



● AGRICULTURE

Long Stem Rose Growth Case Study **South America**

Hydropath treatment was evaluated for improving rose stem growth and quality while maintaining production through the cold growing months.

18.5%

Longer Average Stems

72.8%

Increase Despite Cold Season

89.17%

Stems Reaching 50 cm

60 cm

Longer Stems Emerged



BEFORE & AFTER

● BEFORE

- Average stem length was 42.3 cm
- Cold months slowed greenhouse output
- Longer 60 cm stems were rare

● AFTER

- ✓ Average stem length reached 50.12 cm
- ✓ Cold-season production was maintained
- ✓ Rare 60 cm stems emerged in September



OVERVIEW

A long stem rose grower in South America evaluated Hydropath treatment on a greenhouse irrigation system. Rose value depended on stem length and quality, while growth and production normally slowed during colder months. From April to January, the grower evaluated stem growth, stem strength and plant propagation, while also recording monthly production.



CHALLENGE

The grower needed to improve stem growth and flower quality while sustaining greenhouse output during colder months.

- Cold weather slowed overall rose growth
- Shorter stems reduced the value of harvested roses
- Longer, higher-value stems were limited
- Greenhouse production declined during parts of the cold season

SOLUTION

One *HydroFLOW*® custom 12" unit was fitted around the main greenhouse irrigation line. An oversized evaluation unit was intentionally used for the trial.

UNIT INSTALLED

1x *HydroFLOW*® custom 12"

INSTALLATION POINT

Main greenhouse irrigation line

EVALUATION PERIOD

Approximately 9 months

PARAMETERS EVALUATED

Stem growth, strength and propagation



INSTALLATION

Unit on the main irrigation line

RESULTS

Longer Average Stems

Average stem length increased from 42.3 cm to 50.12 cm by January.

More 50 cm Stems

50 cm stems increased from 25.99% in April to 89.17% in January.

60 cm Stems Emerged

Rare 60 cm stems began appearing during the September harvest.

Cold-Season Output Maintained

Production increased from 8,202 roses in April to 14,170 in January.

Improved Flower Quality

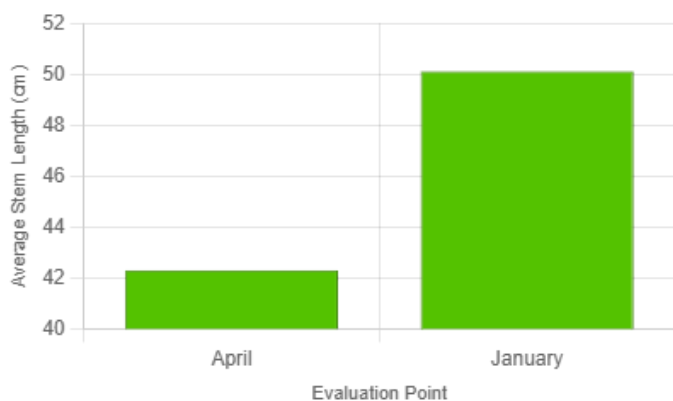
Better symmetry, colour, petal uniformity and shelf life were reported

Reduced Scale & Biofouling

The grower reported reduced scale and biofouling in the irrigation lines.

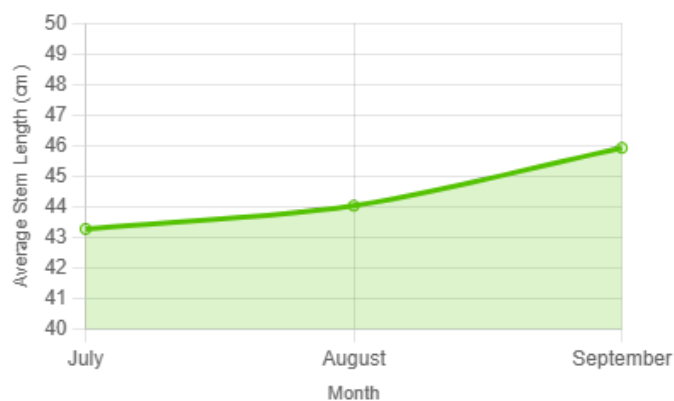
GRAPHS

Average Stem Length: April vs January



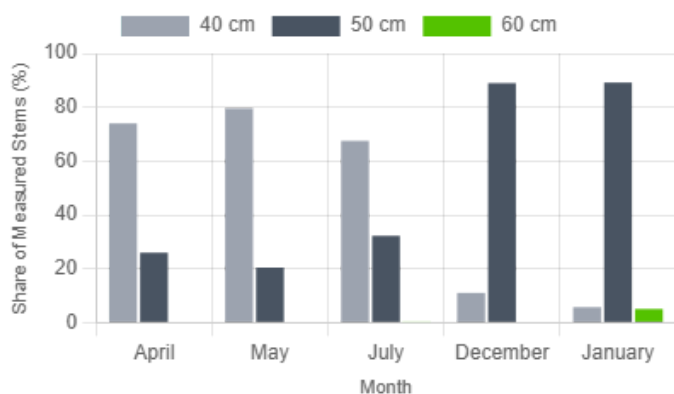
Average stem length increased from 42.3 cm in April to 50.12 cm in January.

Mid-Cycle Average Stem Length



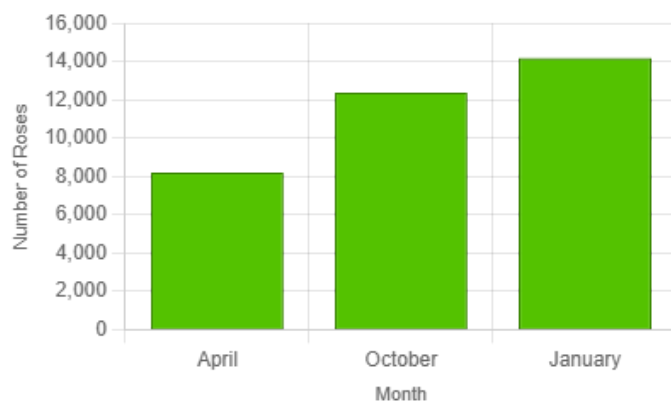
Average stem length rose from 43.27 cm in July to 45.92 cm in September.

Stem-Length Distribution



50 cm stems became increasingly dominant, reaching 89.17% of measured stems by January.

Rose Production During Evaluation



Production went from 8,202 roses in April to 12,380 in October and 14,170 in January.

KEY TAKEAWAY

Rose Growth Evaluation Summary

A South American rose grower evaluated one *HydroFLOW*® custom 12" unit on the main greenhouse irrigation line. Average stem length increased from 42.3 cm to 50.12 cm, while longer stems became more common and production was maintained through the cold months. The grower also reported stronger stems, improved flower quality, longer shelf life and reduced scale and biofouling in drip lines.

18.5%

LONGER AVERAGE STEMS

89.17%

STEMS REACHING 50 CM

72.8%

INCREASE DESPITE COLD SEASON



ADDITIONAL PHOTO EVIDENCE



SITE

Long stem rose production inside the greenhouse

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