



Science
Societies

Combating Drought With Water-Absorbent Polymers

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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

Earn 0.5 CEUs in Soil & Water Management by taking the quiz at

<https://bit.ly/4dI7nWf>.

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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