

Kings Cliffe Industrial Estate, Wansford, Peterborough, PE8 6PB, United Kingdom Tel: +44(0)1780 781360

info@biotechnica.co.uk www.biotechnica.co.uk



BioHumate is a liquid blend of biologically active natural source ingredients, which exert a positive effect on the whole growth cycle of arable and horticultural crops. It improves soil conditions and in particular promotes the activity of beneficial bacteria and fungi including mycorrhizae. This leads to an improved soil structure and encourages the symbiotic relationship between plants and their associated microbial species. In this way the natural organic cycle is more closely approached.

Why choose BioHumate?

BioHumate application is able to offer the following benefits to the crop:

- Increased cation exchange capacity
- Increased nutrient absorption
- Reduction in nutrient leaching
- Increased stress tolerance and plant vigour

Organic matter in the soil not only affects soil structure and the micro fauna but also influences the cation exchange capacity and thus the availability of nutrients. Plants are able to make strong roots through improved root growth and availability.

The stimulatory effect is also evident in the plant from the earliest point. Seeds dressed with **BioHumate** show improved germination rates. Root growth is stimulated and more robust top growth is produced when soil is treated with **BioHumate** or when sprayed after emergence. A healthy plant with a strong root system not only makes more use of available nutrients but also exhibits better disease resistance.

Root and stem development are important factors not only in the establishment of a robust plant but also in enabling the plant to both avoid and resist fungal diseases. Many plants have root exudates that deter fungal attack. Rapid root growth also provides a tougher root, resistant to penetration by soil fungi such as *Pythium*; and rapid stem growth moves vulnerable leaves away from the soil surface and from potential contamination by Rust, *Septoria* etc.

The efficiency of applied chemicals (pesticides and fertilizers) are also improved when **BioHumate** is used as uptake is increased. As a result, **BioHumate** application allows for reductions in inputs and recent trial work has shown that fertilizer levels can be reduced, together with fewer applications of fungicides, whilst maintaining yield and quality. On soils low in organic matter or fertility, crop yields are improved.

Application protocols

For best results apply 3L/ha before sowing.

A further 3L/ha should be applied alongside fertilizer treatment at the post-emergence stage and a further 3L/ha one month later.

For soils with very low organic matter levels (1.5% or less) use 8L/ha on the first application.

For more information on any of our products see www.biotechnica.co.uk