

Zeolites – Abstracts, Citations & references

Peter Coppin, 17th March 2015 for Zeolite WA

This document lists the better of nearly 300 scientific abstracts, research papers, web-based information pages and information supplied by producers of zeolite in Australia that the author viewed in preparing the report 'Zeolite – A Technical Summary' on behalf of Zeolite WA, which can be viewed on my [website](#) or at www.zeolitewa.com.au

Australia & New Zealand:

Australian supplier information:

1. Aussie Zeolite, Albany, WA – <http://aussiezeolite.com.au/home>
2. Castle Mountain Zeolite, Quirindi, NSW - <http://www.cmzeolites.com.au>
3. Zeolite Australia Pty Ltd, Werris Creek, NSW - <http://www.zeolite.com.au>

University of Western Australia:

1. School of Plant Biology – Turf Research Program ([link](#)), plus
2. Various other abstracts, newsletters and publications

NSW Department of Primary Industries: **Zeolites** (part of a series on industrial mineral opportunities). ([link](#))

Literature Review: **Zeolite (Clinoptilolite tuff) and it's beneficial effects in Horticulture to Increase Plant Growth**. Compiled by Michael Leu & Daniel FitzHenry ([link](#))

Reid, Aileen, **Cation exchange capacity – how soils and potting mixes hold onto nutrients**. Gardening WA Style Wordpress blog ([link](#))

Bruce Waddell, Surender Mann and David Allen. **Improvement of Soil Quality by Waste Amendment**. Chemistry Centre (WA), 125 Hay Street, East Perth, WA 6004, November 2002 ([link](#))

GreenLife Soil Co, Midvale, WA, Zeolite summary and application rates. ([link](#))

Reid, Aileen, **Potting Mixes**. DAFWA Farmnote 70/2001 ([link](#))

Daniel FitzHenry, Horticulturist, **SILICA, Silicon (Si) 'The Turf Toughener'**. ([link](#))

Aus-e-tute zeolite summary ([link](#))

Sydney Environmental & Soil Laboratory:

1. **What is cation exchange capacity?** ([link](#))
2. **Cation exchange versus ammonium sorption in zeolites.** ([link](#))

Bulleen Art & Garden, Bulleen, Vic: Zeolite and Hydrocell – Two Great Soil Improvers. ([link](#))

Lifegate.com.au, Summary of Australian zeolite and health uses. ([link](#))

YouTube videos:

[Zeolite boils water](#)

[KNT Group – What does zeolite do?](#)

[McLeods Agriculture – Advantages of Zeolite](#)

[Trius Technology – What is zeolite?](#)

Overseas:

Wikipedia – Zeolite summary ([link](#))

Chemistry Explained – **Zeolites** ([link](#))

Zeolites (summary) – Environmental Protection Agency (USA) 1983 ([link](#))

Review Article: ICAR. **Nanoporous zeolites in farming; current status and issues ahead.** ([link](#))

Timothy K. Broschat. **Substrate Nutrient Retention and Growth of Container-grown Plants in Clinoptilolitic Zeolite-amended Substrates.** (horttech.ashpublications.org) ([link](#))

Ippolito, James Anthony; Tarkalson, David D.; Lehrsch, Gary A. **Zeolite Soil Application Method Affects Inorganic Nitrogen, Moisture, and Corn Growth.** *Soil Science: March 2011 - Volume 176 - Issue 3 - pp 136-142* ([link](#))

Chapter VIII **Using Zeolites in Agriculture.** Frederick A. Mumpton Department of the Earth Sciences State University College Brockport, NY 14420 (1985?) ([link](#))

T. Milosevic, N, Milosevic. **Response of young apricot trees to natural zeolite, organic and inorganic fertilizers.** *Plant Soil Environ. Vol. 59, 2013, No. 1: 44–49* ([link](#))

T. Milosevic, N, Milosevic. **The effect of zeolite, organic and inorganic fertilizers on soil chemical properties, growth and biomass yield of apple trees.** *Plant Soil Environ, Vol. 55, 2009 (12): 528–535* ([link](#))

Zailu Yang, Michael R. van den Heuvel, Trevor R. Stuthridge (Eco-Smart Technologies). **Assessment of the Performance of Nutrient Reduction Treatments for the Rotorua Lakes.** Prepared for Environment BOP August 2004 ([link](#))

Peter Van Straaten, **Farming with rocks and minerals: challenges and opportunities.** *Anais da Academia Brasileira de Ciências (2006) 78(4): 731-747* ([link](#))

