Why biostimulants & fertilizers are part of the same family

In recent decades scientists’ understanding of plant nutrition has broadened and the contribution of biostimulants is one of the areas of emerging knowledge.

Unlike fertilizers, knowing the ingredients of a biostimulant isn’t enough to understand how it will effect crop. Biostimulants are defined more by what they do, than by what they are. And, if you actually look at what fertilizers do – and not just what they are – the similarities between the two types of products becomes clear.

The Similarities between Biostimulants and Fertilizers

In order to illustrate these similarities, let us look at the three effects attributed to biostimulants and how similar they are to the claims of fertilizer nutrients: .

i. Biostimulants help **plants assimilate nutrients** by stimulating root growth. This allows the plant to access more nutrients in the soil, in the same way that phosphorus fertilizers foster root growth.

ii. Biostimulants reinforce plants’ **tolerance to abiotic stress** (extreme weather conditions). Similarly, phosphorus fertilizers also improve stress tolerance, sulphur fertilizers strengthen plant’s resistance to cold and sodium fertilizers help plants counter the effects of alkali salts and organic acids.

iii. **Enhancing crop quality** is also a common claim for biostimulant products. In the world of mineral fertilizers, nitrogen and potassium improve the quality of fruit and nitrogen enhances leaf and forage crops.

Recognising the similar effects

The above examples clearly illustrate the similarities between fertilizers and biostimulants. It is therefore important not to look only at the composition of the two types of products but, more importantly, recognise the similar effects they both have on crop.

In this light, it seems natural and logical to place both fertilizers and biostimulants under the same regulatory framework

Learn more about the effects of biostimulants