



Combatting Drought With Water-Absorbent Polymers

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Dr. Sanandam Bordoloi

Drought can be a major problem for tomatoes, particularly in changing climates. Water-absorbent polymers help retain moisture in the soil, allowing tomatoes to thrive. However, high costs can make it difficult for farmers to use them.

In [this episode](#), Dr. Sanandam Bordoloi discusses his research on developing more affordable and effective water-absorbent polymers using the waste material fly ash.

Self-Study CEU Quiz

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1. **The water-absorbing polymers (WAPS) are used as a foliar spray in the field.**

- a. True.
- b. False.

2. **How do water-absorbing polymers help in drought stress for crop production?**

- a. They have a high affinity to water.
- b. They can absorb water and release it during drought periods.
- c. They improve water retention capacity of soil.
- d. All of the above.

3. **Water-absorbing polymers increase yield by increasing**

- a. soil water availability to plants.
- b. nutrient availability to plants.
- c. plant defense against disease.
- d. plant defense against insects.

4. **Water-absorbing polymers made from fly ash are better than traditional polymers because**

- a. they are made from waste materials.
- b. they are cheaper in cost.
- c. they are easy to use in the field.
- d. All of the above.

5. Scientists found that these polymers significantly alter the soil microbiome.

- a. True.
- b. False.

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