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### **3rd International Zinc Symposium at Hyderabad, India a Huge Success**

The International Zinc Association, The Fertilizer Association of India (FAI), the International Fertilizer Industry Association (IFA) and HarvestPlus jointly organized the 3rd International Zinc Symposium on “Improving Crop Production and Human Health” in Hyderabad, India in October. About 200 delegates from 30 countries participated. This was the third such conference over the last 6 years.

The symposium was inaugurated by Dr. Gurbachan Singh, Agriculture Commissioner, Ministry of Agriculture, Government of India. There were six technical sessions: Human Nutrition, Zinc Fertilizer and Crop Nutrition, Soil and Crop Management, Plant Physiology, Plant Breeding and Molecular Biology, and Environmental Issues. Additionally, there were six keynote speeches, 38 oral presentations, and a field visit to ICRISAT, during which delegates got the opportunity to see the on-going research activities and field trials of ICRISAT. Copies of the session presentations are available at [www.zinccrops2011.org](http://www.zinccrops2011.org).

Dr. Andrew Green, Director ESD and Zinc Nutrient Initiative stated, “there was a clear recognition in the presentations and by the participants that increasing the use of zinc fertilizer to address global soil and

crop deficiencies was critical to improving food security, crop nutrition and human health.”

The Symposium was sponsored by: Adob, Bayer CropScience, Chakradhar Chemicals, Coromandel International, IFFCO, Mosaic, Nagarjuna Group, Omex, Rahimtula Group, Teck, Umicore, Valagro, Yara, Kali and WAS; and Journal Sponsors: *Plant and Soil* and Partner Agricultural Journal, *NewAg International*.

The next Symposium will be held in Brazil in 2014.



During the Opening Session (L-R) : Dr. Wolfgang Pfeiffer, Dr. Andrew Green, Satish Chander, Dr. Gurbachan Singh, Dr. Ismail Cakmak, Patrick Heffer and Dr. David A. Hoisington

## Greg Brouwer Returns to Teck after Successful Secondment with Zinc Nutrient Initiative

Mr. Greg Brouwer has been on temporary secondment from Teck Resources Ltd. serving as Director of the Zinc Nutrient Initiative during its critical 2010-2011 ramp-up phase. Brouwer was instrumental in establishing strategic plans and infrastructure for the target countries of Brazil, China and India; his help in laying a successful foundation for ZNI is greatly appreciated.

Dr. Andrew Green, IZA's Director of Environment, Health, and Sustainability, has worked closely with ZNI since its inception and assumed oversight of ZNI activities as Director of the global ZNI program in October.



Dr. Green is supported by regional ZNI Director's including Mr. Joao Moraes in Brazil, Dr. Ming Xian Fan in China and Dr. Soumitra Das in India.

For more information on the Zinc Nutrient Initiative, please visit <http://www.zinc.org/crops> or contact [Andrew Green](#).

### INDIA

#### IZA and FAI working together to promote the use of zinc fertilizers in India

##### FAI Annual Seminar 2011, New Delhi

The Fertilizer Association of India (FAI) held its Annual Seminar in December in New Delhi. About 1700 participants including 200 overseas delegates from 37 countries attended.



IZA Booth in FAI Annual Seminar (L-R): Stephen Wilkinson, Dr. K.P. Patel, Dr M.V. Singh and Dr Soumitra Das



*NewAg International*, the leading world publication on high-tech agriculture, published a comprehensive review of the 3rd International Zinc Symposium, in which Dr. Ismail Cakmak, Chairman of the Symposium, recounted the key presentations and discussions that took place.

The article also featured an interview with IZA's Dr. Andrew Green about the pressing problem of zinc-deficient soils in developing nations. Dr. Green stated that zinc fertilizers are “a simple and sustainable solution, with far-reaching benefits, not only in overall nutrition, but also in disease prevention, food security, and increased income for farmers.”

