

Developing
sustainable
plant
growing
solutions
together

Jiffy

GROWING SOLUTIONS



BRYANTS
NURSERIES

Transition to Peat Free

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Jiffy has the necessary resources to produce Peat Free mixes at 1Plant

No compromises, growers want and need the same 1st class performance on their mixes

1. A technical team capable of advising the best solutions
2. Multiple raw materials available, of which 24 are not peat.
3. 3 different precision mix lines, capable of handling and combining different materials
4. All our substrate locations are RHP, ISO 14000 and ISO 22000 (Food Safety) certified.

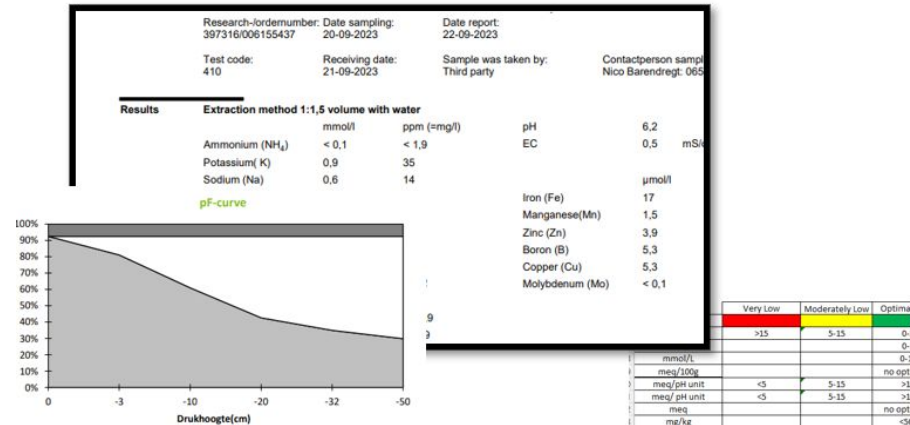
Always propose the best solution to the grower

No compromises, growers want and need the same 1st class performance on their mixes

Growers typically worry more with the actual performance of the mix, than with the materials used

The main goal is to have the right quality parameters in place, the list of raw materials is the tool-box we use to get the job done.

- pF curve, EAW, Buffer Water, RW, AFP
- EC, CEC, pH, pH Buffer Capacity
- NPK, soluble and available on the long term
- Particle size and structural stability
- Beneficial & Resilient microbe life



Out of 34 different raw materials, 24 are not peat.

No compromises, growers want and need the same 1st class performance on their mixes



More new materials are in the pipeline...

3 different precision mix lines, capable of handling and combining very different raw materials



No compromises, growers want and need the same 1st class performance on their mixes

- Fibrous or granular, Heavy or Light, Lose or sticky?
- Mixing different types of peat is often not that difficult, they tend to have similar densities and structures, but combining very different raw materials can be a challenge.
- This is particularly important when we consider the needed homogeneity for propagation mixes or any small pot size.

Food Safety Certification at the heart of each Jiffy operation

No compromises, growers want and need the same 1st class performance on their mixes

- Most renewable raw materials are not so stable as peat.
- Some promote bacterial growth
- All Jiffy locations are now ISO 22000 certified

INTERNATIONAL
STANDARD

**ISO
22000**

Second edition
2018-06

**Food safety management systems —
Requirements for any organization in
the food chain**

*Systèmes de management de la sécurité des denrées alimentaires —
Exigences pour tout organisme appartenant à la chaîne alimentaire*

Peat free materials can be challenging

No compromises, growers want and need the same 1st class performance on their mixes

- Often high Respiration rates and Nitrogen uptake.
- They can be a source of other nutrients, like K, SO₄ or B.
- Often low in WHC, both EAW and Buffer Water.
- Most materials with low pH are only available with a low pH buffer capacity.
- Often not economical because of price, weight or difficulty to compress.
- Not easily available in large volumes, often implying multiple suppliers, qualities, etc.
- Certification can be void.