B. Kwakye-Awuaha*, F. J. K. Adzabea, I. Nkrumaha and C. Williamsb, **Application of Laboratory-Synthesized Ammonium Zeolite LTX as Soil Amendment Additive.** *International Journal of Sciences: Basic and Applied Research (IJSBAR) (2013) Volume 12, No 1, pp 67-81* ([link](#))

RESEARCH UPDATE: **Potential for Natural Zeolite Uses on Golf Courses,** by A. Martin Petrovic Associate Professor of Turfgrass Science, Cornell University, Ithaca, New York ([link](#))

K. A. Rabai, O. H. Ahmed* and S. Kasim. **Improving formulated nitrogen, phosphorus and potassium compound fertilizer using zeolite.** *African Journal of Biotechnology Vol. 11(65), pp. 12825-12829, 14 August, 2012* ([link](#))

O. Latifah, O. H. Ahmed, A. M. Nik Muhamad, **Ammonia loss, ammonium and nitrate accumulation from mixing urea with zeolite and peat soil water under waterlogged condition.** *African Journal of Biotechnology Vol. 10(17), pp. 3365-3369, 25 April, 2011* ([link](#))

Aainaa, H. N.; Ahmed, O. H.; Kasim, S.; Majid, N. M. A.; **Reducing Egypt rock phosphate use in Zea mays cultivation on an acid soil using clinoptilolite zeolite.** *Journal: Sustainable Agriculture Research 2015 Vol. 4 No. 1 pp. 56-66*

Kulasekaran Ramesh, Dendi Damodar Reddy, **Zeolites and Their Potential Uses in Agriculture.** *Advances in Agronomy, Volume 113, Chapter Four, 2013*

Hortensia Radulescu, **Soil Treatment Effects Of Zeolitic Volcanic Tuff On Soil Fertility.** *Research Journal of Agricultural Science, 45 (2), 2013*

Alberto C. de Campos Bernardi^{A,E}; Patrícia Peronti Anchão Oliviera^A; Marisa B. de Melo Monte^B; José Carlos Polidoro^C; Fernando Souza-Barros^D, **Brazilian Sedimentary Zeolite Use In Agriculture.** © 2010 19th World Congress of Soil Science, *Soil Solutions for a Changing World, Brisbane.*

Ruthrof, Katinka X¹; Douglas, Tegan K²; Calver, Michael C³; Craig, Michael D⁴; Dell, Bernard⁵; Hardy, Giles E St J⁶, **The efficacy of soil ameliorants to improve early establishment in trees and shrubs in degraded 'Eucalyptus gomphocephala' woodlands.** *Pacific Conservation Biology Volume 18 Issue 4 (2012)*

Bob Wiedenfeld, **Zeolite as a Soil Amendment for Vegetable Production in the Lower Rio Grande Valley.** *Subtropical Plant Science, 55: 7-10.2003*

Ahmed Al-Busaidi, Tahei Yamamoto, Mitsuhiro Inoue, A. Egrinya Eneji, Yasushi Mori, Muhammad Irshad, **Effects of Zeolite on Soil Nutrients and Growth of Barley Following Irrigation with Saline Water**. *The 3rd Conference on Water Resources and Arid Environments (2008) and the 1st Arab Water Forum*.

Hadi Ghorbani, **The Effects of Natural Zeolite on Ions Adsorption and Reducing Solution Electrical Conductivity I) Na and K Solutions**. Shahrood Institute of Technology.

R. Perez-Caballero, J. Gil, C. Benitez, J. L. Gonzalez, **The Effect of Adding Zeolite to Soils in Order to Improve the N-K Nutrition of Olive Trees. Preliminary Results**. *American Journal of Agricultural and Biological Sciences* 2 (1): 321-324, 2008.

Teimuraz Andronikashvili, Marine Zautashvili, Luba Eprikashvili, Nino Burkiashvili, Nino Pirtskhalava, **Natural Zeolite – One of the Possibilities of Transition from Chemical to Biological Agronomy**. *Bulletin Of The Georgian National Academy Of Sciences*, Vol. 6, No. 2, 2012

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H. Kusá, P. Ruzek, K. Ciahotný, **Soil Application Of Zeolite (Clinoptilolite) Saturated By Ammonia From Waste Air Produced In The Animal Production**. *RAMIRAN 2002. Proceedings of the 10th Conference of the RAMIRAN Network*. ([link](#))

Hasbullah Nur Aainaa, Osumanu Haruna Ahmed, Susilawati Kasim and Nik Muhamad Ab. Majid. **Use of Clinoptilolite Zeolite on Selected Soil Chemical Properties, Dry Matter Production, Nutrients Uptake and Use Efficiency of Zea mays Cultivated on an Acid Soil**. *International Journal of Agricultural Research*, Vol. 9, Issue 3, Pages 136-148, 2014.

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