# Plant nutrition courier

The best bits of plant nutrition research

2024-05



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- Lithium: essential ultratrace element for ruminants
- Lithium in diet is good for mental health

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# Small dose of lithium can increase crop yield

Small amounts of lithium can be beneficial for crop growth, development and health. This low dose stimulation can be exploited in the lithium fortification of food crops.

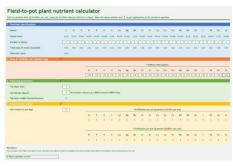


# Soybean benefits from nickel in several ways

Soybean in need of nickel benefits most from this micronutrient if it is applied via both leaves and soil or seeds.



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#### Lithium

- 4 Small dose of lithium can increase crop yield
- 5 Lithium: essential ultratrace element for ruminants
- 7 Lithium in diet is good for mental health
- 7 Editorial: Farmer can provide ingredients for good mood and mental health and well-being

#### **Arable farming**

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- 8 Adding sulphur to potassium phosphate increases maize growth on calcareous soil
- 8 Three terms for different forms of 'leftover' phosphorus
- 8 Soil-applied nanosilica protects maize against root lesion nematodes
- 9 Mycorrhizal fungi help rice get more silicon in three ways
- 9 Wheat seed orientation affects rooting depth

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- 11 Generic critical potassium dilution curve for potato
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#### Fruits and vegetables

- 11 Boron extends shelf life of strawberries
- 11 Peach fruits outperform nectarines in uptake of foliar-applied calcium
- 11 Amorphous silica improves tomato fruit quality
- 11 Chloride can partially replace nitrate in lettuce on hydroponics
- 11 Seed soaking in phytase solution improves germination

#### Plant and soil analytics

- 11 Determination of active silicon
- 12 New extractant for routine soil testing on micronutrients
- New method to precisely estimate ammonia emissions from soil surface-applied slurry

#### **Fertilisers**

- 11 Generic critical potassium dilution curve for potato
- 11 New silicon sources
- 12 Milling molybdenum and zinc into slow-release molybdenum fertiliser
- 12 Anions affect urease enzyme differently
- 13 Promising phosphate-solubilizing bacteria found in insect guts
- 13 Publications about new, experimental and potential fertiliser formulations

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#### Silicon

- 8 Soil-applied nanosilica protects maize against root lesion nematodes
- 9 Mycorrhizal fungi help rice get more silicon in three ways
- 11 Amorphous silica improves tomato fruit quality
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Editor Gert van den Berg

Publisher Landbouwkundige Uitgeverij G.C. van den Berg

Address Van Maerlantstraat 5, 3906 EL Veenendaal, The Netherlands

Website <u>www.plantnutritioncourier.nl</u>

Subscriptions Small: € 160,00/year ex VAT (1 - 10 readers at one physical location of the organisation).

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