

SYLAS-ST[™] OILSEEDS



SEED
TREATMENT

Concentrated oligosaccharide seaweed filtrate

A biological Seed Treatment for oilseed rape and brassica crops



- Boosts germination speed
- Improves root & shoot mass; increases potential of soil exploration
- Facilitates water and nutrient movement & uptake
- Concentrated formulation; higher loading on small seeds

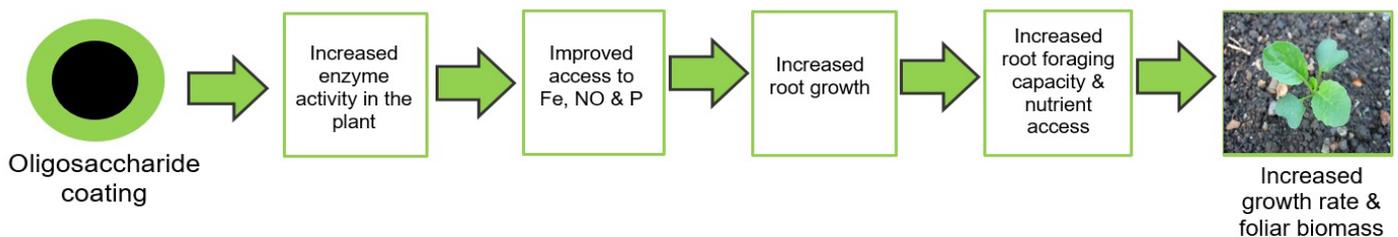


Sylas-ST™ is a biological Seed Treatment for oilseed rape and brassica crops. Its benefits include improved water uptake, leading to increased germination speed and plant biomass.

This unique highly concentrated product places a high loading of the active molecules, known as oligosaccharides, onto each seed. Oligosaccharides are naturally produced complex sugars that stimulate plant enzymes to increase nutrient and water translocation. Facilitating water regulation, movement and uptake in the plant enables rapid germination of the seed, and the development of an enhanced root and shoot mass. Oligosaccharides stimulate an increase in enzyme activity such as phosphatases and reductases, which improves the utilisation and access of crucial nutrients within the plant. This is complimented with an improved root system and subsequently allows the plant to access and utilise more nutrients from within the soil.

The oligosaccharides found in Sylas-ST are obtained from *Ascophyllum nodosum* seaweed species through an exclusive cold-press extraction process, before being concentrated at low temperatures to preserve the natural active ingredient.

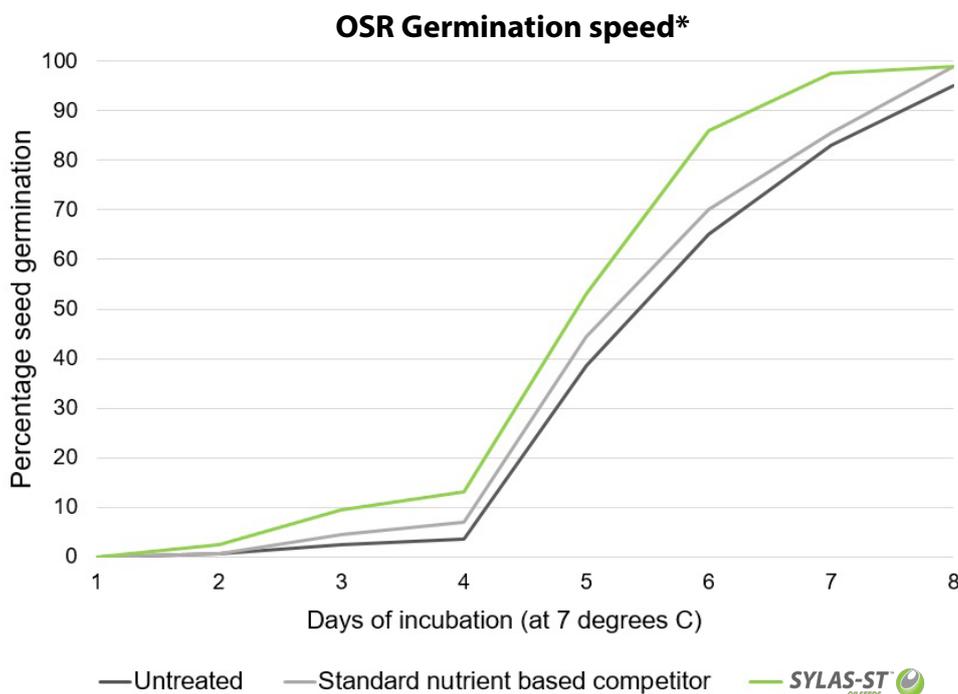
HOW THIS WORKS IN SEED TREATMENT



RAPID GERMINATION & CROP GROWTH ARE KEY

Rapid germination and crop growth are critical in oilseed rape for these main factors:

