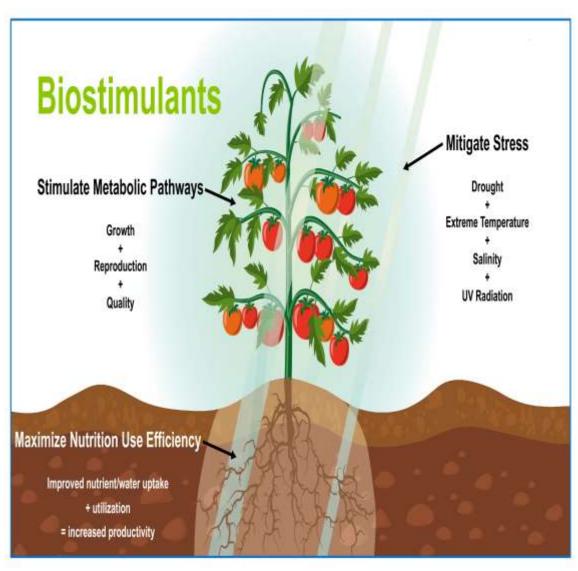


FAI-WESTERN REGION NATIONAL WORKSHOP ON "BIOSTIMULANTS FOR SUSTAINABLE AGRICULTURE"



April 18, 2023
Hotel Sea Princess
Juhu Tara Road, Juhu Beach, Mumbai

Dear Friends.

FAI has been conducting various training programs for the fertilizer industry personnel on the subjects of topical importance. It is proposed by FAI-Western Region to organize a national level workshop on "Biostimulants for Sustainable Agriculture" at Mumbai on April 18, 2023.

Biostimulants are substances that improve plant growth, resilience to water, and tolerance to abiotic stresses. These compounds are effective in modest quantities, promoting the smooth operation of the plant's critical activities and allowing for high yields and high-quality products. Furthermore, regardless of nutrient content, biostimulants improve nutrient use efficiency, abiotic stress tolerance, and plant quality attributes. The market for biostimulants in India is expected to be driven by rising investment and the need to boost yield per unit area. In addition, the increased demand for organic food will drive up demand for organic farming, which will increase the need for use of biostimulants in agriculutre.

The Indian biostimulants market size was valued at USD 266.58 million in 2022. The market is expected to grow to USD 734.13 million by 2029, exhibiting a CAGR of 15.57% during the forecast period. The market for biostimulants is principally driven by massive agriculture activities to produce & provide high-quality & nutrition-rich food to feed the burgeoning population of India. Further, the substantial investments by the all stakeholders in improving the yield per unit area would also augment the market growth.

In view of the above, the program has been specifically designed to address all the stakeholders; be it manufacturers, importers / exporters, distributors, policy makers in order to have in depth discussion for healthy growth of this important sector. We are confident that the participants will gain valuable insight into the entire value chain of biostimulants and will be better prepared to face the challenges in this sector.

With this background, it is proposed to organize a national workshop on "Biostimulants for Sustainable Agriculture" on April 18, 2023 at Mumbai.

We request you to avail this opportunity by nominating officers from your organization.

We look forward to your early and favourable response.

Arvind Chaudhary Director General

ABOUT FAI

The Fertiliser Association of India (FAI), set up in 1955, is the national representative body of all fertilizer industry in India comprising membership across public, private, joint and cooperative sectors. It is a non-profit, non-trading organization of fertilizer manufacturers/importers, technologists, plant/equipment manufacturers, research institutes and others interested in fertilizers.

The main objective of FAI is to bring together all concerned with the production, import, marketing and use of fertilizers with a view to promote solution of industry problems, to assist industry in improving its operational efficiency and to promote the balanced fertilization for raising agricultural productivity.

To cater to the need of the officials working in different disciplines of the industry, FAI has been regularly conducting programs in the areas of fertilizer policy, marketing, agriculture, environment, technology. management development, forecasting of fertilizer demand, etc. Realizing the need of the industry, we have planned a national level workshop on "Biostimulants Sustainable Agriculutre" wherein the experts from the Government, FAI, Agricultural Institutions and the Biostimulants Industry would be sharing their thoughts & ideas in making the deliberations interesting and meaningful.



TRAINING APPROACH

The training approach aims at stimulating individual thinking and maximum participation of the officers working or interested to work in the Biostimulants industry. Emphasis is on participative approach rather than merely lectures so that participants become intimately involved in the learning process.

BACKGROUND

Today we are facing many challenges related to crop nutrition in agriculture, such as depletion of soil organic matter, imbalanced use of fertilizers, decline in fertilizer use efficiency, nutrient imbalance multi-nutrient deficiency in soil etc. As a result of the indiscriminate and imbalanced use of chemical fertilizers, there is a continuous decline in the fertile capacity of the soil, due to which the stability of the agricultural production system is in danger. Deficiency of various micronutrients in the soil has also led to problems in humans and animals.

