



Bundesamt für  
Verbraucherschutz und  
Lebensmittelsicherheit



# Plant Strengtheners in Germany

- Are plant strengtheners in Germany biostimulants?
- And *vice versa*: are biostimulants plant strengtheners?

## Biostimulants according to EBIC (European Biostimulants Industry Council):

*Plant biostimulants contain substance(s) and/or micro-organisms whose function when applied to plants or the rhizosphere is to stimulate natural processes to enhance/benefit nutrient uptake, nutrient efficiency, tolerance to abiotic stress, and crop quality.*

*Biostimulants have no direct action against pests, and therefore do not fall within the regulatory framework of pesticides.*

Biostimulants according to European Commission  
(i. e. presentation by Eric Liegeois in Brussels –  
PPP Working Group 16.05.2014; ‚work in progress‘) :

*A plant biostimulant is any substance or microorganism, in the form in which it is supplied to the user, applied to plants, seeds or the root environment with the intention to stimulate natural processes of plants benefiting nutrient use efficiency and/or tolerance to abiotic stress, and/or crop quality, regardless of its nutrients content, or any combination of such substances and/or microorganisms intended for this use.*

## § 2 No 10 German Plant Protection Act (6<sup>th</sup> Feb 2012)

*Plant strengtheners are substances and mixtures including micro-organisms which*

- a) are exclusively intended to maintain plant health in general as long as they are not plant protection products according to Article 2 (1) of Regulation (EC) No 1107/2009 or*
- b) are intended to protect plants against non-parasitic impairments*



## biostimulants

→ definition suggested by EBIC and European  
Commission

### stimulation of natural processes

**nutrient use  
& efficiency**

**tolerance to  
abiotic stress**

**crop quality**

**plant strengtheners**  
→ German Plant Protection Act

**maintenance  
of plant health**

**tolerance to  
abiotic stress**

## plant protection products

→ Regulation (EC) No 1107/2009

**direct action  
against pests**

(IN, AC, FU, HB,  
RE, ...)

**elicitors (EL)**

(indirect action  
against pests)

**growth  
regulators (PG)**

(*i.e.* plant  
hormones)



? Are plant strengtheners in Germany biostimulants?

~~✍~~ *Some of them could be biostimulants.*

? Are biostimulants plant strengtheners?

~~✍~~ *Not necessarily.*



## § 2 DüngG (German Fertilisers Act)

Soil improvers: *Substances without significant concentrations of nutrients and also microorganisms, which are intended*

- a) *to influence the biological, chemical or physical properties of the soil in order to improve the conditions for plant growth or*
- b) *to promote the nitrogen fixation by symbiotic organisms*

Plant growth improvers / plant aids (Pflanzenhilfsmittel):

*Substances without significant concentrations of nutrients, which are intended*

- *to act on plants in a biological or chemical way in order to achieve a beneficial effect on plant cultivation, production or application,*
- *as far as they are not plant strengtheners in the sense of § 2 No 10 German Plant Protection Act*

*[unofficial translation]*

# provisions for $\mu$ -organisms in PPP

## special guidelines for $\mu$ O

SANCO/10754/2005 rev. 5

### identity and biological properties

- taxonomic level → strain level
- identity and biological properties
- metabolites, toxins
- mode of action
- human health
  - toxicity
  - pathogenicity
  - infectiveness
- environment
  - fate and behaviour
  - effects on non-target organisms

# provisions for $\mu$ O plant strengtheners

## similar as for $\mu$ O in PPP!

- identity and biological properties
  - taxonomic level → strain level
  - identity and biological properties
  - metabolites, toxins
  - mode of action
- human health
  - toxicity
  - pathogenicity
  - infectiveness

# provisions for $\mu$ O in fertiliser products

## not similar as for $\mu$ O in PPP *resp.* plant strengtheners!

- in Germany, no specific data requirements for products but allowance for living microorganisms in fertiliser products
- *uses*
  - *in order to inoculate the soil*
  - *in order to stimulate the growth of plants and to improve the plants' vitality*

*The organisms must be specified.*

*The legal provisions for genetic engineering must be complied with.*

*[unofficial translation]*

## information on plant strengtheners

[www.bvl.bund.de](http://www.bvl.bund.de) > Plant Protection Products > Plant  
Strengtheners >  
*general information, definitions, lists, forms, advice, news...*

*Thank you  
for your kind attention!*

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