## MAYTREE CASE STUDY

## forgro

## How innovative lighting and benching solutions has helped to drive growth and improve crop quality.

By mimicking sunlight to encourage plant growth and increase marketable yield, Maytree have been able to improve their overall production rate with the use of Signify lighting and tiered benching from Northern Poly Tunnels.

By using ingenious horticultural technology, Maytree has improved plant yield and growth and revolutionised their production rate. From their own experience, Maytree explain to Fargro how this investment has seen substantial growth for their business and plant production rates.

## ABOUT MAYTREE NURSERY

Maytree is a close-knit family business which has grown from a small back-garden project to a 4-acre plot stocked with thousands of plants. Growing a range of perennials, shrubs, roses, ornamental trees, fruit trees, fruit bushes, potted and bare rooted plants.

Maytree have been focusing on the homegrown to give their product a USP that aligns with consumers as well as for economic reasons. "Quite simply buying stock in to sell on was less economically attractive both at a grower level and for our customer", for Maytree growing their own was a "no brainer".

It also safeguards against supply chain issues; this year has been extraordinary but illustrates the point. During the post lockdown surge in ornamental sales, Maytree had a stock of 150002 perennials to draw
on to meet demand. This lead to customers asking, "How have you got all this stock?" Further to this, homegrown helps to mitigate the uncertainty and any tariffs that may be placed on plants post BREXIT. says Neil, Growing Manager at Maytree.


## Drive growth and production capacity using a combination of LEDs and tiered benching.

Maytree invested in two separate LED systems. The first at the cutting bench where the lights were put in place to drive growth and the second on the tiered benching system where the lights allowed Maytree to double their production by building up rather than building out.

Building up has proven to be an innovative and effective solution for Maytree. Space is limited so maximising their current structures was key to the success of the project. The tiered system increased production by $100 \%$ and was more cost effective than building an additional polytunnel.
The predicted ROI on this investment is one year.


## Mimicking sunlight on lower benches

Building up rather than out does however present an issue that the lower level received very little light, this leads to etiolated growth, stretching and yellowing /darkening of the plants. By installing LEDs with a white, red and blue mix Maytree have mimicked sunlight on the lower tier to ensure consistent high-quality growth.

## Collaboration to reach a solution

To create effective lighting programmes Fargro and Signify worked alongside Maytree to create a light recipe to achieve desired outcome and a lighting plan to ensure the correct number of lights were installed to give proper and cost-effective light coverage.

Northern Polly tunnels supplied the twotiered benching ensuring it worked within the existing Maytree poly tunnel structure.

Innovation and integration of technology is a key process at Maytree and is viewed as a continuous project. Going forward if the customer base and demand continues the tiered bench and LED system
will be rolled out to a greater area of the nursery. The only challenge is staffing to manage the increased area of plants grown.

Thanks to the use of technology and benching, Maytree have seen their production rates scale to meet the needs of their customers and between increased demand and finding the solutions to aid with plant production and growth, Maytree have been able to successfully improve their production by $100 \%$ with the use of Signify lighting and tiered benching.

