



KAMARAJ IAS ACADEMY
Only IAS Academy by Grandson of "Perunthalsivam Kamarajar"

Biostimulants

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Context: Biostimulants are being promoted as a **sustainable and eco-friendly approach** to enhance agricultural productivity in India.

About Biostimulants

- **Definition:** Substances or micro-organisms that **stimulate natural plant processes, independent of nutrient content.**
- **Objective:**
 - Enhance **nutrient uptake.**
 - Boost **stress tolerance** (drought, salinity, heat).
 - Improve **crop quality and yield.**
 - Support **resilience under climate stressors.**
- **Regulation:** Covered under **Fertiliser Control Order (FCO), 1985.**

Significance

1. **Nutrient-use Efficiency:** Reduces dependency on chemical fertilizers.
2. **Soil Health:** Enhances **soil microbial biodiversity** and **carbon sequestration.**
3. **Climate Resilience:** Helps crops withstand **dynamic climate conditions.**
4. **Circular Bioeconomy:** Supports **sustainable agriculture and resource recycling.**