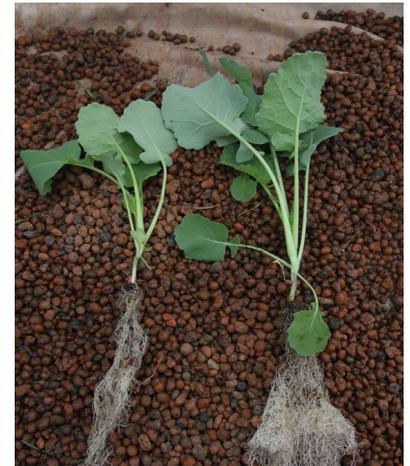
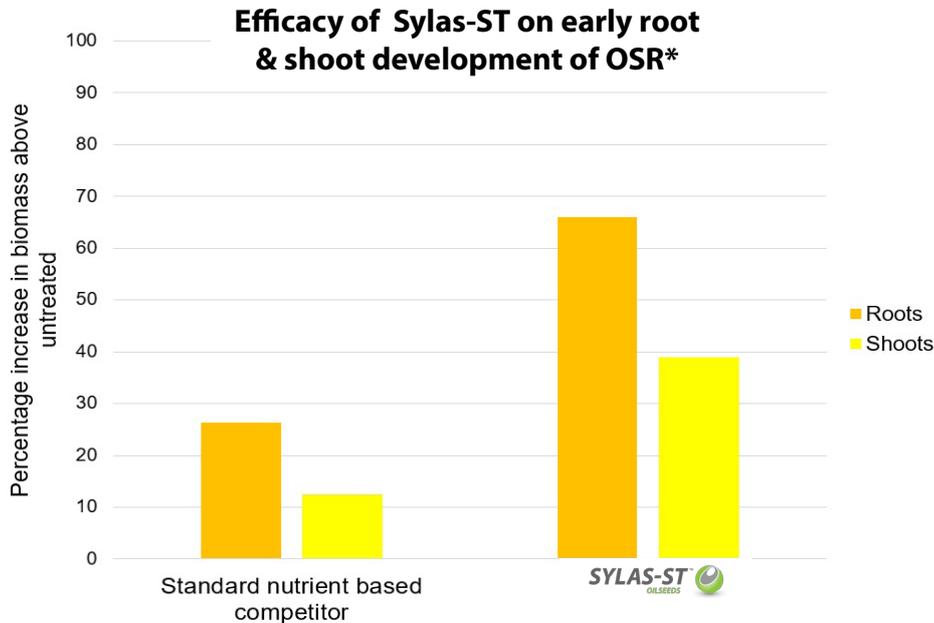
- The need to minimise the impact of pest damage i.e Cabbage Stem Flea Beetle
- Overcoming declining day length at the time of planting for autumn sown crops
- The need to mitigate the risk of declining moisture availability



Sylas-ST improves germination speed by triggering water uptake in the plant, resulting in a steeper germination curve when compared to both untreated seeds, and those treated with nutrient-based seed treatments.

INCREASED ROOT & SHOOT MASS

Sylas-ST treated seeds germinate earlier, and grow more rapidly with an improved root and shoot biomass. Trials show a consistent 65% improvement in root biomass, compared to untreated seeds.



Untreated

SYLAS-ST™
OILSEEDS 

*Average of independent work conducted by the University of Nottingham, 2018 and 2019

IMPROVED DROUGHT TOLERANCE

Sylas-ST improves a plant's drought tolerance and increases its turgidity due to improved root mass and movement of water. The oligosaccharides found in Sylas-ST also manage cell integrity and stomatal regulation, further improving drought tolerance.

Plants after three days of drought in controlled conditions



Untreated



Standard nutrient-based competitor



SYLAS-ST™
OILSEEDS 

Trials conducted at University of Nottingham, 2019



SUMMARY

- Biological seed treatment for oilseed rape & brassica crops
- Improves germination speed
- Increases plant biomass & soil exploration potential
- Helps to boost drought tolerance

Crop	Dose rate	Application
Oilseed rape & brassica crops	3L/T	Directly to the seed

ABOUT UPL

UPL is focused on emerging as a premier global provider of total crop solutions designed to secure the world's long-term food supply.

In pursuit of our long-term vision to be a world leader in the global food network, we have launched our purpose 'OpenAg'. This stands for open-minded, win-win partnerships; broadening the space to create value across a wider food production network.

We aim to transform agriculture by creating an open network that feeds sustainable growth for all. No limits, no borders.

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