The interview also described the Zinc Saves Kids program launched by IZA and UNICEF, noting that the main goal is to prevent delinquent growth and development caused by zinc deficiency in children.

Ismail Cakmak's full article and Dr. Green's interview can be found in the November 2011 issue of *NewAg International*.

For more information on the Zinc Symposium, please see the cover article or visit <http://www.zinccrops2011.org>. For more information on ZNI or Zinc Saves Kids, contact [Andrew Green](#).

The seminar was inaugurated by Srikant Kumar Jena, the Minister of State for Chemicals and Fertilizers, Government of India. Other notable participants included Ajay Bhattacharya, Secretary (Fertilizers), Ministry of Chemicals and Fertilizers, A. Vellayan, FAI Chairman, R.G. Rajan, FAI Co-Chairman, and Satish Chander, FAI Director General.

IZA's Dr. Soumitra Das organized a Zinc Nutrient Initiative booth to highlight the Initiative's activities. A number of fertilizer companies enquired about establishing new zinc fertilizer plants, developing new products containing zinc, and the availability of quality raw materials for the manufacturing of zinc fertilizers in India.

An FAI report covering detailed statistics on zinc fertilizer capacity, production and consumption in India, was published for the first time at the event.

Also during the event, Dr. K.P. Patel, Research Scientist, Micronutrient Project (ICAR) Anand Agricultural University was presented with an award of INR 100,000 for "Promoting the Use of Zinc in Indian Agriculture." This award was instituted by IZA in collaboration with FAI to recognize individuals or institutions working to increase the awareness of the importance of zinc fertilizers.

For more information about the seminar or about the IZA-FAI Award, please contact [Soumitra Das](#).



Dr. K.P. Patel (2nd from left) receiving the IZA-FAI Award 2011 from the Minister of State for Chemicals and Fertilizers, Mr. Srikant Kumar Jena (3rd from left)

### 3rd FAI-IZA Symposium "Zinc in Crops and Human Health" held in Chennai, Tamil Nadu

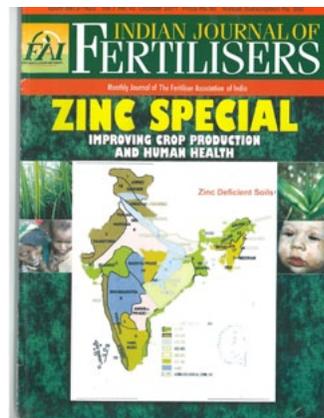
IZA and FAI co-organized the Zinc in Crops and Human Health Symposium in Tamil Nadu, India in August. The event was attended by over 100 participants and included representatives from the Department of Agriculture, the Department of Health and Family Welfare, the Government of Tamil Nadu, State Agricultural University, ICAR Research Institutes and national organizations



Dr. B.C. Biswas, Dr Andrew Green, and Dr. Soumitra Das

The goal of the symposium was to bring together industry experts and representatives from state and national government to discuss India's problem of zinc-deficiency in soils, with a major focus on the state of Tamil Nadu. Well over 50% of soils in India are zinc deficient. The symposium highlighted many strategies and innovations that farmers can use to begin to see real increases in the yield and quality of their crops.

The Indian Journal of Fertilizers, produced by FAI, devoted its entire October 2011 issue to Zinc. The cover shows a map illustrating the extent of zinc deficiency in soils throughout India.



Editor-In-Chief and Director General of FAI, Satish Chander highlighted the urgency of the problem of zinc deficiency in crops, leading to zinc deficiency in the human population. Chander writes of the widespread concern in India, stating that the Indian government,

the departments of agriculture and health, UNICEF, the fertilizer industry, and other involved sectors were “alive with the problem.”

Among the papers in this publication is a piece co-authored by Soumitra Das and Andrew Green, which discusses IZA’s launch of the Zinc Nutrient Initiative to address the problem of zinc deficiency in soils, crops, and humans.

For more information about the FAI Journal or the articles in the “Zinc Special” issue, contact [Soumitra Das](#).

