Field trial of SILVIVO® – SM013 Dalagärde, Halland, Norway spruce

Trial 23 April – 13 October 2026 (173 days)

Introduction

At the trial site, containerised Norway spruce 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 April. The documented trial covered a smaller part in the south-eastern part of the clear-cut.

Pictures from the site

Area identification 2026-10-13



Follow-up 2026-10-13







Pictures of three untreated (left) and three treated (right) seedlings at the follow-up on 13 October 2026.

Results in brief

Key results

Measure	Control	SILVIVO®	Observed difference
Survival	98%	100%	2%
Mean seedling height	397 mm	412 mm	4%*

*No significant difference between treated and control.

Short conclusion

After almost six 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	Dalagärde, Halland
Planting date	2026-04-23
Follow-up date	2026-10-13
Tree species and seedling type	Norway spruce, two-year-old containerised seedling from Södra (Bredinge)
Scope	Norway spruce, with every other row treated
Soil conditions	Moist, productive spruce land.
Site preparation	Inverted sod site preparation
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: Silty soil. Moisture content was good at planting.
- Seedling quality: Good at planting.

- Site productivity or site index: G28.
- Elevation and climate zone: 108–118 metres above sea level, climate zone 2.
- Harvesting: January 2025
- Site preparation method and timing: Inverted sod, March 2026
- Planting spot: In the middle of the inverted sod
- Tree species and seedling type: Norway spruce, two-year-old containerised seedling from Södra (Bredinge)
- Seedling protection: Holonyx
- Known risks: Browsing damage and pine weevil



Map of the planting, with the trial area marked in blue. In total, 113 seedlings were included: 62 treated with SILVIVO® and 51 untreated control seedlings. Every other planting row was treated with SILVIVO® and marked with blue sticks.

Weather during the trial period

Weather for the period 23 April – 13 October 2026. The data come from the Källsjö station for both temperature and precipitation. Data are available for all 174 days.

The mean daily temperature was 14.2°C over the period, ranging from 4.9°C on 26 April to 25.0°C on 27 June. The warmest day was 27 June with a daily maximum of 32.9°C, and the coldest night occurred on 27 April with a daily minimum of −1.2°C. In total there were 19 summer days (daily maximum ≥25°C), of which 4 were really hot days (≥30°C), and 4 frost nights. The frost came on 26, 27 and 29 April and on 11 May.

Total precipitation was 450.1 mm. 66 days had at least 1 mm of precipitation, while 80 days were virtually dry (below 0.1 mm). The wettest day was 19 August with 24.6 mm, and the longest continuous dry spell lasted 9 days, from 8 to 16 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

100% of the treated and 98% of the untreated seedlings survived.

Seedling height and stem diameter

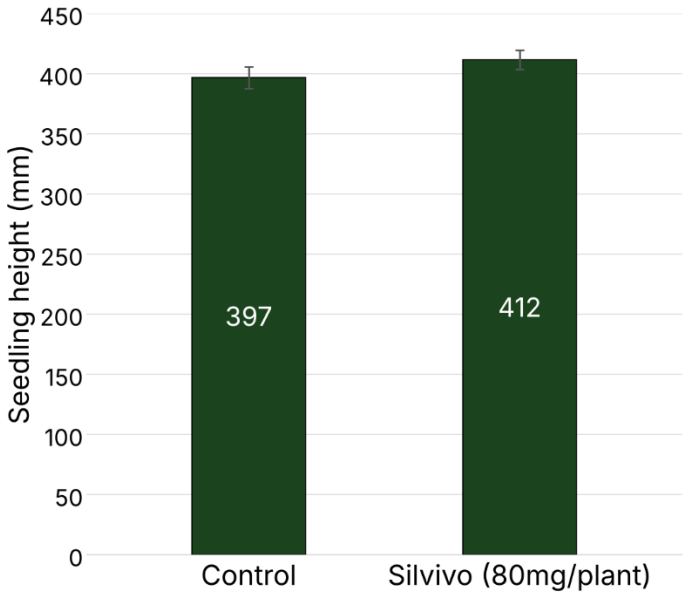


Chart of seedling height. Bars show means and error bars show the standard error of the mean (s/√n).

Damage and external impact

- Scleroderris canker: no
- Pine weevil damage: to some extent
- Browsing damage: no
- Drought: no
- Waterlogging: no
- Frost: no
- Vegetation competition: low
- Mechanical damage: no

What happens next?

- Next follow-up: October 2027
- Measurements to be repeated: annually
- Planned long-term follow-up: annually

About the trial

- Responsible for trial design: The landowner
- Responsible for measurements: The landowner
- Report date: 2026-10-27