

Plant nutrition courier

The best bits of plant nutrition research

2022-05

Selenium protects ornamentals against stress, extends vase life 8

Soybean benefits from nickel-enriched limestone 4

Silicon and sulphur enhance drought tolerance of maize 5

Nickel reduces blossom-end rot in tomato 7

Magnesium successfully co-granulated with mono-ammonium phosphate 10

China's development road of ammonium phosphate fertilisers 11

Patent analysis shows developments in urea fertiliser coatings 30



Selenium protects ornamentals against stress, extends vase life 8

Selenium application protects pot-grown ornamentals against salinity and other forms of stress. Cut flowers supplied with selenium have a longer vase life.

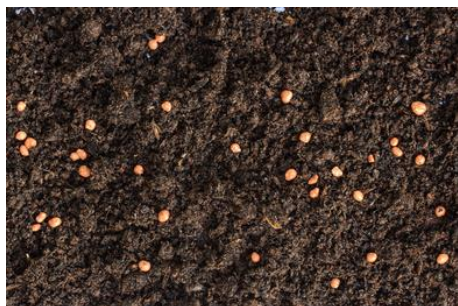


Silicon and sulphur enhance drought tolerance of maize 5

Silicon seed priming and foliar-applied ammonium sulphate enhance drought tolerance. *Drought-stressed maize on Dutch sandy soil.* Photograph: C.C. van Maanen-de Leeuw



Magnesium successfully co-granulated with monoammonium phosphate 10



Patent analysis shows developments in urea fertiliser coatings 30

Arable farming

- 4 Soybean benefits from nickel-enriched limestone
- 4 Placed urea improves nitrogen use efficiency in rice
- 4 Silicon improves nitrogen fixation
- 4 Intercropped water spinach increases silicon uptake of rice
- 5 Silicification of wheat leaves differs per growth stage
- 5 Silicon fertigation reduces water-deficiency stress in maize
- 5 Silicon and sulphur enhance drought tolerance of maize
- 5 Nutrient seed treatment against drought stress in oilseed rape
- 6 Clay minerals are major source of plant-available silicon in temperate soils
- 6 New books on selenium and silicon in plants

Potato nutrition

- 6 Foliar-applied silicon increases potato mini-tuber production
- 6 Publications about potato nutrition research

Fruits and vegetables

- 7 Iron(II) ions recover leaves of citrus trees suffering from huanglongbing
- 7 Foliar-applied melatonin increases iron uptake in peach
- 7 Nickel reduces blossom-end rot in tomato
- 7 Sulphur biofortification of tomato

Ornamentals

- 8 Selenium protects ornamentals against stress, extends vase life
- 8 Silicon extends vase life of chrysanthemum
- 9 Canadian researchers reduce fertiliser levels for sub-irrigated pot plants

Rhizosphere

- 12 Cereal biofortification via microbes in the rhizosphere
- 12 Phosphate-mobilising microbes often work differently than thought

Fertilisers

- 9 Plea for better enhanced efficiency nitrogen fertilisers
- 9 Natural oil-based fertiliser coatings scrutinized
- 10 Magnesium successfully co-granulated with monoammonium phosphate
- 10 Phosphate fertiliser choice tailored to soil pH
- 11 China's development road of ammonium phosphate fertilisers
- 12 Publications about new, experimental and potential fertiliser formulations

Plant research

- 29 New virus discovered in world's most widely used research plant

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- 30 Recent plant nutrition patent publications

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Cover photograph: Tineke van den Berg

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Fertiliser research



Liquid fertiliser applicators



Soil services



Mycorrhizae



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Colophon

Editor	Gert van den Berg
Publisher	Landbouwkundige Uitgeverij G.C. van den Berg
Address	Van Maerlantstraat 5, 3906 EL Veenendaal, The Netherlands
Website	www.plantnutritioncourier.nl
Subscriptions	Small: € 140,00/year ex VAT (1 - 10 readers at one physical location of the organisation). Medium: € 410,00/year ex VAT (11 - 50 readers at multiple physical locations of the organisation). Worldwide: € 875,00/year ex VAT (worldwide in-company subscription).
Single issues	€ 45,00/issue ex VAT.

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