

Plant nutrition courier

The best bits of plant nutrition research

2019-02



Theme: Glyphosate and nutrients

Once a nutrient thief, always a nutrient thief 3

Glyphosate counted as phosphate fertiliser 8

Pesticide-to-plant-nutrient calculator 9

Glyphosate-resistant Palmer amaranth excels by improved nitrogen use 10

And further:

Modern wheat cultivars outperform older varieties 11



Once a nutrient thief, always a nutrient thief 3

Glyphosate is a chelating agent. This active ingredient sequesters cations that are present in spray solutions prepared with hard water. But what about glyphosate in plants and the rhizosphere?



Glyphosate counted as phosphate fertiliser 8

Glyphosate ending up in soil degrades to phosphate, or competes with this nutrient for binding sites in soil. Researchers suggest that this widely used herbicide increases the phosphorus availability to crops.



Glyphosate-resistant Palmer amaranth excels by improved nitrogen use 10



Modern wheat cultivars outperform older varieties 11

Glyphosate and nutrients

- 3 Once a nutrient thief, always a nutrient thief
- 8 Glyphosate counted as phosphate fertiliser
- 9 Pesticide-to-plant-nutrient calculator
- 10 Glyphosate-resistant Palmer amaranth excels by improved nitrogen use

Herbicide-resistant weeds

- 10 Glyphosate-resistant Palmer amaranth excels by improved nitrogen use
- 10 Cover crops help in slowing development of herbicide resistant weeds

Plant breeding

- 11 Modern wheat cultivars outperform older varieties

Beneficial microorganisms

- 11 Soil microbes can enhance both disease resistance and iron acquisition

Service

- 12 Calendar of events

Photographs

Top: Glyphosate yellow flash in glyphosate-resistant soybean. Eric P. Prostka, University of Georgia Department of Crop & Soil Sciences.

Picture three: Palmer amaranth. Theresa Reinhardt-Piskackova, North Carolina State University

Fertiliser companies



Agricultural cooperatives
(Dutch - with international network of subsidiaries)



Liquid fertiliser applicators



Fertiliser research



Trial equipment



Soil services



Biostimulants



Mycorrhizae



How to advertise

Advertisements in the international Plant nutrition *courier* are published in six consecutive issues including one free issue. Follow [this hyperlink](#) for details about advertising in the Plant nutrition *courier* and/or in the email newsletter.

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: € 125,00/year ex VAT (1 - 10 readers at one physical location of the organisation). Medium: € 375,00/year ex VAT (11 - 50 readers at multiple physical locations of the organisation). Worldwide: € 825,00/year ex VAT (worldwide in-company subscription).
Single issues	€ 40,00/issue ex VAT.

Plant nutrition *courier* is an internationally published bimonthly digital newsletter on plant nutrition, including silicon and other beneficial elements. Authors and publisher declare the information in the Plant nutrition *courier* is provided to our best knowledge of the current situation, but they cannot accept responsibility for the validity or for the consequences of their use. Subscriptions will be extended, unless cancelled at least one month before the end of the yearly subscription.