

# Contents of Beneficial nutrients news 2005 - 2010

## Decemeber 2010

- Debate about phosphorus reserves
- Peak phosphorus
- A new spring, a new sound
- International silicon conference in silicon-deficient China
- Contents of Plant nutrition *courier* December 2010
- Calendar of events
- Colophon

## October 2010

- Spray against stress
- The unpredictable manganese effect of chloride
- Further reading about manganese effect of chloride
- Desk study highlights silicon in potato
- Silicate against white grub
- Recent silicon publications
- Contents of Plant nutrition *courier* October 2010
- Calendar of events
- Colophon

## August 2010

- The pros and cons of cobalt in plant nutrition
- Further reading about cobalt
- Sugar beet
- Less toxin
- More ethylene
- Quick patent scan cobalt in plant nutrition
- Contents of Plant nutrition *courier* August 2010
- Calendar of events
- Colophon

## June 2010

- Silica protects against root herbivores
- Domestication increased awn silicon content
- Heavier orchid liners
- Silicon retards tobacco ringspot virus
- Stimulating upward silicon transport
- Bacterial spore coat
- Silicon in beer
- Floral Si accumulators
- Recent silicon publications
- Contents of Plant nutrition *courier* June 2010
- Calendar of events
- Colophon

## April 2010 (Dossier particle size)

- First nano fertilisers come onto the market
- "Better water soluble than nano"
- Nano-sized biosensor makes nitrogen fertiliser crop-specific
- Tiny bubbles enhance phosphate recovery
- Iron chelate
- Active silica
- Ultrafine CO<sub>2</sub> foliar fertilisers
- Super surfactant
- Quick patent scan nano in plant nutrition
- Recent silicon publications
- Contents of Plant nutrition *courier* April 2010
- Calendar of events
- Colophon

## February 2010

- Cobalt inhibits ethylene production
- Further reading about cobalt
- Recent silicon publications
- Contents of Plant nutrition *courier* February 2010
- Calendar of events
- Colophon

### December 2009 (Dossier particle size)

- Nanotech on farmers' fields
- Nano: what is in a name?
- Plants utilize nano-sized nutrients
- Three types of nano-fertilisers
- Pros and cons of tiny tubes
- Afraid of nano-food
- Nanotech consumer products cross millennial threshold

- Further reading about nanotechnology
- Nanotech formulations
- Contents of Plant nutrition *courier* December 2009
- Calendar of events
- Colophon

### October 2009

- Converter slag as carrier for phosphorus
- Silicon-fed wheat less sensitive to leaf streak
- Iodine biofertiliser increases apple yield
- Peach rootstock profits from low selenium dose

- Recent silicon publications
- Contents of Plant nutrition *courier* October 2009
- Calendar of events
- Colophon

### August 2009

- Silicon-fed potato less prone to green peach aphid
- Silicate minerals as nutrient solution optimiser
- Further reading about water treatment with siliceous materials
- Ammonia volatilization from mineral fertilisers
- Cerium counteracts linoleic acid
- Lanthanum protects chlorophyll

- Si negative for orchid plantlets
- Recent silicon publications
- Contents of Plant nutrition *courier* August 2009
- Calendar of events
- Colophon

### June 2009

- Nickel deficiency has many faces
- Further reading about nickel
- Patent: Use of nickel to correct growth disorders in plants
- Nickel fertilisers
- Fertiliser from low grade rock phosphate and silicate

- Biofortification by monocot and dicot intercropping
- Recent silicon publications
- Contents of Plant nutrition *courier* June 2009
- Calendar of events
- Colophon

### April 2009

- Silicious fertilisers increasingly patented
- Patent highlight: Silicon in crop protection
- Patent highlight: Silicon fertilisers from steel industry
- Soil improving 'cement'
- Straw-based silicon fertiliser
- Silicate bacteria
- Golf course fertiliser

- Organomineral fertiliser with prolonged action
- Suppressing methane gas emission from soil
- Silicon in agrochemicals - new patent publications
- Contents of Plant nutrition *courier* April 2009
- Calendar of events
- Colophon

### February 2009

- Selenium improves potato performance
- Selenium speciation
- New: Supplement about plant nutrition research
- Further reading about selenium nutrition of potato
- Careful with selenium
- Se production and consumption

- Onion profits from selenium
- Silicon improves nodulation
- Gerbera: no Si effect on mildew
- Better rooting with neodymium
- Recent selenium publications
- Calendar of events
- Colophon

#### **December 2008**

- Silicon alleviates soil salinity effects
- Sodium is the culprit
- Further reading about salt stress alleviation by silicon
- Zinnia performs better with silicon supplementation
- Silicon suppresses ornamental pests
- SURfaPLUS records 5,000 patents in alert service
- Calendar of events
- Colophon

#### **November 2008**

- Nursery crops benefit from silicon
- Further reading about silicon in nursery crops
- Book of abstracts Si conference
- Calendar of events
- Colophon

#### **October 2008**

- Conference on the 'interest' of plants in silicon
- Silicon against black Sigatoka disease and other biotic and abiotic stresses
- Abstracts and proceedings
- Recent silicon publications
- Calendar of events
- Colophon

#### **August 2008**

- The pros and cons of iodine in plant nutrition
- Preference for salt as iodine carrier
- Iodine deficiency widely spread
- Quick patent scan iodine in plant nutrition and biofortification
- Further reading about iodine
- Calendar of events
- Colophon

#### **June 2008**

- Potato profits from silicon supply
- Silicon effects of basic slag on potato overlooked
- Further reading about silicon in potato and relatives
- Magnesium protects plant pigments against breakdown at high temperature
- Recent silicon publications
- Calendar of events
- Colophon

