

Plant nutrition courier

The best bits of plant nutrition research

2020-06



Novel soil fumigant is significant source of nitrogen 4

Organic farms with legumes as sole source of nitrogen deplete soil reserves of phosphorus and potassium 7

Foliar route is best suited to fortify potato tubers with iodine 8

Super absorbents respond differently to soil pressure 13

Silicon in nutrient solution induces iron deficiency in cucumber 28



Organic farms with legumes as sole nitrogen source deplete reserves of phosphate and potassium 7

Organic farms with low stocking rate that rely on biological nitrogen fixation as sole nitrogen source are at risk of depletion of soil reserves of phosphorus and potassium.



Foliar route is best suited to fortify potato tubers with iodine 8

Foliar-applied potassium iodate and soil-applied potassium iodide are both safe to potato crops, but foliar application turned out to be the most efficient in increasing iodine accumulation in potato tubers.



Super absorbents respond differently to soil pressure 13



Silicon in nutrient solution induces iron deficiency in cucumber 21

Soil fumigation and nitrogen fertilisation

- 4 Novel soil fumigant is significant source of nitrogen

Arable farming

- 7 Organic farms with legumes as sole source of nitrogen deplete soil reserves of phosphorus and potassium
- 7 US maize is calculated to need one-third of fertiliser dose to compensate for soil degradation
- 7 Usefulness of sub-surface banding differs per type of slow-release urea
- 7 Depth granular ammonium nitrate placement affects fertiliser performance
- 7 Magnesium supports nitrate uptake in soybean
- 28 Silicon increases nodule number and size in soybean
- 28 Protein precipitates silica in sorghum leaf epidermal cells

Potato nutrition

- 8 Foliar route is best suited to fortify potato tubers with iodine
- 9 Foliar application of calcium-sorbitol complex
- 9 Publications about potato nutrition research

Fruits and vegetables

- 28 Silicon in nutrient solution induces iron deficiency in cucumber

Ornamentals

- 7 Selenium increases vase life of ethylene-sensitive cut flowers

Fertilisers

- 11 New process for phosphorus recovery from low-grade phosphate ore
- 11 Nitrification inhibitor reduces effectiveness of urease inhibitor
- 11 Sorbitol improves performance of zinc nitrate foliar fertiliser
- 11 Preparation of calcium-sorbitol complexes
- 11 Publications about new, experimental and potential fertiliser formulations

Super absorbents

- 13 Super absorbents respond differently to soil pressure

Silicon

- 28 Silicon increases nodule number and size in soybean
- 28 Protein precipitates silica in sorghum leaf epidermal cells
- 28 Silicon in nutrient solution induces iron deficiency in cucumber
- 28 Special issue on silicon in plant biology
- 28 Recent silicon publications

Literature

- 9 Publications about potato nutrition research
- 11 Publications about new, experimental and potential fertiliser formulations
- 14 Publications about plant nutrition research
- 28 Recent silicon publications

Service

- 30 Calendar of events

Cover photograph:

Soil fumigation with the new fumigant cyanogen.

Photograph: Lučební závody Draslovka Kolín, a.s.

Publications about plant nutrition research

from page 14

General	14	Phosphorus	21
Biofortification	14	Potassium	22
Climate change	14	Calcium	23
Greenhouse gas emission	14	Lime / pH	23
Glyphosate and other herbicides	15	Magnesium	23
Mapping, sensing, sampling and analytics	15	Sulphur	24
Application technology	16	Boron	24
Foliar fertilisation	16	Chloride	24
Chelates	17	Copper	24
Organic fertilisers and industrial wastes (selection)	17	Iron	25
Green manure / cover crops	17	Manganese	25
Biochar	18	Sodium	25
Humic acids	18	Zinc	25
Nano-fertilisers	18	Aluminium	26
Nitrification and urease inhibitors	18	Iodine	26
Specific release	18	Selenium	26
Nitrogen	19	Rhizobia, mycorrhiza etc.	27

Fertiliser companies



Agricultural cooperatives

(Dutch - with international network of subsidiaries)



Liquid fertiliser applicators



Fertiliser research



Trial equipment



Plant and soil analysis devices and tools



Soil services



Biostimulants



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: € 135,00/year ex VAT (1 - 10 readers at one physical location of the organisation). Medium: € 395,00/year ex VAT (11 - 50 readers at multiple physical locations of the organisation). Worldwide: € 845,00/year ex VAT (worldwide in-company subscription).
Single issues	€ 40,00/issue ex VAT.

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