

Plant nutrition courier

The best bits of plant nutrition research

2024-01

Quantum dots: fertiliser, nutrient tracker, biostimulant, photosynthesis promotor 4

Maize cultivars respond differently to foliar fertilisation 8

Swiss scientists predict crop response to mycorrhiza inoculation 11

Small particles increase nutrient uptake from foliar fertilisers 14

Recent plant nutrition patent publications 34



Quantum dots: fertiliser, nutrient tracker, biostimulant, photosynthesis promotor 4

Quantum dots are gaining interest. Since the turn of the millennium, these nanosized semiconductor crystals are increasingly being investigated as a source or carrier of nutrients, as plant growth promotor and stress inhibitor.



Maize cultivars respond differently to foliar fertilisation 8



Scientists predict crop response to mycorrhiza inoculation 11

Picture: Agroscope/FiBL



Small particles increase nutrient uptake from foliar fertilisers 14

Quantum dots

- 4 Quantum dots: fertiliser, nutrient tracker, biostimulant, photosynthesis promotor
- 5 Editorial: Quantum dots seem to have a lot going for them, which is why we need to know more about them quickly
- 7 Quantum dots channel solar energy to chloroplasts, thus improving photosynthesis

Arable farming

- 8 Maize cultivars respond differently to foliar fertilisation
- 8 Sugarcane cultivars differ in leaf scorching by urea
- 8 Soil pH determines best ammonium:nitrate ratio
- 8 Sprayable mulch that slowly releases urea
- 8 Combining nitrogen and potassium increases oilseed rape oil yield and quality
- 9 High silicon dose reduces clubroot severity in oilseed rape
- 9 Selenium fertilisation of wheat examined

Potato nutrition

- 9 Publications about potato nutrition research

Plant and soil analytics

- 10 Micronutrients: from physiological functions to deficiency symptoms
- 10 Critical soil nutrient levels scrutinised
- 10 Calcium sulphate crystals can be artefacts of sample preparation

Fertilisers

- 10 Productive siderophore-producing bacterial strain discovered
- 11 Phosphate compromises storage-stability of NBPT urease inhibitors
- 14 Small particles increase nutrient uptake from foliar fertilisers
- 11 Publications about new, experimental and potential fertiliser formulations

Silicon

- 9 High silicon dose reduces clubroot severity in oilseed rape

Mycorrhizae

- 11 Swiss scientists predict crop response to mycorrhiza inoculation

Plant nutrition patents

- 34 Recent plant nutrition patent publications

Literature

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Fertiliser companies



Analytical services



Fertiliser research



Liquid fertiliser applicators



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Agricultural cooperatives

(Dutch - with international network of subsidiaries)



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Colophon

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