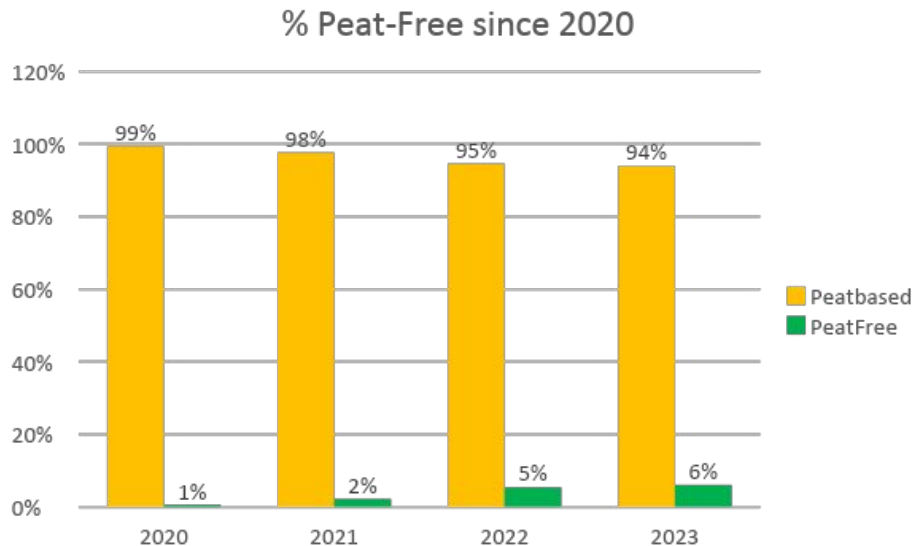
Jiffy has been increasing its share of non-Peat materials in our mixes at 1Plant, NL.



- From the 2019/20 till the 2022/23 season, the average non-peat content of the mixes produced at 1Plant has risen from 16% to 29%, almost doubling.
- However, that doesn't tell us much about how many m³ were coming from 100% peat free mixes.
- Most mixes are actually a mix of peat and non-peat materials.

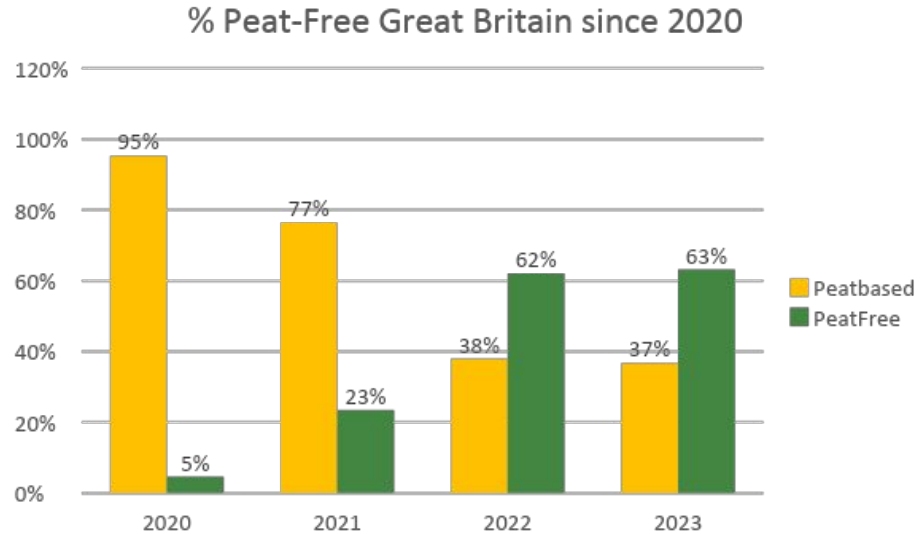
Jiffy has been increasing its share of non-Peat materials in our mixes at 1Plant, NL.

- From 1 to 6% worldwide



Jiffy has been increasing its share of non-Peat materials in our mixes at 1Plant, NL.

- From 5% to 63% in the UK

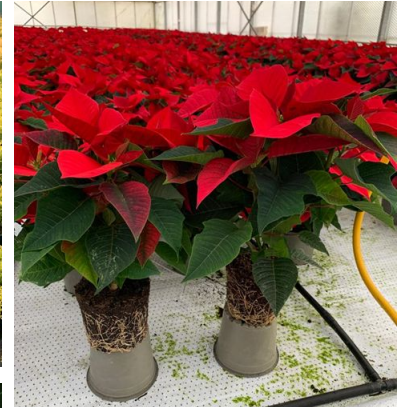


Crop Groups

- Soft Fruits
- Nursery Stock
- Perennials
- Bedding
- Herbs

Already many growers 100% Peat Free

Based on Jiffy's experience we have many proven mixes we can recommend that offer good results.



