

Press Release: Zinc and Fertilizer Industries Form Task Force to Reduce High Mortality Rates in Developing World

2-3



HarvestPlus Project: Making progress in the past year

3



National Soil and Fertilizer Conference in Thailand: A presentation of research and publications

3-4

Zinc Nutrient Initiative

The Zinc Nutrient Initiative represents a new program with the overall goal of increasing the use of zinc in fertilizers. The Food and Agricultural Organization (FAO) has estimated that 50% of the world's agricultural lands are deficient in zinc. Further, the World Health Organization (WHO) attributes 800,000 deaths worldwide each year to zinc deficiency and highlights that zinc deficiency in humans is largely related to inadequate intake or absorption of zinc in the diet. Numerous other studies and findings have come out recently reconfirming the global and critical nature of the zinc deficiency problem, in crops and humans. The use of zinc fertilizers in zinc-deficient soils can increase crop productivity as well as the zinc nutritional status of the crops. To achieve these goals, the program will incorporate the use of demonstration crop trials (including the generation of time-elapsd video showing the benefits of adding zinc), plus communications and marketing, initiatives to government organizations, fertilizer companies, dealers and farmers.

A number of activities have occurred:

Meetings

- Latin American Fertilizer Conference held in Panama (January 2009) including presentation by **Dr. Ray Hoyum** (IZA Consultant) on Zinc and Fertilizers
- Zinc crop session and booth organized with Padaeng Industry (IZA Member) at Thailand's National Soil & Fertilizer conference (April 2009), including presentation by **Dr. Andrew Green** and Dr. Ismail Cakmak on IZA's Zinc Nutrient Initiative
- Zinc Symposium - New Delhi (April 2009) organized with Fertilizer Association of India and, including presentation by Dr. Andrew Green and Dr. Ismail Cakmak on IZA's Zinc Nutrient Initiative.



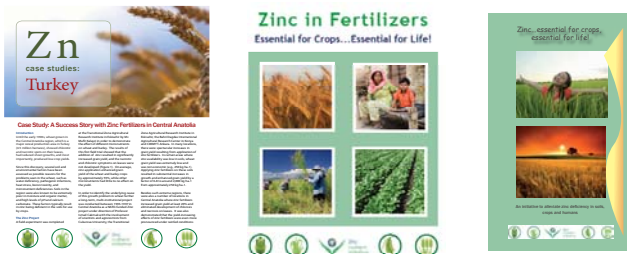
- Meeting held with the Food and Agricultural Organization (FAO) by **Stephen Wilkinson** and **Johan Van Wesemael** to discuss support of zinc fertilizer program and funding efforts.



Zinc
nutrient
initiative

- Meeting held with U.S. Agency for International Development (USAID) by **George Vary** and Dr. Andrew Green. Discussions included efforts in the developing world to make zinc (in sulphate form) available as part of an oral rehydrative salt (“ORS”) program for the treatment of diarrhea, a leading cause of death in children. USAID is also involved in fertilizer programs in the developing world.
- International Fertilizer Association (IFA) conference in Shanghai (May 2009), including presentation by Dr. Andrew Green on IZA’s Zinc Nutrient Initiative to the Regional Association group.
- Formation of a joint IFA-IZA task force to determine strategies to alleviate zinc deficiency

Publications



- A **case-study** highlighting the success of zinc in fertilizers in Turkey
- A technical **brochure** on the benefits of using zinc in fertilizers
- A fact sheet on Zinc in Rice
- A **flyer** highlighting details of new program
- Updates on the www.zinc-crops.org website

Research

- Demonstration field trials (including video) underway in China, India, Thailand and Laos
- Participation in HarvestPlus Zinc Program including field trials in eight countries

New Membership

- Mosaic has joined the Zinc Nutrient Initiative/IZA as an affiliate member. Mosaic is a leading producer



and marketer of concentrated phosphate and potash, two of the primary crop nutrients. The company engages in crop nutrition development, from the mining of resources to the production of crop nutrients, feed and industrial products for worldwide customers.