In order to increase crop production in sustainable manner, innovative agricultural technologies have to be implemented in farming and farmers have to be made aware of the benefits of these technologies, so that farmers can make rational use of inputs (fertilizers, weedicides, insecticides and fungicides) in farming, to be able to reap more economic benefits by improving the yield, quality and storage capacity of crops. In innovative agricultural technologies, biostimulants can be used as a supplement to chemical fertilizers to bring sustainability in agriculture production system. Biostimulants represent a group of products (besides fertilizers) that promote plant growth when used in small amounts. Both naturally occurring microorganisms and products (such as humic substances, seaweed extracts, protein hydrolysates, etc.) are increasingly used in agriculture as biostimulants. Biostimulants being

eco-friendly, natural formulations promote plant growth, nutrient uptake and plant tolerance to abiotic stresses. The use of this category of bio-products in agriculture can effectively enhance the efficiency of agro chemicals.

Due to the increasing demand for improved yield and quality of crop produce, the use of environmental friendly fertilizers of natural origin has become a major objective in sustainable agriculture. Use of low amounts of biostimulants can improve yields without any negative effects on environment while reducing the use of fertilizers. Farmers are increasingly interested in the use of biostimulants in agriculture because their use activates a number of physiological processes that increase plant resistance to (1) nutrient acquisition and use efficiency, (2) plant growth and development, and (3) resistance to abiotic stress tolerance and (4) increase crop yield and quality.

Major Biostimulants available in the market are with a variety of formulations and different ingredients but are generally used by farmers on the basis of their source and constituents into four major groups (1) Humic substances, (2) Seaweed extracts (3) Microbes (4) Biostimulant of amino acid and protein hydrolysates origin. Irrational use of chemical fertilizers has hugely disturbed the ecosystem of microbes in the soil. Therefore, to rejuvenate microbial activities in soil to improve fertilizer use efficiency and to maintain healthy soil, bio-stimulants are required.

The Gol has very well understood the significance of these new products in precision agriculture, therefore, the biostimulants has been covered under the ambit of FCO. This would help to control the quality of biostimulants and also to promote organic agriculture in conjunction with chemical fertilizers for optimum yield and better soil health.

Indian market of biostimulants is at crossroads, government and industry both aspire to have clarity on legal, technical and commercial issues related with biostimulants. This workshop will provide a roadmap to all the stakeholders of biostimulants. It is therefore, thought to be appropriate to discuss the challenges and the way forward for the managers of the biostimulants related industries so that they can effectively execute their business strategies.

TOPICS TO BE COVERED

- 1. Global Biostimulant Scenario
- 2. Problems & Prospects of Biostimulants in India & Strategies for Effective promotion
- 3. Research Organization Perspective on Biostimulants
- 4. State Govt Perspective on Biostimulants
- 5. Challenges in Quality Control of Biostimulants & Way forward

TARGET AUDIENCE

Manufacturers, importers / exporters, marketers, distributors, policy makers, researchers, students who are interested in Biostimulants

FACULTY

Subject Matter Specialists from the Government, Agriculture Institutions, FAI, and Biostimulant Industry, will act as the faculty.

DURATION AND DATE

The duration of the programme is one day i.e. on April 18, 2023.

VENUE OF THE PROGRAMME

The programme will be held at:

Hotel Sea Princess Juhu Tara Road Juhu Beach Mumbai – 400 049 Ph No :- 022 - 69061111

Since this is a non-residential programme participants have to make their own travel & stay arrangements

COURSE FEE

In order to cover the expenses of the programme, a contribution of Rs.10,000 plus applicable GST per participant is payable. The contribution covers reading material, conference facilities, breakfast, lunch, AM /PM tea coffee & cocktail dinner.

The fee can be remitted through a Banker's cheque / draft payable at Mumbai in favour of The Fertiliser Association of India. The payment also can be made by NEFT/RTGS transaction through Punjab National Bank; Branch: Linking Road, Bandra (West), Mumbai; Saving Bank A/c.No.: 0082002100061929; SWIFT / IFSC / RTGS: PUNB0008200 under intimation to us. FAI-WR GSTIN: 27AAACT0097M1Z1

REQUEST FOR NOMINATION

We have to be absolutely specific with the hotel about the number of participants. It is, therefore, requested that nomination of the participants should reach us latest by the April 10, 2023. Early communication on nominations will be highly appreciated.

REGISTRATION

Registration form duly filled in along with the fee by Demand Draft/Bankers' Cheque may please be sent to :

S P Shete
Regional Executive
The Fertiliser Association of India (Western Region)
3, New Commonwealth Society, 229, Linking Road
Bandra (West), Mumbai – 400 050, India
Contact No: 9594131210
wr@faidelhi.org, www.faidelhi.org

REGISTRATION FORM

FAI-WR National Workshop on "Biostimulants for Sustainable Agriculture" April 18, 2023 Hotel Sea Princess, Mumbai

To:
The Regional Executive
The Fertiliser Association of India (WR)
3, New Commonwealth Society, 229, Linking Road
Bandra (West), Mumbai – 400 050

Please register the following for the above programme:

| S. | Name in Capital Letters | Designation | Organizationand Postal | Mobile / | Email |
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Photocopies can be used, if additional forms are needed.

You may also email the filled in nomination form to wr@faidelhi.org