Field trial of SILVIVO® – SM006 Mörön, Norrbotten, Scots pine

Trial 16 May – 2 October 2026 (139 days)

Introduction

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

The clear-cut covered about 0.3 hectares and was planted by the forest owner's forest manager in May. The documented trial covered the entire clear-cut.

Pictures from the site

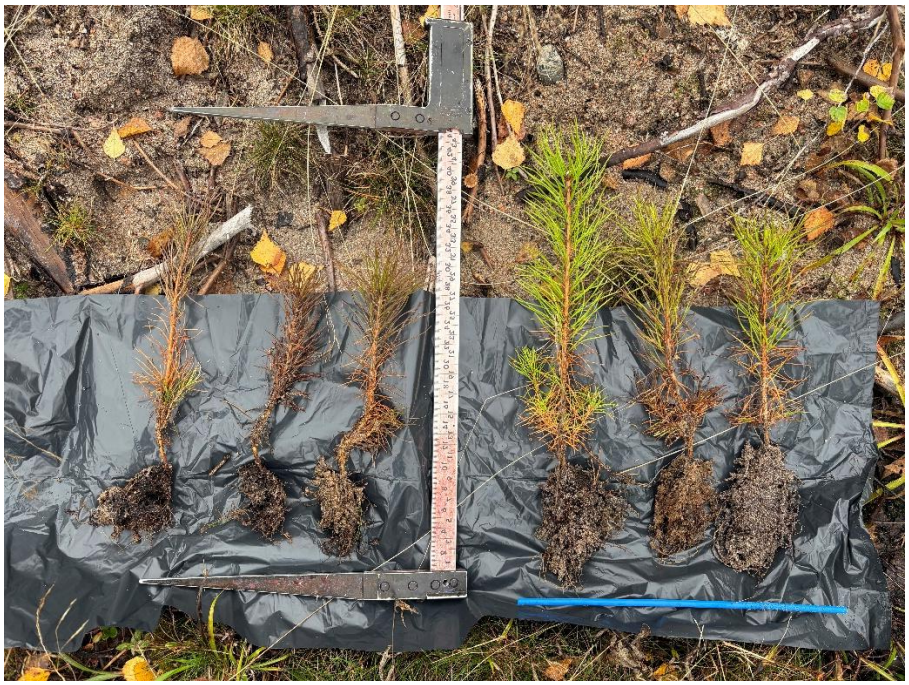
Area identification 2026-05-16



Follow-up 2026-10-02







Pictures of a representative selection of untreated (left) and treated (right) seedlings at the follow-up on 2026-10-02.

Results in brief

Key results

Measure	Control	SILVIVO®	Observed difference
Survival	100%	100%	0%
Mean seedling height	156	165	6%*
Mean stem diameter	3.5	3.7	7%*

*No significant difference between treated and control.

Short conclusion

After 4.5 months, the SILVIVO® group had 100% survival and 6–7% 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	Mörön, Norrbotten
Planting date	2026-05-16
Follow-up date	2026-10-02
Tree species and seedling type	Scots pine, one-year-old frozen-stored containerised seedling from Svenska Skogsplantor
Scope	About 500 seedlings, with every other row treated
Plug volume/type	45–55 ml from Svenska Skogsplantor, delivered in boxes
Soil conditions	Normal moisture in a thin humus layer
Site preparation	Harrowed in 2023
Dosage	1.6 grams per seedling
Application	Hand-dosed into planting tube (45 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: Normal moisture in a thin humus layer
- Seedling quality at delivery: Good
- Seedling quality at planting: Good
- Site productivity or site index: T20
- Elevation and climate zone: 36–49 metres above sea level, climate zone 7
- Site preparation method and timing: Disc trenching (harrowing) in 2023
- Planting spot: In the harrow furrow
- Tree species and seedling type: Scots pine, one-year-old frozen-stored containerised seedling from SSP
- Seedling protection: No treatment
- Known risks: Scleroderris canker and browsing damage



In total, about 500 seedlings were planted in a number of rows within the blue-marked area on the map above. Every other row (about 300 seedlings) was treated with SILVIVO® and marked with blue sticks. About 200 seedlings were untreated.

Weather during the trial period

Weather for the period 16 May – 2 October 2026, based on the Luleå-Kallax Airport station (same station for temperature and precipitation).

The mean daily temperature was 13.5°C over the period, ranging from 7.3°C on 6 September to 20.2°C on 14 July. The warmest day was 14 July with a daily maximum of 24.6°C, so no true summer day (daily maximum ≥25°C) occurred during the whole period. Only one frost night occurred, on 7 September (-0.1°C).

Total precipitation was 514.5 mm over 139 of 140 days, an unusually wet period for the area. 60 days had at least 1 mm of precipitation, while 66 days were virtually dry (below 0.1 mm). The wettest day was 17 August with as much as 35.0 mm, and the longest continuous dry spell lasted 8 days, from 21 to 28 August.

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

100% of the treated and 100% of the untreated seedlings in the representative sample survived.

Seedling height and stem diameter

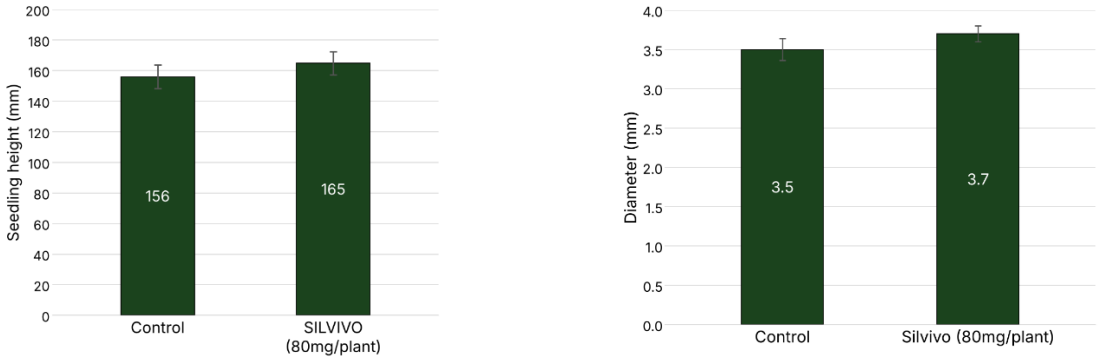


Chart of seedling height and diameter. Bars show means and error bars show the standard error of the mean (s/√n).

Damage and external impact

- Pine weevil damage: no
- Scleroderris canker: yes
- Browsing damage: no, but occurs in the area
- Drought: no
- Waterlogging: yes
- Frost: no
- Vegetation competition: low

What happens next?

- Next follow-up: Summer 2027
- Measurements to be repeated: Summer 2027
- Planned long-term follow-up: annually from now on

About the trial

- Responsible for trial design: The landowner's forest manager
- Responsible for measurements: The landowner's forest manager
- Report date: 2026-10-27