Press Release: Zinc and Fertilizer Industries Form Task Force to Reduce High Mortality Rates in Developing World

On 28 May 2009, Mr. Ajay Shriram, Chairman and Senior Managing Director of DCM Shriram Consolidated Limited and President of the International Fertilizer Association (IFA), and Don Lindsay, President and CEO of Teck Resources Limited and Chairman of the International Zinc Association, announced the formation of a global task force to address zinc deficiency in developing countries. This global program to promote zinc fertilizer will increase crop yields and improve human health.



“With the formation of this task force, the international fertilizer and zinc industries have come together to work with government and non-governmental agencies to tackle one of the most critical health problems affecting children in developing countries,” said Shriram. “Zinc-enhanced fertilizers are a cost-effective solution to increase the nutritional content of crops and combat human malnutrition.” Mr. Lindsay added, “The zinc industry is committed to this important initiative and its potential to provide a long-term solution to human malnutrition the world over.”

The complete press release can be found [here](#). For further information, please contact [Rob White](#).

HarvestPlus Project



The HarvestPlus Zinc Fertilizer Project (HarvestZinc) was initiated in the spring of

2008 to assess the potential of zinc-containing fertilizers to increase zinc concentration in cereal grains for higher nutritional values and to improve crop production. Crop trials are underway in eight different countries: India, China, Pakistan, Thailand, Turkey, Mozambique, Zimbabwe and Brazil. Due to differences in the geographical regions, only countries in the northern hemisphere have completed experiments on spring sown crops (maize and rice). Most of the maize and rice trials have been harvested, and the data is presently being analyzed. This data, including a comparison among crops and countries, will be available with the second progress report.

This project is co-sponsored by IZA, with several partners, including three fertilizer companies, the International Fertilizer Association, and the International Plant Nutrition Institute. For more information on this project, please [contact us](#) or visit the new HarvestZinc website at: www.harvestzinc.org.

Press Release: Effect of Zinc Fertilization on Nutrition and Food Quality

On 26 and 27 March 2009, a conference, which was funded by IZA and IZASA and hosted by the Food and Nutrition Unit of the Tropical Soil Biology and Fertility (TSBF) of CIAT, was held in Nairobi, Kenya. The conference, coordinated by Rob White from IZASA, included experts drawn from diverse fields (soil, crop, food and nutrition sciences and commercial fertilizer producers) who deliberated on the need to ensure both food security and nutrition security in Africa. The main discussions contained in the conference were:

- The absence of adequate supplies of zinc in the diets of children results in increased morbidity and mortality.
- Africa's growing population and diminishing land and water resources exert immense pressure on ongoing efforts to ensure food security.
- Addition of micronutrients to commonly used commercial fertilizers to ensure both food and nutrition security.
- Improve communication with policy makers concerning importance of micronutrients and infrastructure needs.

Identified information gaps include insufficient data on nutrition, attitude and practice on utilization of zinc at the grass roots level, understanding of the socioeconomic drivers that assist policy makers to pursue food and nutrition security and the effects of post-harvest handling and treatment on zinc content and bio-availability.



National Soil and Fertilizer Conference in Thailand

The National Soil and Fertilizer Conference of 2009 (NSFC2009) was held in Kampangsang, Thailand on 23-24 April. A session on "zinc in fertilizers" was organized at this conference with help from Padaeng Industry. Speakers included Dr. Andrew Green, Dr. Ismail Cakmak of Sabanci University and local scientists/agronomists. Participants of the conference included academic staff members, students and fertilizer companies and associations.



Andre van der Heyden (second from right), CEO of Padaeng Industry, and others at zinc session

Newspaper and radio interviews were held discussing zinc in fertilizers. A booth was also organized and hosted at this conference by Padaeng Industry and IZA. The booth highlighted the benefits of adding zinc to fertilizers and included communication materials in English and Thai.