#### **March 2008**

- American researchers examine silicon in ornamentals
- Sunflower is sensitive to silicon source and rate
- Fear for silicon in strawberry substrate
- Silicon protects pelargonium against bacterial wilt
- Recent silicon publications
- Calendar of events
- Colophon

#### December 2007

- Mycorrhizae channel silicon to plants
- Si improves potato yield and plant architecture
- SURfaPLUS records 2,500 patents in alert service
- China is a gold mine of applied silicon research
- Recent Chinese-language silicon publications
- Calendar of events
- Colophon

#### November 2007

- Plants utilize nano-sized silicon oxide
- No effect of silicon on tomato fungal diseases
- Silicon nutrition reduces wheat grazing by rabbits
- Recent silicon publications
- New patent publications cover silicon in agrochemicals
- Calendar of events
- Colophon

#### September 2007

- Hormesis - beneficials effects of adverse elements
- Speciation analysis stimulates selenium research
- Recent selenium publications
- Zirconium improves wheat growth
- Calendar of events
- Colophon

#### June 2007

- Sodium silicate reduces postharvest fruit decay
- New silicon soil test
- Se on symposium
- Patent applications cover new uses for titanium
- Quick patent scan titanium in agrochemicals 2006-2007
- Recent silicon publications
- Silicon conference
- Calendar of events
- Colophon

#### April 2007

- Silicon benefits annual ornamentals
- Healthier avocado trees with three silicon drenches a year
- Eggplant more tolerant to bacterial disease
- Recent silicon publications
- Calendar of events
- Colophon

#### February 2007

- Silicon research profits from new tracing methods
- Searching for the key role of selenium (Interview)
- Rare earth elements trace soil erosion
- Silicon enhances frost tolerance of sugarcane
- Si affects potato growth
- Recent silicon publications
- Calendar of events
- Colophon

#### **December 2006**

- Silicon alleviates acidification effects
- Recent silicon publications
- New patent publications cover silicon in agrochemicals
- Calendar of events
- Colophon

#### **November 2006 (special issue on selenium)**

- Selenium enriched food keeps the doctor away
- New patent publications cover selenium in agrochemicals
- Selenium increases seed pod number
- Calendar of events
- Recent selenium publications
- Colophon

#### **September 2006**

- Grasses benefit from silicon nutrition
- Plant nutrition studies
- Geochemicus recommends silicates for CO<sub>2</sub> sequestration
- New patent publications cover silicon in agrochemicals
- German scientists develop highly bioavailable silicon compounds
- Calendar of events
- Recent silicon publications
- Colophon

#### **August 2006**

- Dual purpose manganese silicate fertiliser
- Grass seeds as selenium carrier
- Calendar of events
- Recent silicon publications
- Colophon

#### **May 2006**

- Silicon improves performance of agrochemicals
- New series on fertilisers
- Patents covering silicon in agrochemicals and drugs / pharmaceuticals
- Nickel deficiency more frequently reported
- Recent silicon publications
- Calendar of events
- Colophon

#### **February 2006**

- Crops thrive on chloride
- Less stem decay in *Gerbera*
- Patents covering silicon in pesticides
- Diatomite production
- Risk assessment of soluble silicates
- Si at Pacificchem 2005
- Recent silicon publications
- Selenium management with catch crops
- Selenium-enhanced potatoes
- Calendar of events
- Colophon

#### **December 2005 (special issue on silicon in cereals)**

- Cereals need silicon for fungal disease resistance
- Silicon mediated disease resistance on conference
- Water glass inhibits rape disease
- New projects
- More grain with silicon foliar application
- No effect of silicon on induced disease inaccessibility in oat
- Recent silicon publications
- Scientists advise breeding for silicon-benefitted cereal varieties
- Selenium on conferences
- Calendar of events
- Colophon

#### **September 2005**

- Healthier bones through silicon in food
- Beer is a major source of silicon
- Silicon content of foods and beverages
- Analytical methods topic on silicon conference
- Vase life extension
- Recent silicon publications
- Two decades of selenium fertilisation
- Lanthanum proposed as pig feed additive
- Calendar of events
- Colophon

#### **July 2005 (special issue on patents)**

- Patents reflect search for new fertilisers
- Recent granted patents covering silicon, nickel and rare earth elements
- Dual-purpose titanium composition
- Recent silicon publications
- Selenium counteracts oxidative stress
- Recent granted patents covering selenium
- Calendar of events
- Colophon

#### **May 2005**

- Nickel deficiency in field grown woody perennials
- Thicker rose stems with silicon nutrition
- Literature search and desk research service
- Recycling of diatomite filter-aid sludge
- Recent silicon publications
- Recent selenium publications
- Insects avoid selenium-fertilised plants; selenium protects Indian mustard against fungal infection
- Calendar of events
- Colophon

#### **April 2005**

- Silicon sprays reduce percentage of sweet cherry fruit cracking
- Disease control with small-effect treatments
- Diatom is model for new slow release pesticide formulations and provides plants with silicon
- Aluminium and silicon interactions
- Recent silicon publications
- Foliar-applied chloride kills fungal spores
- Calendar of events
- Colophon

#### **January 2005**

- Editorial
- Inducing bacterial disease resistance in tomato
- Efficiency of water use by maize
- Selectivity of simeconazole (fungicide)
- Calcium silicate neutralizes an acidic stream
- Recent silicon publications
- Selenium affects potato yield and tuber size
- Recent selenium publications
- Calendar of events
- Colophon