BEE-TECH GROUP
AGRICULTURAL DEVELOPMENT

No Bees, No Yield: Insights from the 2025 Strawberry Trial

Strawberry yield is not limited by fertiliser, irrigation, or variety alone. It is limited by pollination.

While strawberry plants can self-pollinate, this process is often incomplete under commercial growing conditions. When pollination falls short, flowers fail to develop into fruit. The result is simple and costly: fewer strawberries per plant and reduced total yield.

A 2025 field trial made this clear. Managed bee pollination is not optional—it is a core driver of strawberry yield, and hive placement matters.

Trial Overview

Three pollination treatments were compared:

- No bee hives (control)
- Bee hives placed approximately 100 m from the crop
- Bee hives placed approximately 10 m from the crop

Fruit number per 10 plants was recorded across three harvest dates (14 November, 28 November, and 12 December 2025), allowing total seasonal yield to be compared between treatments.

The Yield Response Was Decisive

At every harvest, plots with bee hives produced more strawberries than plots without bees. When yields were summed across the season, the scale of the difference was unmistakable.

Total strawberries per 10 plants:

- **No hive (control):** 142
- **Hive ≥100 m from crop:** 220
- **Hive ~10 m from crop:** 327

This represents:

- **55% more strawberries** with hives placed 100 m from the crop
- **130% more strawberries** with hives placed just 10 m from the crop

These gains were consistent across all harvest dates, showing that bee pollination increased fruit numbers throughout the production period—not just at isolated pickings.

The figure below shows cumulative fruit yield per 10 plants across all harvest dates for each pollination treatment.

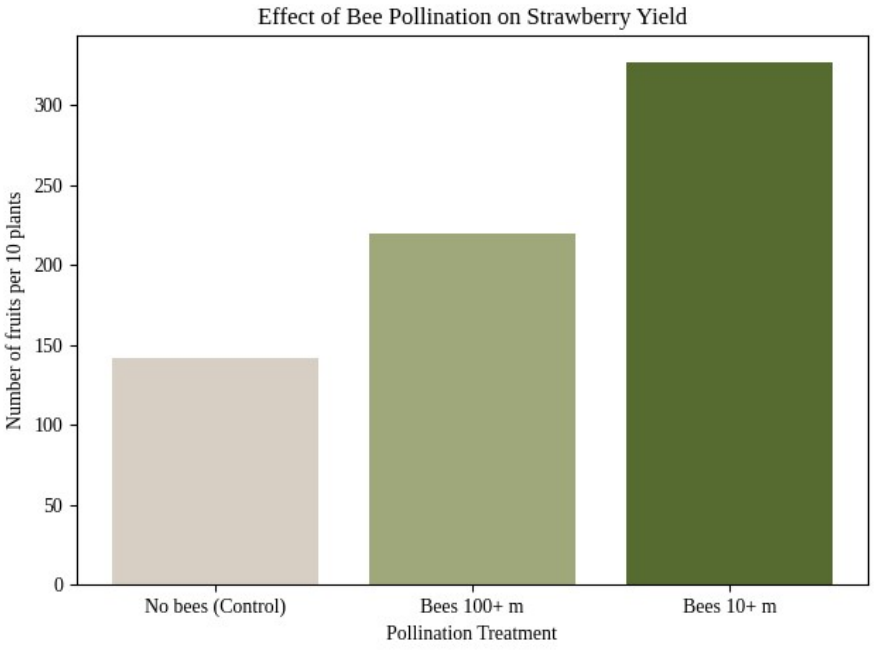

Figure 1. *Total fruit yield per 10 plants across three harvest dates under three pollination treatments: no hive (control), hive ≥100 m from the crop, and hive ~10 m from the crop.*

The primary benefit of bee pollination was improved fruit set, with more flowers successfully developing into harvestable strawberries. Bee-pollinated plants also showed modest improvements in fruit development.

Fruit length was generally greater in bee-pollinated treatments, particularly where hives were located close to the crop. On average, fruit from the 10 m hive treatment was approximately 3.8% longer than fruit from the un-pollinated control. Fruit width showed only minor variation between treatments.

These results indicate that improved pollination increased both the number of strawberries produced and, to a lesser extent, fruit size.

The Takeaway for Growers

The message from this trial is clear:

- Bee hives are essential for achieving high strawberry yields
- Hive proximity directly affects pollination success and fruit number
- Without bees, a large proportion of yield potential is lost

Strawberries grown without bee pollination produced less than half the fruit of plants with nearby hives. Even hives placed further away delivered meaningful yield benefits, but the strongest and most consistent results occurred when hives were positioned close to the crop.

Bottom Line

Bee pollination is a core production input. In this trial, placing bee hives within approximately 10 m of the crop more than doubled strawberry yield, while also delivering modest improvements in fruit development. Without bees, yield was fundamentally constrained.

For growers aiming to maximise productivity and returns, pollination management and hive placement should be treated with the same priority as any other key input in the production system.

For more information, give us a call at 071 404 0101 or send us an email at info@bee-techgroup.com.

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Our mailing address is:

Bee-TechGroup Sardinia Bay Rd Lovemore Park Ah Port Elizabeth, Eastern Cape 6070 South Africa

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