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Japan's EF Polymer accelerates global expansion and R&D to reduce water and fertilizer use in agriculture

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EF Polymer, a deep-tech startup developing 100% organic super absorbent polymers, announced that it has raised JPY 1 billion (approx. $6.6 million) in the first close of its Series B round. A new overseas manufacturing facility will be established with funds raised to accelerate R&D and business development.

Founded with a mission to solve global water challenges and improve farmersâ?? livelihoods, EF Polymer has created a bio-based alternative to petroleum-derived absorbents, helping reduce water and fertilizer use in agriculture while improving yields. Its materials are also expanding into non-agricultural applications such as cosmetics and personal care.

EF Polymer has delivered products to farmers in Japan, the U.S., and France, with cumulative sales over 400 tons by 2025. Amid rising concerns over drought and fertilizer costs driven by climate change, global demand continues to rise, with commercial trials now underway in over 20 countries. By expanding into new markets like horticulture, landscaping, and urban greening, the company plans to meet this demand.

EF Polymer is also scaling its presence in non-agricultural markets. Recent projects include a biodegradable ice pack, co-developed with Iwatani Corporation, and absorbent sheets in partnership with Soken Chemical. Its polymer solutions offer a sustainable alternative to petroleum-based ingredients commonly used across industries, contributing to the green transformation.

R&D Focus Areas

EF Polymer will prioritize R&D efforts across the following areas:

- **Raw material innovation**: Diversifying sources beyond orange and banana peel
- **Circular manufacturing**: building a closed-loop, sustainable production model
- **Scaling production**: Piloting and implementation of multi-site manufacturing
- **New product development**: Expand polymer applications outside agriculture

Narayan Gurjar, Founder and CEO of EF Polymer said: â??EF Polymer exists to solve water-related challenges and improve farmers' lives. This Series B funding marks a major step forward in scaling our solutions globally and building a truly circular, sustainable business.â?•

EF Polymer is a pioneering deep-tech startup focused on creating 100% organic super absorbent polymers (SAP) made from orange peels. In addition to reducing production costs, especially in water and fertilizer usage, EF Polymer's product boosts crop yields.