



BIO-STIMULANTS

Defining, Analyzing and Characterization

Speakers:

Benoit Planques, Chair of CEN/TC 455, EU Standards for Bio-stimulants

Terry Stone & Keith Pitts, US Biostimulant Coalition

Eddie Simons, WSDA

USDA

Bio-Stimulants, *Proposed definitions*

- US proposed –
- ***“A substance or micro-organism that, when applied to seeds, plants, or the rhizosphere, stimulates natural processes to enhance or benefit nutrient uptake, nutrient efficiency, tolerance to abiotic stress, crop quality, and yield”*** (U.S. House Farm Bill)
- EU proposed-
- ***“A plant bio-stimulant is any micro-organism or substance based on natural resources, in the form in which it is supplied to the user, applied to plants, seeds or the soil and any other substrate with the intent to stimulate natural processes of plants to benefit from their nutrient use efficiency and/or their tolerance to (abiotic) stress, regardless of its nutrient content or any combination of such substances and/or micro-organisms intended for this use”.***

Bio-Stimulants - Concerns

- **Efficacy**
- **Bio-availability**
- **Pathogenic contaminants**
- **Methods for assessing all of the above**

- **Regulatory**
 - **Federal (via Farm Bill),**
 - **AAPFCO**
 - **Individual States proposing & modifying some type of framework**

USDA Working Group



Industry

- Actagro
- Agrinos
- Bayer Crop Science
- Lallemand
- Monsanto
- Montys Plant Food
- Marrone Bio
- Nutrien