European Biostimulants Industry Council

ABOUT BIOSTIMULANTS AND THE BENEFITS OF USING THEM

Agricultural biostimulants include diverse formulations of compounds, substances and micro-organisms that are applied to plants or soils to improve crop vigour, yields, quality and tolerance of abiotic stresses.

Biostimulants foster plant growth and development throughout the crop life cycle from seed germination to plant maturity in a number of demonstrated ways, including but not limited to:

- Improving the efficiency of the plant's metabolism to induce yield increases and enhanced crop quality;
- Increasing plant tolerance to and recovery from abiotic stresses;
- Facilitating nutrient assimilation, translocation and use;
- Enhancing quality attributes of produce, including sugar content, colour, fruit seeding, etc;
- Rendering water use more efficient;
- Enhancing soil fertility, particularly by fostering the development of complementary soil micro-organisms.

What distinguishes biostimulants from traditional crop inputs?

- Biostimulants operate through different mechanisms than fertilisers, regardless of the presence of nutrients in the products.
- Biostimulants differ from crop protection products because they act only on the plant's vigour and do not have any direct actions against pests or disease.
- Crop biostimulation is thus complementary to crop nutrition and crop protection.

Biostimulants are a critical ingredient in Europe's sustainability

Europe 2020 puts forward three mutually reinforcing priorities:

- Smart growth: developing an economy based on knowledge and innovation. As a research-based industry, the biostimulants sector generates knowledge and innovation for the bio-based economy.

- Sustainable growth: promoting a more resource efficient, greener and more competitive economy. Biostimulants make many contributions to making agriculture more sustainable.
- Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion. Many biostimulant companies are located in rural areas or small cities, creating jobs and supporting economic development from production through use.

More information on the European Union's objectives can be found in *Europe 2020: A strategy for smart, sustainable and inclusive growth, Communication from the European Commission, 2010.*