Field trial of SILVIVO® – SM024 Tannträsk, Västerbotten, Scots pine

Trial 8 June – 30 September 2026 (114 days)

Introduction

At the trial site, containerised Scots pine seedlings treated with SILVIVO® were compared with untreated control seedlings of the same seedling type. The aim was to follow differences in survival and growth during the first establishment period.

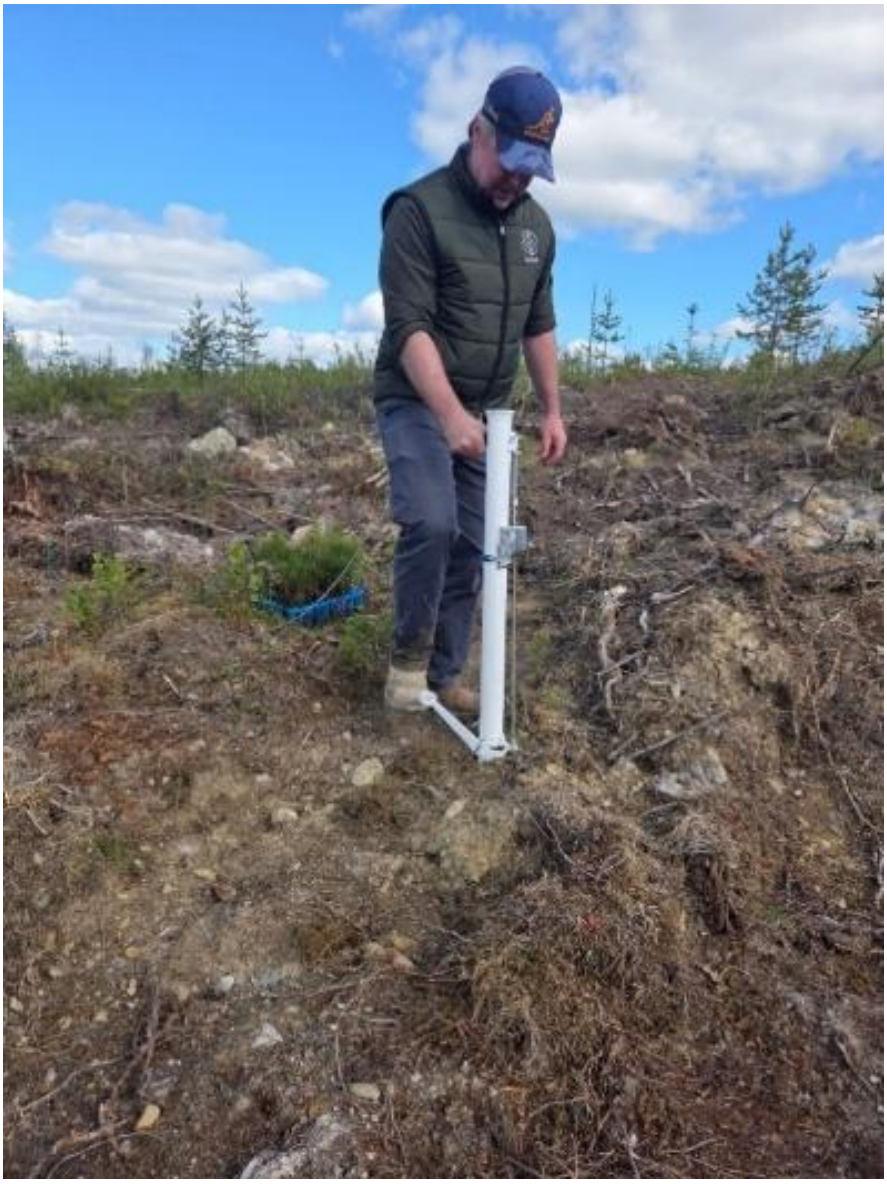
The clear-cut covered about 3 hectares and was planted by the forest owner in May–June. The documented trial covered a smaller part in the northern part of the clear-cut.

