Field trial of SILVIVO® – SM042 Hedesunda Gävleborg County, Scots pine

Trial 17 June – 12 October 2026 (118 days)

Introduction

At this site, seedlings planted with SILVIVO® were compared with untreated control seedlings. The aim was to examine differences in survival and growth during the first establishment period.

The trial site was a stony Scots pine site (T27, GYL 2/4/2) that was harvested in April 2025 and scarified with an excavator in May 2026. The area has good drainage, good soil quality and good access to daylight, but can periodically be exposed to drought risk. Within the stand, a contiguous area of about 250 seedlings was planted, half with fertiliser and half without. The treated and untreated seedlings were planted in rows at normal planting spacing to obtain conditions as similar as possible.

Pictures from the site

Area identification 2026-06-17



Planting 2026-06-17







Follow-up 2026-10-12







Pictures of a representative selection of untreated (left) and treated (right) seedlings at the follow-up on 2026-10-12.

Results in brief

Key results

Measure	Control	SILVIVO®	Observed difference
Survival	100%	100%	0%
Mean seedling height	212.7 mm	236.7 mm	11.3%
Mean stem diameter	4.2 mm	5.2 mm	25.8%

Short conclusion

After just under 4 months, the SILVIVO® group had unchanged survival and stronger development than the control group.

Important to know

The results describe the outcome at this site and during the period in question. They should be interpreted together with soil conditions, weather, damage and the scope of the trial. A single field trial is not sufficient to draw general conclusions about all planting situations.

The trial in brief

Location	Gävleborg County, Hedesunda
Planting date	2026-06-17
Follow-up date	2026-10-12
Tree species and seedling type	Scots pine, one-year-old containerised seedling
Scope	Scots pine, every other row treated
Soil conditions	Scarified (excavator), site index T27, stony Scots pine stand harvested May 2025. Good drainage.
Planting spot	Mineral soil
Dosage	1.6 grams product (80 mg N) per seedling
Application	Hand-dosed into planting tube
Trial focus	Survival and growth

The question the trial aims to answer

Do SILVIVO®-treated seedlings show better survival and early development than the control seedlings under the conditions at the trial site?

Site conditions

Soil and planting

- Soil type and soil moisture: Dwarf-shrub type – bilberry. Normal/low soil moisture at planting.
- Seedling quality: Good at planting.
- Site index: T27.
- Elevation and climate zone: About 58 metres above sea level, climate zone 4.

- Site preparation method and timing: Excavator, May 2026
- Planting spot: Mineral soil patch/hinge.
- Tree species and seedling type: Scots pine, one-year-old containerised seedling from SCA, Jackpot.
- Seedling protection: Hylosafe
- Known risks: Drought, pine weevil

In total, about 250 seedlings were planted on a contiguous area within the stand. Every other row was treated with SILVIVO® and marked with blue sticks. The representative sample was taken from one of the sites.

Weather during the trial period

Weather in the Gysinge area, Gästrikland, during the period 17 June – 12 October 2026, based on temperature and precipitation data from the SMHI weather station Kerstinbo A:

The mean daily temperature averaged 15.0 °C over the 117 days for which temperature data were available, out of a total of 118 calendar days. The warmest day was 28 June, with a mean daily temperature of 23.7 °C. The highest temperature of the period, 31.4 °C, was recorded on 17 July. Two days reached a daily maximum above 30 °C. Frost occurred on a few occasions during the autumn, with the lowest daily minimum of the period, −0.6 °C, on 7 October. The coldest mean daily temperature, 4.3 °C, occurred on 10 October.

Total precipitation was 153.4 mm during the period. In total, 35 days had at least 1 mm of precipitation, while 70 days had no recorded precipitation (below 0.1 mm). The longest continuous dry spell lasted 8 days, from 9 to 16 July. The wettest single day was 8 October, when 39.2 mm was recorded. The period was characterised by relatively limited precipitation during high summer, followed by heavier rain in early October.

How the trial was carried out

Control and SILVIVO® groups were created
→ SILVIVO® was placed under the roots at planting
→ The seedlings were marked and documented
→ The same measurements were followed up in both groups

Common trial method

The trial was carried out according to the SILVIVO® model, a standardised working method for planning, documenting and following up field trials. The common structure makes it possible to compare control and SILVIVO® seedlings and to relate the results to the conditions at the site. Read more about the SILVIVO® model at www.silvivo.se

Results in detail

Survival

All treated and untreated seedlings in the representative sample survived.

Seedling height and stem diameter

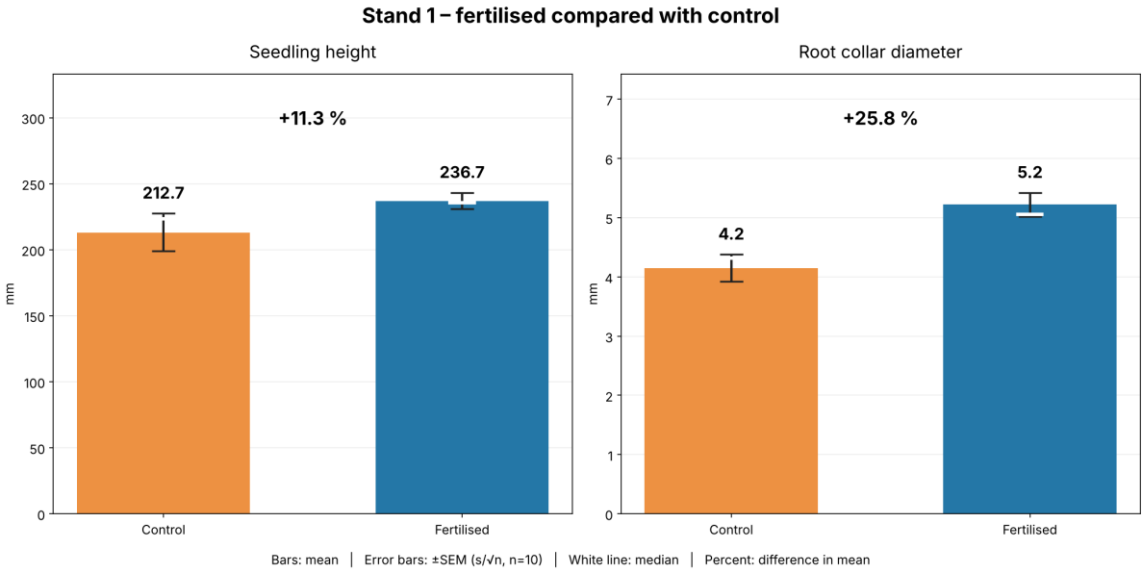


Chart of seedling height and diameter.

Damage and external impact

- Pine weevil damage: 0
- Browsing damage: 0
- Drought: 0
- Waterlogging: 0
- Frost: 0
- Vegetation competition: 0
- Mechanical damage: 0

Worth noting

High survival and no damage at the time of measurement, despite periods of drought risk.

What happens next?

- Next follow-up: Autumn 2027
- Measurements to be repeated: The same as the first measurement
- Planned long-term follow-up: Yes

About the trial

- Responsible for trial design: The landowner.
- Responsible for measurements: The landowner, with support from SILVIVO® staff
- Report date: 2026-10-27