Mr. Tak Sriratanobhas and Dr. Ismail Cakmak at Padaeng/IZA booth



Demonstration field trial for rice in Laos

Publications

A Key Micronutrient



In the March-April 2009 issue of *Fertilizer International*, a review entitled "A Key Micronutrient" evaluates a range of products that can counter the current international threat of zinc deficiency to crop yields. This re-

view addresses subjects such as zinc pathways in plants and evidences of deficiencies, soil conditions, interactions of zinc with other essential elements, the wide range of zinc fertilizer compounds available, typical results of zinc fertilizers on soils and in plants, other uses for zinc and the worldwide demand for it. There also is a special section within this article about successes with zinc applications around the world, including those in Turkey, Australia, India, Pakistan, Israel, Egypt and the U.S.

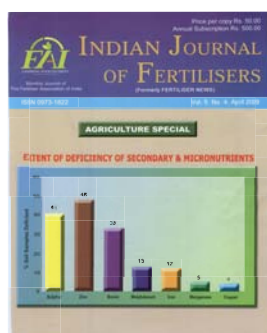
Biofortification of Cereal Grains with Zinc by Applying Zinc Fertilizers

An article in *Biozoom* No. 1, 2009 entitled "Biofortification of Cereal Grains with Zinc by Applying Zinc Fertilizers" was written by Dr. Ismail



Cakmak of Sabanci University. This article provides in-depth information on zinc's effect on human health in conjunction with zinc in fertilizers' effect on plant health. Additionally, there is information about the HarvestPlus program and agronomic biofortification.

Micronutrient Nutritional Problems in Soils of India and Improvement for Human and Animal Health



An article by M.V. Singh entitled “**Micronutrient Nutritional Problems in Soils of India and Improvement for Human and Animal Health**” was published in the May 2009 issue of *Indian Journal of Fertilisers*. Singh’s article focuses on how zinc deficiency affects

human health and how the ongoing increase of zinc deficiency in India greatly increases the need for zinc in fertilizers. His suggested strategies for correction include biofortification of micronutrients in seed through improved agricultural practices, micronutrient supplementation and improving bioavailability through dietary modifications.

FAI-IZA Symposium in India

On 28 April 2009, the Fertilizer Association of India (FAI) and IZA organized a symposium on zinc in improving crop production and human health in New Delhi, India. The symposium was attended by over 125 delegates representing the Indian government (e.g. Ministry of Agriculture), fertilizer companies/associations, zinc distributors/manufacturers and researchers.



Participants at the symposium

The symposium created awareness about zinc’s positive role in improving plant, animal and human health. In his inaugural speech, Dr. Chopra highlighted the role of zinc in the human body, soil testing and analysis and increasing crop productivity. Other speakers included Dr. Andrew

Green and Dr. Ismail Cakmak (Sabanci University), as well as local researchers and representatives from the fertilizer industry.

A panel of experts, including top government officials, also addressed India’s national fertilizer policies and zinc. A new initiative, which provides government support as part of the National Food Security program for the use of zinc in fertilizers, was discussed at the meeting as well.



Lighting ceremony at the symposium

For more information about the symposium, including details and conclusions presented, see the “**FAI-IZA Symposium on Zinc in Improving Crop Production and Human Health in India**” article, which was published in the May 2009 issue of the *Indian Journal of Fertilisers*.



International Zinc Association

The International Zinc Association is a non-profit organization with offices/representatives in:

Belgium - Peru - P.R. China - South Africa - U.S.A.

Zinc in Fertilizers is a newsletter published by IZA covering issues pertaining to zinc in fertilizers. To learn more about zinc’s benefits for crop nutrition, please visit www.zinc-crops.org.

Contributions

We invite your submissions of articles, letters and images.

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For more information on IZA, please visit <http://www.zincworld.org>.