients is therefore vital. Table 1 illustrates the effect of varying concentrations of K on Ca and Mg uptake by the plant. As the K status in the soil increases, the uptake of Ca and Mg decreases.¹

K soil base saturation	Composition of leaves		
	%K	%Ca	%Mg
0	0.4	1.4	1.5
0.5	0.5	1.2	1.1
1.0	0.8	1.1	0.7
2.0	1.0	0.3	0.6
4.0	2.1	0.7	0.4
8.0	2.1	0.6	0.3
12.0	2.2	0.6	0.4
16.0	2.2	0.4	0.4
20.0	3.1	0.3	0.4

Table 1

Magnesium is mostly about Photosynthesis

- Mg is necessary for photosynthesis to operate
- Mg is an essential ingredient in chlorophyll – which is needed to produce energy
- Mg activates enzymes which are needed for photosynthesis

Why Biostim Magnesium

- Fast correction in Mg deficiency via foliar
- Biostim Magnesium 6% is fully complexed.
- Proven history of effective uptake
- Clean safe product
- 100% of the Magnesium content is available
- Non marking on fruit
- Strong compatibility with other chemistries
- Liquid concentration (not powder)
- Biostim Magnesium is fully complexed (not all chelates are the same)



¹ APAL Dean Rainham September 2015