### IZA Zinc Fertilizer Training Program in India

IZA’s Zinc Fertilizer Training Program was developed to assist ZNI members and other key stakeholders in educating sales and extension personnel on the key attributes and benefits of zinc fertilizers. The one-day program, facilitated by IZA’s zinc fertilizer experts, provided a complete overview of zinc deficiency in crops and humans and the use of zinc fertilizers. Ten such training programs have taken place in India during 2011. The programs have been represented by all the leading fertilizer companies in India, including ZNI members IFFCO, Nagarjuna Fertilizers & Chemicals, Coromandel International, Deepak Fertilisers & Petrochemicals Corporation, and Tata Chemicals.



Zinc Fertilizer Training Program, November 2011 in Bhubaneswar

### BRAZIL

#### Benefits of Zinc Fertilizer Highlighted During Brazilian Zinc Day

Key stakeholders including agricultural universities and leading fertilizer companies met in Sao Paulo, Brazil on December 6 to discuss the challenge of low zinc availability in soils and methods to address this through the use of zinc fertilizers. Among

the moderators were industry experts from the University of Sao Paulo, the Federal University of Lavras, Sabanci University, IPNI, and Tec-Fertil, an agricultural consultancy firm. IZA co-sponsored the event and Joao Moraes, Director, ZNI-Brazil, gave a presentation on IZA’s Zinc Nutrient Initiative. The Brazil Zinc Day event was organized by the Agronomical Institute of Campinas (IAC), the Harvest Zinc Project, HarvestPlus and Sabanci University.



Dr. Ismail Cakmak, a professor from Sabanci University and leader of the Harvest Zinc Project, noted that Brazil was one of the top food-exporting nations in the world. He stated, “Brazil can develop a zinc biofortification program which might be easily and effectively realized by zinc fertilization... The shipment of zinc-biofortified foods to some developing countries, where a high incidence of zinc deficiency in human populations exists, would be an important and very useful Brazilian contribution to human health and wellbeing.”

Zinc Days have also been held in other countries in recent months, including China, India, and Thailand.

For further information on Zinc Days, click [here](#). For more information about Brazilian Zinc Day or the Zinc Nutrient Initiative, contact [Joao Moraes](#).

### MEXICO

#### Benefits of Zinc Highlighted During National Fertilizer Convention in Manzanillo, Mexico

Over 100 participants met in Manzanillo, Mexico to attend the “4a Convención Nacional de Distribuidores de Fertilizantes” organized by IZA, Peñoles and Fertiquim. An international panel of speakers reinforced the importance of zinc-containing fertilizers to achieve better yield and more nutritious crops in Mexico. Greg Brouwer spoke on behalf of the Zinc Nutrient Initiative and Joao Moraes spoke about zinc deficiency and increasing world demand for foods rich in micronutrients.

For more information about the convention, please contact Joao Moraes.

## CHINA

### China NATESC considers extension of Zinc Fertilizers Project

Stephen Wilkinson, Executive Director of International Zinc Association met Dr. Xia Jingyuan, Director General, National Agricultural Technology Extension and Service Center (NATESC) and Li Tiesheng, Deputy Director General, NATESC in November to discuss extending the collaborative project between IZA and NATESC to promote the use of zinc fertilizer in Chinese agriculture. Dr. Xia spoke highly of both the work implemented and the progress made in research, demonstration, education and promotion, which far exceeded original expectations, encouraging NATESC to increase funding well beyond their initial pledge. Early crop results have shown a 10% increase in yield and significant increases in the zinc nutritional status of the crops.

The main objective of the project, which began in 2011, is to bring zinc fertilizer to the forefront in national recommendations and promotional programs by substantiating its many benefits. The project will help farmers use zinc fertilizer efficiently and effectively to increase crop productivity and quality, and to improve human health.

Dr. Gao Xiangzhao, Director of Water Conservation Agri-Tech Division, Dr. Fan Mingxian, Director, ZNI-China, and other senior experts in MOA also attended the meeting.

