



# beej<sup>ki</sup>baat

voice of the seed

**EDITION OCTOBER 2024**



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Executive Director**

Greetings,

Welcome to the October 2024 edition of Beej Ki Baat. This issue brings a wealth of innovations poised to transform agriculture. From multi-resistant, high-yield rice and nitrogen-fixing bacteria improving wheat production, to biofortified crops and precision breeding shaping food security, the future of farming looks promising. Breakthroughs in biological fertilizers and drought-tolerant crops are driving sustainability, while advancements in gene editing and resilient seeds help tackle climate challenges.

The evolving role of research, technology, and sustainable practices highlights the importance of continued innovation. As we face global challenges like climate change and food security, these stories offer hope and underscore the vital role of collaboration and investment in agriculture's future. We remain committed to supporting progress for a resilient and sustainable food system.

As a result, FSII in collaboration with ICAR-Directorate of Weed Research organized a meeting on Weed Management in India: Emerging Challenges and Management Strategies.

Let's move forward together, cultivating solutions that ensure a brighter, more prosperous tomorrow.

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## FSII In News



[Weed Management in India: Emerging Challenges and Management Strategies – A Meeting Organized by the ICAR-Directorate of Weed Research & the Federation of Seed Industry of India](#)

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## INDIA



## **Govt weighs herbicide-tolerant BT cotton, glyphosate use as industry pushes**

The government is deliberating complex policy decisions regarding Herbicide-tolerant BT (HTBT) cotton and the use of herbicide 'glyphosate' as industry demands intensify, Agriculture Commissioner P K Singh said on Friday. The key issue revolves around permitting widespread glyphosate application in cotton farming, even as discussions are underway about officially introducing HTBT cotton varieties in the country.

[Read full article...](#)



**[Indian Experts Point Out Hurdles in Gene Editing Applications in Crops](#)**



**[There're tougher seeds in India to counter tricks of rain and heat](#)**



**[Cabinet approves National Mission on Edible Oils](#)**



**[New paddy cultivation method saves 25% water](#)**



**[Given the climate change, we need to invest more in agriculture research](#)**



**[Agricultural Drones Are Revolutionising Crop Management](#)**

## GLOBAL



### **Resilient catalysts: Can regenerative agriculture revolutionise rice farming for smallholders in Asia?**

Instead of recruiting a large labour base to carry out transplanting work, in the absence of standing water, DSR allows machinery to enter the paddy including sowing machines. This saves time and ensures each plot is optimised with the right spacing and depth to boost the chances of crop success.

[Read full article...](#)



**Large scale, Intensive, land-sparing farming is the sustainable future not the problem**



**Fungus grows more vigorously when it feels good vibes**



**UK Introduces Legislation Supportive of Precision Breeding**



[Rice phytobiome engineering could lead to greater food security](#)



[Creative Destruction in the Plant Breeding Sector](#)



[Switch Bioworks to Bring New Biological Fertilizer Technology to the Field](#)

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## RESEARCH



### **Researchers Develop Biofortified Golden Lettuce with 30 Times More Beta Carotene**

Scientists have developed an innovative method for the biofortification of leaves and other green plant tissues with increased healthy substances such as beta-carotene, the main precursor of vitamin A in the human diet. Beta-carotene is one of the main carotenoids, pigments found naturally in plants and other photosynthetic organisms that benefit health, with antioxidant, immunostimulant and cognitive-enhancing properties. Scientists have achieved up to a 30-fold increase in beta-carotene levels compared to untreated leaves by creating new places to store it without affecting vital processes such

as photosynthesis. The massive accumulation of beta-carotene also gave the lettuce leaves a characteristic golden colour.

[Read full article...](#)



**[Efficient Bioenergy Crops That Need Less Water to Grow](#)**



**[Scientists Use CRISPR to Modify Euglena for Biofuel Production](#)**



**[Nitrogen-Fixing Rhizobium Bacteria Promotes the Growth of Wheat](#)**



**[Multi-resistant and High-yield Rice Variety](#)**



**[Gene Editing Used to Increase Protein in Staple Crops to Alleviate Global Protein Shortage](#)**



**[Wageningen Researchers and Partners Develop First Banana Resistant to TR4 and Black Sigatoka](#)**

## From The Secretariat



**Brainstorming Meeting on "Weed Management in India: Emerging Challenges and Strategies," by ICAR-DWR & FSII**



**FSII supported the CITI conference discussing the Evolving Trends in Cotton Farming**



**Dr. Kumria represented the seed industry at the Agri Innovation Summit by ThinkAgri**



**FSII toured BRIC-NABI's state-of-the-art speed breeding facility at Mohali campus**

## Stay Tuned With Us





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For more information about Federation of Seed Industry of India visit [www.fsii.in](http://www.fsii.in)

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