

15 OTHER ELEMENTS

Humans and animals require more micronutrients for optimal development than plants. Animals also require iodine (I), chromium (Cr), nickel (Ni), selenium (Se), strontium (Sr), vanadium (V) and cobalt (Co). The influence of many of these elements on plant production has been investigated.

It was found that Co and Se improved yield in a variety of crops.

Foliar sprays with potassium iodide at 20mg per litre water increased the sugar content of apples and grapes.

Strontium can supplement Ca. Applications of Sr will lift the Ca deficiency due to

magnesium excess.

Vanadium and gallium stimulate root development but are required at concentrations of 1 part per billion.

Silicon (Si) is known to protect the plant physically against adverse environmental conditions. Silicon is absorbed by the roots and leaves and precipitates just below the epidermis where it provides protection against the penetration of mycelium. Insect find silicon treated plants not tasty. Si is also precipitated in roots, stems, trunks, leaves and supports the plant during periods of cold, heat and drought.