



Sunflower: R-PLS

Aim of the trial

The objective of the application is to increase the plant density of sunflowers in a plot with emergence difficulties linked to pedoclimatic conditions (adjoining plot needed to be reseeded) and that is also subject to massive attacks by wood pigeons and wild boars.

General information

Conditions of the trial:

Trial location:	France – Midi Pyrénées	Sowing date:	Mid May 2025
Variety:	SY CELESTO OL		
Sowing density:	75,000 gr/ha (at 75 cm distance)		
Soil type:	Sown in a light soil, cultivated in dry conditions		
In cooperation with:	ARTERRIS		

Experimental design:

Trial on big surfaces without replicates. Treated part : 1 ha

Treatments

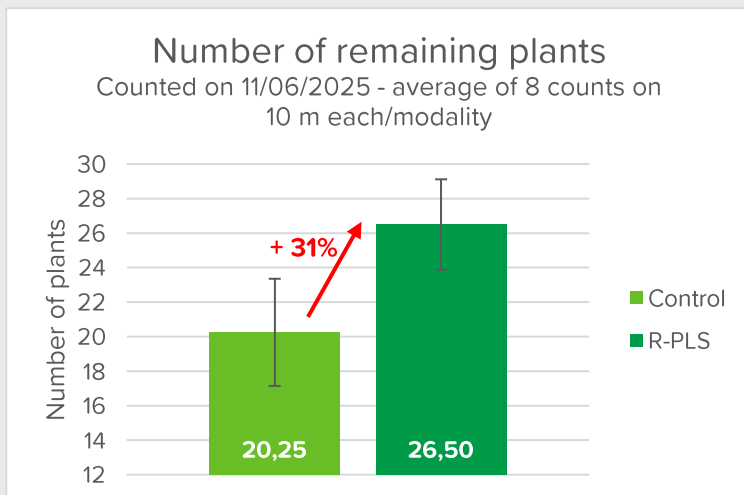
2 modalities:

- **Untreated control**
- **R-PLS: 2 kg/ha** at the emergence of the sunflower via foliar application

Results

Field visit on June 11, 2025 for density counts.

Counts of the number of plants remaining in 8 strips of 10 m each (randomly selected) per modality.



	Control	R-PLS
Density/ha	26,999	35,332

CONCLUSIONS :

Using R-PLS, we see a significant increase in the number of plants by 31% ($p < 0.05$). Syngenta recommends a plant density of 50,000 plants/ha in light, dry soils. Terres Inovia indicates that a "low density," between 25,000 and 30,000 plants/ha, of well-established sunflowers can be maintained, especially if the plants are regularly spaced throughout the field. This threshold was just reached in the untreated control, while with an application of R-PLS, we achieve a plant density 40% higher than the threshold of 25,000 plants/ha recommended by Terres Inovia.