Peat Free Propagation – Loosefill Substrate



Preforma

- Peat free trials ongoing since 2021
- Have 3 Peat Free mixes available in our portfolio since beginning 2023
- These 3 mixes have demonstrated little, or no differences compared to the peat mixes.



Preforma

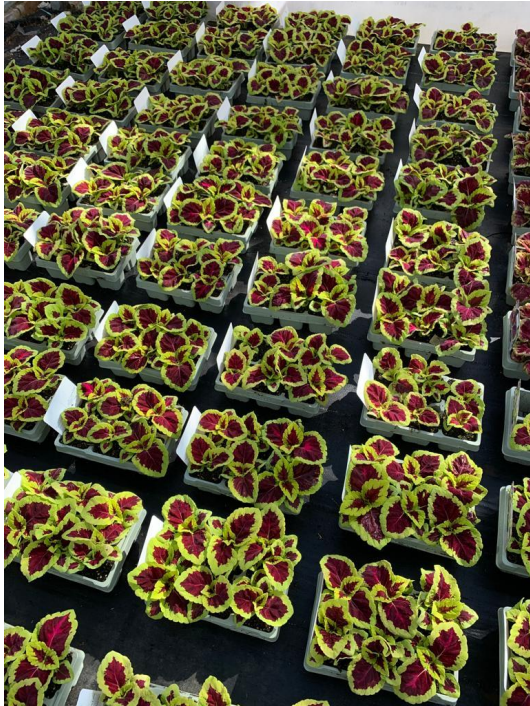




Who Are We?

- Bryants Nurseries are a wholesale nursery growing bedding plants, veg and perennials.
- Established in 1948, we annually grow 1.25 million packs and 750,000 pots.
- We supply about 150 garden centres and a handful of landscapers in Southern England.

Peat Free Trials



- We began peat free trials early 2021, seeing the industry was heading in that direction.
- We held a healthy scepticism of it initially – but it seemed wise to get experience with peat free before our hand was forced.
- After 6 months we had seen enough to believe we could grow in peat free without any disasters – while learning that peat free needed to be treated quite differently to peat to achieve the best results.
- Jiffy were the main source of our peat free trial material initially and since then have been very supportive with advice, guidance and analysis.
- In 2022 we took the leap and moved our production to be fully peat free.

Moving Forward With Peat Free



- After a successful trial we gave Jiffy the opportunity to supply the bulk of our substrate for 2022, and then again in 2023.
- We tried various components and mixes along the way. We are currently settled on a General Bedding Mix for pack and small pots, and a Shrub mix for most pots 1 litre and larger.
- We did continue trials of other peat free substrates in 2022/23, comparing different options as they developed. We've found significant differences in performance between the mixes from different suppliers.
- In 2024 we're planning to produce all pots and packs in Jiffy peat free mixes.

The three main challenges we faced switching to peat free were:

- **Watering:** The watering regime is different to peat, and every peat free mix is different. Early on we tended to over water, it took our growers time to adjust to the new substrate.
- **Feed & Nutrition:** With Jiffy's assistance we tinkered numerous times with the recipe to get it right. We revised our liquid feeding, and experimented with compound feeds instead of straights. We adopted the Shrub mix when it was clear that perennials were struggling in the bedding mix.
- **Flowability:** Some of our machinery coped poorly with peat free mixes. Tray fillers jammed up. Bale breaker chains slipped cogs. Packs no longer filled evenly. After a few early tweaks we felt the Jiffy mixes were the most reliable through the mechanised production process.



Outcome

- It took us 12-24 months to become fully comfortable growing in peat free.
- As we head into 2024 we're confident that we can continue to build on our experience and knowledge.
- We know that we can produce quality crops in Jiffy peat free, having come to terms with the different growing requirements.

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