Field trial of SILVIVO® – SM011 Månstorp, Skåne, Norway spruce

Trial 14 April – 13 October 2026 (182 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 2 hectares and was planted by the forest owner in April. The documented trial was carried out on a smaller part in the western area of the clear-cut.

Pictures from the site

Area identification 2026-10-13



Follow-up 2026-10-13





Pictures of a representative selection 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	91%	98%	7 pp
Mean seedling height	387 mm	412 mm	6%*

*Measured on a representative sample of 25 treated and 24 untreated seedlings. Seedling height should primarily be regarded as a baseline for the coming annual measurements, as it largely depends on each seedling's height at planting. A subjective assessment indicated no clear difference in the length of this summer's leader shoots.

Short conclusion

After 6 months, the SILVIVO® group had 7 percentage points higher survival.

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	Månstorp, Skåne
Planting date	2026-04-14
Follow-up date	2026-10-13
Tree species and seedling type	Norway spruce, two-year-old containerised seedling, Ekebo Plus, SP 90, 25–45 cm
Scope	Rows with blue sticks at each end are treated; the control rows in between have no sticks. In the western part of the trial, treated and control seedlings were also planted in unscarified ground (between the scarification furrows; here too, treated rows are marked with blue sticks at the start and end of each row).
Soil conditions	GYL 2 2 1, sandy-silty till, G34
Site preparation	Disc trencher, spring 2026
Dosage	1.6 grams 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: Moisture content was good at planting.
- Seedling quality: Good at planting.
- Site productivity or site index: G34.
- Elevation and climate zone: 142–147 metres above sea level, climate zone 3
- Harvesting: 2025.
- Site preparation method and timing: 2-row powered disc trencher, late winter 2026
- Planting spot: In the trencher furrow
- Tree species and seedling type: Norway spruce, two-year-old containerised seedling, Ekebo Plus, SP 90, 25–45 cm
- Seedling protection: None
- Known risks: Pine weevil, roe deer



Map of the planting, with the trial area marked in blue. In total, 415 seedlings were included: 204 treated with SILVIVO® and 211 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 14 April – 13 October 2026. Temperature data are from Hästveda and precipitation data from Bjärnum D. Data are available for all 182 days.

The mean daily temperature was 14.3°C over the period, ranging from 5.6°C on 15 April to 25.5°C on 27 June. The warmest day was 27 June with a daily maximum of 35.6°C, and the coldest night occurred on 28 April with a daily minimum of −1.3°C. In total there were 26 summer days (daily maximum ≥25°C), of which 6 were very hot days (≥30°C), and 8 frost nights. Frost occurred on 16, 20, 21, 26, 27, 28 and 29 April and on 9 May.

Total precipitation was 304.3 mm. 51 days had at least 1 mm of precipitation, while 98 days were virtually dry (below 0.1 mm). The wettest day was 11 May with 24.4 mm, and the longest continuous dry spell lasted 12 days, from 22 May to 2 June. Precipitation varies considerably between the stations in the area, so the precipitation figure is less certain than the temperature figure.

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

After one growing season (2026-10-14), survival was 98% for the treated seedlings and 91% for the control.

Seedling height

Height was measured on a representative sample of a total of 24 control seedlings and 25 SILVIVO®-treated seedlings. The height difference is mainly due to differences in height at planting in April.

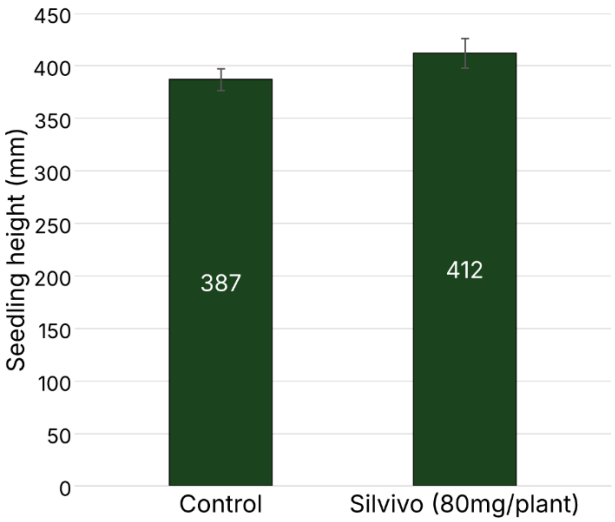

Chart of seedling height. Bars show means and error bars show the standard error of the mean (s/√n).

Damage and external impact

- Scleroderris canker: No
- Pine weevil damage: Yes, occurs; a few dead seedlings
- Browsing damage: No
- Drought: No
- Waterlogging: No
- Frost: No
- Vegetation competition: No
- Mechanical damage: No

What happens next?

- Next follow-up: Autumn 2027
- Measurements to be repeated: Annually
- Planned long-term follow-up: Annually
- Comparison with other trial sites: No

About the trial

- Responsible for trial design: The landowner
- Responsible for measurements: The landowner
- Report date: 2026-10-28