## OTHER NEWS

### Zinc promoted at 37th session of the Committee on World Food Security (CFS)

This symposium, held in October in Rome, was co-organized by the UN System Standing Committee on Nutrition [UNSCN], the Food and Agriculture Organization [FAO] and the World Food Programme [WFP]. It aimed at fostering a dialogue on nutrition security within the Committee on World Food Security [CFS] and identifying ways the CFS can contribute to accelerate progress in nutrition improvements in countries throughout the world. The meetings provided a platform for discussion to strengthen

## ZNI Welcomes New Members

### Affiliate Members



**Produquímica—Brazil:** The first affiliate member in Brazil, Produquimica Ind. E Com. S.A is the largest supplier and distributor of micronutrients focused in technologies

and solutions for plant and animal nutrition, chemical inputs for the industrial processes and products for water treatment in the Brazilian market.



**Bohigh Zinc Product Co.—China:** A company under the Bohigh group, which is engaged in professional production of zinc sulphate monohydrate.



**Luxi Chemicals Group Corporation—China:** A large integrated public chemicals and fertilizer corporation, specializing in manufacturing and marketing of fine chemicals and fertilizers.

### Associate Members:



**Associação Nacional para Difusão de Adubos (ANDA)—Brazil:** An association representing 122 companies ranging from large prime matter suppliers to small fertilizer mixers or blenders, working to increase the

awareness of the benefits generated by the fertilizer sector.



**Micronutrient Manufacturers Association (MMA)—USA:** An organization committed to advocacy on behalf of the micronutrient manufacturing industry.

collaborative actions at the global and regional levels among a wide variety of stakeholders. These include governments, regional organizations, international organizations and agencies, NGOs, food producers' organizations, private sector and philanthropic organizations.



Stephen Wilkinson made two presentations to over 200 country and agency delegates; the first highlighted zinc's role in improving crop yield and nutritional value, and the second centered on the Zinc Nutrient Initiative as an example of public-private partnerships. Wilkinson also participated in several policy roundtables with the objective of developing international strategies and guidelines on food security and nutrition.

Meetings were also held with Jose Graziano da Silva (Brazil), the 8th Director-General Elect of FAO, David Nabarro, Special Representative of the UN Secretary General for Food Security and Nutrition, Bill and Melinda Gates Foundation, Agricultural Division, and Canadian and American delegations.

### ZNI Advisor Receives CSIRO Fellow Award

Professor Mike McLaughlin received the Fellow Award from the Commonwealth Scientific and Industrial Research Organization (CSIRO), Australia's national science agency. The CSIRO Fellow award is appointed to exceptional scientists who have displayed eminence in a significant field of science or engineering. Dr. McLaughlin received this award in recognition of his career as an internationally renowned environmental scientist who has advanced our overall understanding of the behavior of nutrients and contaminants in the environment.



Prof. McLaughlin has contributed to IZA research programs in various capacities over the last 15 years. Most notably,

he has been working with IZA as an advisor on the Zinc Nutrient Initiative, including the development of a Code of Practice for contaminants in zinc fertilizer. Prof. McLaughlin also serves on a panel of internationally recognized scientists providing input on various environmental issues to IZA and other associations.

### International Crops Video

To increase international awareness about the importance of zinc for social, economic and ecological uses, IZA has produced an international crops video. The video includes interviews with several international experts from various countries, including China and India, as well as Dr. Ismail Cakmak from Turkey. Video footage, mainly from China, India and Peru, demonstrates how zinc fertilizer use can help address human health, crop yield and crop nutrition. To view this new video, click [here](#).



### International Zinc Association

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

Belgium - Brazil - India - 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.org/crops](http://www.zinc.org/crops).

#### Contributions

We invite your submissions of articles, letters and images.

Director, Zinc Nutrient Initiative: [Andrew Green](#)  
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For more information on IZA, please visit <http://www.zinc.org>.

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