

# Vanilla and spice next to bloom in Dutch greenhouses

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University of Wageningen researcher Filip van Noort and vanilla grower Joris Elstgeest inspect vanilla orchids, part of four years of ground-breaking research

Flowers more exotic than the humble tulip will soon flourish for the first time in Dutch greenhouses after intensive research into growing the capricious vanilla orchid to harvest one of the world's most expensive spices.

In the middle of potato fields in a central Dutch rural town, scientists from Wageningen University have for the past four years been nurturing [vanilla](#) orchids. And their research has been deemed a success.

"Based on our information, businesses believe vanilla is a plant with a lot of potential for Dutch greenhouses and have decided to start growing it," said researcher Filip van Noort.

How many orchids will be planted will be decided at the start of the next growing season in the spring, and it will take at least three years before the first Dutch-grown vanilla hits the market.

In Bleiswijk, home to the ground-breaking research, vines from about 100 plants stretch metres high in hot, tropical greenhouses. Hidden under fleshy, oval-shaped leaves are the buds, that will eventually become the vanilla pods so prized by chefs the world over.

"The challenge is to ensure the plants blossom and then to be able to pollinate them in a cost-effective way," said van Noort.

## **Black gold**

Cultivation is hugely labour intensive. The orchid's flowers only last one day and must be pollinated by hand if they are to produce fruit. So it was an apt challenge for the Dutch—renowned for their green fingers and their expertise in greenhouse cultivation.



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"A few years ago we were looking for new plants which could be grown in Dutch greenhouses," explained van Noort.

The aim was to increase the variety of crops grown by Dutch farmers as they search for improved profits.

Vanilla made sense. Currently the Indian Ocean island of Madagascar holds a quasi-monopoly over world supply producing some 80 percent of global vanilla bean stocks.

It is also the world's second most expensive spice, with prices climbing to 350 euros (\$380) a kilo this month—compared with 60 euros in 2014.

"In the past the price was too low to be interesting. But today, with demand increasing, the prices are rising," said orchid expert Joris Elstgeest.

The long, black vanilla pods, with their distinctive caramel and at times woody scent, have to be collected by hand from the vines and then dried before being sold.

It is the sticky tiny black seeds scraped from inside the pods which are a baker's delight, lending an almost intoxicating flavour to everything from cakes and ice-cream.



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## **All organic**

Originating from Mexico, the vanilla orchid was brought to Europe by Spanish explorer Christopher Columbus. But all attempts to grow it in milder climates failed for lack of the type of bee which pollinated the flowers.

It was not until 1841 that someone on the island of Reunion figured out how to pollinate the flowers one-by-one.

That method finally paved the way towards large-scale production, with Madagascar proving the most effective of growers.

But even if prices fall and as other countries explore possible vanilla crops, Dutch growers believe it will prove a good investment.

In past decades, synthetic vanilla flavourings were increasingly adopted by the food industry. But with a return to all things authentic and organic, the real stuff is making a welcome return.

Bleiswijk vanilla is wholly organic, say its Dutch growers, unlike in Madagascar, they claim.



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Half of Madagascar's vanilla is exported to Europe, and a third to the United States. But clients say the quality has been slipping, with producers harvesting the pods before they reach maturity to cash in on the price boom.

Some Madagascans even speculate the vanilla industry is being used as a front for the illegal trade in rosewood — a sought-after product in China.

The Dutch consortium behind the project says it has already received lots of interest from local high-end restaurants as well as food companies.

The Netherlands is a global leader in the art of greenhouse growing with almost 10,000 hectares of this lowlands country set with rows of glasshouses growing all kinds of flowers, fruits and vegetables—compared to just 1,900 hectares in France.

And researchers are already setting their sights on other spices.

"We've also got black pepper, which seems to be adapting well," said van Noort, adding indigo used to dye blue jeans was another project.

And perhaps saffron—the world's most expensive spice derived from the saffron crocus—could be next to flourish here.

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