Pictures from the site

Area identification 2026-09-30



Planting 2026-06-08



Follow-up 2026-09-30





Pictures of untreated (yellow) and treated (green) seedlings at the follow-up on 30 September 2026.

Results in brief

Key results

Measure	Control	SILVIVO®	Observed difference
Survival	100%	100%	0%
Mean seedling height	265 mm	317 mm	21%
Mean stem diameter	3.8 mm	4.5 mm	19%

Short conclusion

After almost four months, the SILVIVO® group had unchanged survival and somewhat 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 scale of the trial. A single field trial is not sufficient to draw general conclusions about all planting situations.

The trial in brief

Location	Tannträsk, Västerbotten
Planting date	2026-06-08
Follow-up date	2026-09-30
Tree species and seedling type	Scots pine, one-year-old containerised seedling from Holmen Skog
Scope	Scots pine, with every other row treated
Soil conditions	Dry, poor pine land
Site preparation	Harrowed in autumn 2025
Dosage	1.6 grams per seedling
Application	Hand-dosed into planting tube (55 mm)
Trial focus	Survival and growth

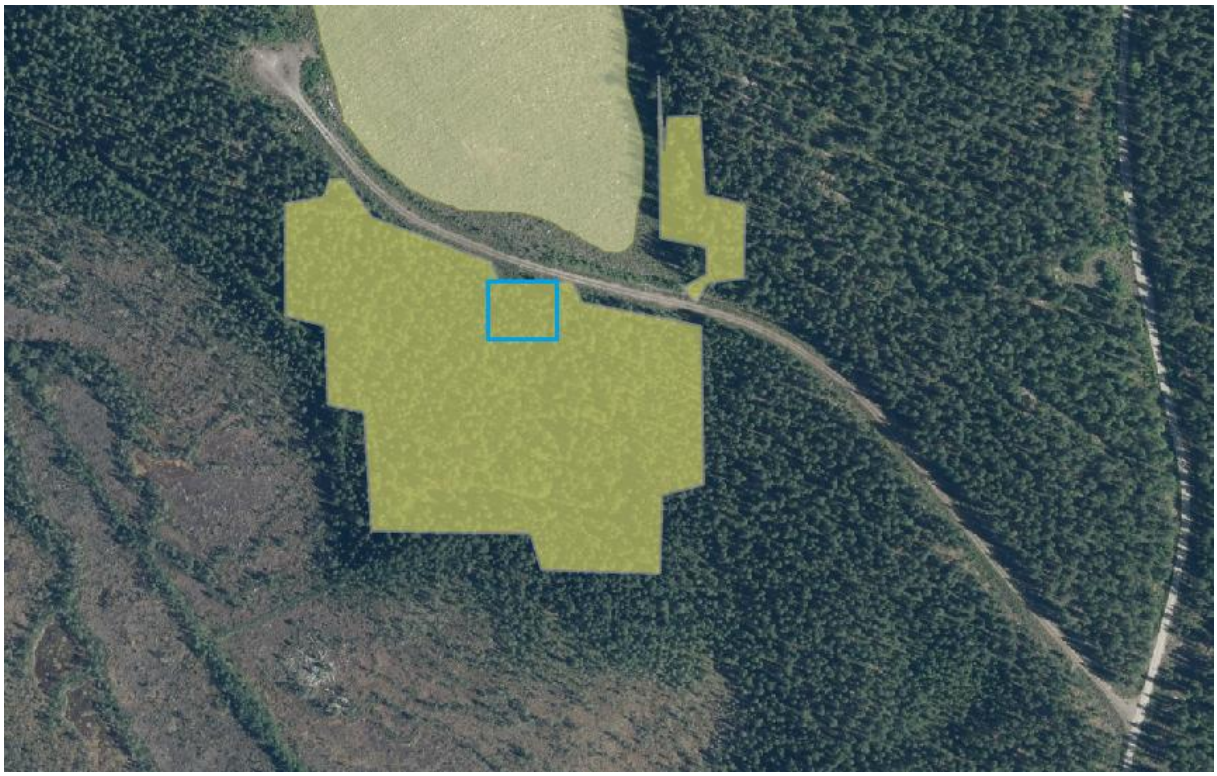
The question the trial aims to answer

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: Moisture content was good at planting.
- Seedling quality: Good at planting.
- Site productivity or site index: T20.
- Elevation and climate zone: Approximately 249–254 metres, zone 7.
- Harvesting: Spring 2025.
- Site preparation method and timing: Harrowed in autumn 2025.
- Planting spot: Mixed – in inverted sod, in the fold and in the middle of the furrow. The area was gently sloping.
- Tree species and seedling type: Scots pine, one-year-old containerised seedling from Holmen Skog.
- Seedling protection: None.
- Known risks: Some risk of browsing damage.



Map of the planting, with the trial area marked in blue. In total, 33 seedlings were included: 17 treated with SILVIVO® and 16 untreated control seedlings. Every other planting row was treated with SILVIVO® and marked with blue sticks. The control seedlings were marked with yellow sticks.

