

# F1 News Flash: F1 hybrid trial at Umdoni Farms, South Africa

“F1 hybrid seeds will help growers to scale up and commercialize efficiently”



 **Seed Tech**

# Introduction

Following successful trials at Umdoni Farm in South Africa, Jeffrey Hinsbeeck is looking forward to seeing the entire multispan greenhouse filled with “a uniform sea of green” of two F1 SeedTech hybrid varieties – First Lady F1 and Miss Beauty F1 – in the near future. Here, he reflects on the trial results and explains why he is so convinced that F1 hybrid seeds are a “gamechanger for the whole industry”.

“I understand why many cannabis growers still use cuttings. They seem like a cheaper option compared to seeds, which cost money upfront. However, growers tend to underestimate how much labour is involved in keeping cuttings stable, from checking the rooting to refreshing the mother plants,” states Jeffrey Hinsbeeck. “Meanwhile, using seeds from traditional strains results in many different phenotypes and flowers with varying qualities and densities, creating a lot of batch-sorting work.”

As owner of JH Consultancy and Druid Nutrients, Hinsbeeck contributes his extensive expertise with customers around the world, such as his recent project together with Umdoni Farm. “This pioneer in the cannabis industry transition was looking to scale up its current flower-export activities. I believed that the F1 hybrid autoflowering varieties from F1 SeedTech could be part of the solution, so I convinced the owner and head grower to run a small trial of 500 seeds in late 2022 – although I think they were half-expecting to prove me wrong, because they were convinced that they had the best cuttings!”



# Speed is an eyeopener

“The first real eyeopener was the speed: by the third week after transplanting from plug to pot, the plants from the F1 hybrid seeds already had flowers, while those from the traditional seed strains didn't. And by the sixth week into the trial, the plants grown from seeds were so densely full of flowers and had so few leaves, it was extreme! We were able to harvest huge amounts of flowers from them in around three-quarters of the normal time.”

“Plants with weight rather than volume are good news financially, of course, firstly because it means that the F1 hybrid varieties make optimal use of all the inputs – so nothing is being wasted – and secondly because they equal more production per square metre. Add to this the compactness of the plants, which allow us to fit more plants into the same amount of space, combined with the shorter growth cycles, and you get a significantly higher total annual yield. And on the topic of labour, because F1 hybrid seeds always produce a stable, uniform end product all the flowers can be sold as one batch, saving a lot of time and money.”

# Coping well with local challenges

“The combination of high temperatures of up to 40°C, the natural salinity of the water and the high humidity in Umdoni Farm's coastal location in South Africa often creates a water management problem for crops in the multispan greenhouse, but the plants from F1 hybrid seeds proved to be much more resistant against Botrytis. Moreover, the fact that they so clearly outperformed the traditional seeds in the trial demonstrates that they can cope well with all the other local challenges, which include regular power cuts and sub-optimal water, nutrients and soil quality.”



# Fine-tuning to perfection

“Customers in the pharmaceutical industry expect an extremely consistent level of quality, but the performance of plants from traditional seeds or even from cuttings is always a little unpredictable. With F1 hybrid seeds, you know that the same growth settings will produce the same repeatable results every cycle, which allows you to steer the crop precisely. We’re now working to fine-tune the settings to perfection so that we can develop a cultivation protocol that will guarantee maximum production time after time. This will make cannabis cultivation ‘foolproof’, so minimal training will be needed for new employees plus it will become easier to manage the operation remotely.”

## Full transition

“At the start of this year, a second trial of another 500 F1 hybrid seeds achieved over 10% more yield than the first. The whole team was so impressed that we’ve decided to run a full-scale trial with around 15,000 seeds, and we anticipate making a full transition. In fact, we have so much faith in First Lady F1 and Miss Beauty F1 that we’ve already registered them as our first two ‘house varieties’, and I will certainly be the first in line for further hybrid varieties from F1 SeedTech in the future. I can’t wait to see the whole greenhouse filled with a uniform sea of green thanks to F1 hybrid seeds!”

## Gamechanger

“Although autoflower seeds had a bit of a bad reputation in the past, extensive breeding work since then means that their quality is now as good as regular short-day varieties. As an added bonus, you don’t need to invest in expensive equipment or a high-tech greenhouse to grow them. It’s true that F1 hybrid seeds seem to have a higher purchase price, but all the benefits – speed, density, stability, uniformity and the reduced labour requirement, not to mention advantages such as easier logistics and storage – quickly outweigh the costs, resulting in a bigger gross margin. Therefore, they make perfect sense for Umdoni Farms... and also for many other growers who are looking for ways to scale up and commercialize efficiently, without compromising on quality. That’s why I truly believe that F1 hybrid seeds are a gamechanger for the whole industry.”



# Concrete results from Umdoni Farm's first trial (Oct-Dec 2022)

- 🌻 Germination rate: 95.8% (F1 hybrids) vs 69.6% (traditional seed strain)
- 🌿 F1 hybrids had higher phenotypical stability than the traditional seeds
- 🌻 F1 hybrids had a +25% faster growing cycle than the traditional seeds
- 🌿 Yield per year: 15-25% higher with F1 hybrids
- 🌻 Best Botrytis resistance: the F1 hybrid variety 'Miss Beauty F1'



# More information

For more information about the trial or to discuss the opportunities for improving your efficiency with F1 hybrid seeds, please contact Maikel de Bresser ([maikel@f1seedtech.com](mailto:maikel@f1seedtech.com)). Interested in consultancy on growing methods or plant nutrition, please contact Jeffrey Hinsbeeck ([jeff@druidnutrients.com](mailto:jeff@druidnutrients.com)).



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