# PHOTOSYNTER™: The advancement in increasing crop yields

PHOTOSYNTER™ is an innovative technology developed by Beam CropTech designed to enhance the yield of key crops. Based on research by Dr. Carlos Crocco on the regulation of one gene conserved in all plants, this technology optimizes plant growth, increasing production even under challenging conditions such as drought.

## Key Benefits

Performs **10 - 16%** yield increase under optimal conditions.

More than a **25%** increase under water stress conditions.

## How does PHOTOSYNTER™ work?

Unlocks the potential of the solar light capture, allowing plants to adjust their biological processes more efficiently. This activation:

- Protects leaves from excess sunlight, reducing damage from photoinhibition.
- Improves photosynthetic efficiency, directing more energy towards growth and stress management.
- In drought situations, plants continue to grow and produce, significantly increasing yield.

## Proven results

- Potato and Brassica (field-tested): Notable improvements in yield.
- Soybean (greenhouse-tested)

## Comercial partnership

We have already closed an agreement with GDM, a global leader in soybean germplasm, to develop plants with PHOTOSYNTER™.

## Intellectual property

PHOTOSYNTER™ is protected by a patent: USPTO No. US11535858B2.

## FAQs

**How is PHOTOSYNTER™ applied in crops?**
PHOTOSYNTER™ is introduced through genetic improvement techniques in plants, adjusting the expression of one gene conserved in all plants to maximize yield without altering the natural growth cycle.

**In which crops has PHOTOSYNTER™ been tested?**
PHOTOSYNTER™ has shown improvements in crops such as potato, brassica, and soybean. We are currently looking to expand the technology to other crops.

**What differentiates PHOTOSYNTER™ from other yield enhancement solutions?**
Unlike other approaches, PHOTOSYNTER™ targets a key genetic mechanism, improving photosynthetic efficiency and the plants' ability to manage stress without compromising crop quality or health.

**What are the benefits under drought conditions?**
In drought situations, PHOTOSYNTER™ allows plants to maintain leaf growth and seed or tuber production, resulting in a yield increase of at less 25-30%.

**How long does it take to implement PHOTOSYNTER™ in a new crop?**
The time may vary depending on the crop, but our business agreements allow us to accelerate the development and implementation process in collaboration with our strategic partners.

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Ready to transform your crops with PHOTOSYNTER™?

Contact us today to learn more about how our technology can boost your agricultural production or to discuss collaboration opportunities.