Weather during the trial period

Weather for the period 8 June – 30 September 2026, based on the Lycksele A station (same station for temperature and precipitation).

The mean daily temperature was 12.7°C over the period, ranging from 5.5°C on 25 September to 20.2°C on 16 July. The warmest day was 16 July with a daily maximum of 28.5°C, while the coldest night occurred on 18 September with a daily minimum of -1.8°C. In total there were 5 summer days (daily maximum ≥25°C) and no really hot days (≥30°C), and 6 frost nights, all during the cold spell around 18–25 September.

Total precipitation was 257.5 mm over all 115 days. 38 days had at least 1 mm of precipitation, while 55 days were virtually dry (below 0.1 mm). The wettest day was 18 August with 22.0 mm, and the longest continuous dry spell lasted 9 days, from 12 to 20 July.

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

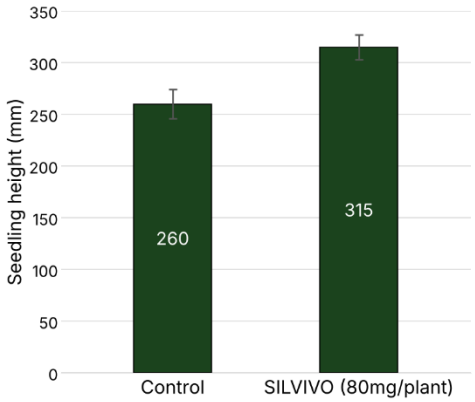
The trial was carried out according to the SILVIVO® model, a standardised working method for planning, documenting and following up field trials. The common structure makes it possible to compare control and SILVIVO® seedlings and to relate the results to the site conditions. Read more about the SILVIVO®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

Results in detail

Survival

All 17 treated and 16 untreated seedlings in the representative sample survived.

Seedling height and stem diameter



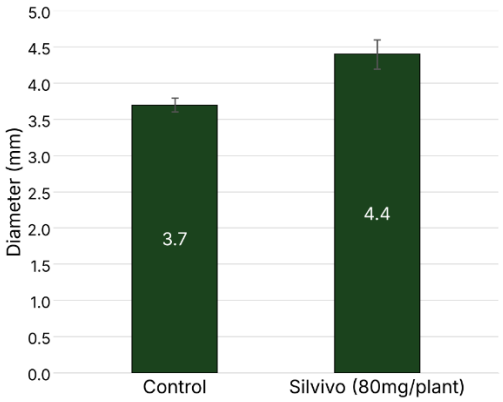


Chart of seedling height and diameter. Bars show means and error bars show the standard error of the mean (s/√n).

Damage and external impact

- Scleroderris canker: Possible attack
- Pine weevil damage: Low
- Browsing damage: No
- Drought: No
- Waterlogging: No
- Frost: No
- Vegetation competition: Low
- Mechanical damage: No

What happens next?

- Next follow-up: September/October 2027
- Measurements to be repeated: Yes
- Planned long-term follow-up: Yes
- Comparison with other trial sites: Yes

About the trial

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