

# COLOMBA: GOOD— LOOKING, TASTY AND IMPRESSIVE YIELDS

TEXT WELMOED DE HAAN-BENEDICTUS PHOTOS JEANINE DEVELING, INDIRA DHUMNE, JITESH PATEL

One thing is certain: Colomba is more of a stud than a spud. Even after wilting away a little time in chilled storage, it looks as radiant as ever, but its beauty is more than skin-deep: a delicious table potato awaits inside. Growers find this variety extremely easy to work with, producing fantastic yields in no time at all. In this three-part story, we'll travel all the way to India, but first, let's pay a visit to the HZPC laboratory in Metslawier.



## THE QUALITY ASSURANCE OFFICER: Marijke Woudsma

At HZPC Research, one of the things Marijke and her colleagues work on is the propagation of potato plants. It's a highly meticulous task: they take cuttings from plants and place them in a medium - soil - in a little tub. Over the course of a few weeks, these cuttings then grow into new plants. Marijke goes into more detail: "It goes without saying that it's extremely important that we keep each variety separate. Everything is also done in sterile conditions. On top of that, we keep our so-called 'stock' at 4 °C. That stock forms the base material for all HZPC and STET varieties, and we regularly need to renew it to keep the plants in good condition. When we receive a request from abroad to send plants of specific varieties, this base material is where we start."

The plants that are propagated are eventually placed in a mailing tube with a little medium, so they can be transported to their various destination countries. Colomba plants, for example, are often shipped to India, where they are propagated further for use in mini tuber production. Once a request is received, the first step is to check whether the base material is still in adequate condition. Once the plants have been kept in chilled storage for four months, their quality will be lower than plants that have been kept chilled for just one month. "First of all, we take cuttings for a new stock tub with base material. If we don't do so, we lose it. If we believe the quality falls short, we continue to propagate before we ship. Sometimes, it can take a significant amount of time before the plants are ready to send — I don't think everyone realises that." Generally speaking, it takes around six days for the plants to get to India. The Tempex shipping box keeps them fresh for around eight days. Cooling elements are added to the box to prevent the plants from getting too hot, and LED lighting is used to simulate a circadian rhythm. If the plants spend too long on the road, or if they get stuck in customs, they soon perish. "When that happens, our customers are greeted by a pile of straw when they open the box. And we'll need to start the process of sending plants all over again", Marijke explains. →



THE DEPUTY GENERAL MANAGER  
OF MINI TUBER PRODUCTION:  
Indira Dhumne

Indira Dhumne is the deputy general manager of mini tuber production at Mahindra HZPC, a joint venture in India. In that role, she's responsible for research and development, quality, and — as per her job title - the production of mini tubers. Indira grew up in a region of India where little or no potatoes were grown, but since she started working with this crop in 2004, she's never looked back: "There are so many different sides to potatoes. Even after twenty years in the business, this crop still hasn't revealed all its secrets to me. And that's what keeps things so interesting." Once Marijke

Diana Toren, Gert Jan Feddes and Indira Dhumne.



(or one of her colleagues) has posted the Colomba plants, it takes a little while before the parcel lands on Indira's desk. "When the plants finally arrive in India, they go straight into quarantine for around eight to ten months. A year can often go by between the date Marijke sent the plants and me receiving them, so careful advance planning is of the essence," Indira says. Once the plants are received, they pass through the laboratory first, before heading out to the mini tuber production facility. From there, they go out to seed potato growers who grow the first, second and third generation. Colomba follows a slightly different process, however: "For this variety, we grow the first generation on our own fields, so we can keep a close eye on quality.

The mini tubers are grown in a greenhouse, meaning they've never spent time outside, and they've never had to deal with the climate here. Once the first generation is ready, they are passed on to our seed potato growers", Indira explains. Indira is excited about Colomba, and she's keen to explain why: "Potatoes harvested here generally end up in chilled storage. Most varieties look a little worse for wear after a while, but Colomba retains its radiant and stunning skin, stays looking completely fresh, and the tubers are all more or less the same size. A great-looking and uniform exterior is important in India and gets growers a better price: they end up with 60,000 to 70,000 more rupees in their pocket per acre. On top of that, this variety generates excellent yields and is easy to grow, particularly when fertilised. Ware potato growers can harvest their crop for the traditional market in as little as 70 days.

Alternatively, they can opt to harvest their potatoes after 100 days, following which they can go into storage. That said, Colomba has one major downside, especially in India: to keep the cost of seed potatoes under control, 90% of growers cut their seed stock in half. That leaves the potatoes more susceptible to rot, and only the most experienced growers know how to handle this properly." There is one final thought Indira is eager to share: "Colomba generates excellent yields, and is genuinely a quality potato. Few varieties can even get close, but that actually makes it a real challenge to us to introduce any new varieties."

THE GROWER:  
Jitesh Patel

Together with nine other Indian growers, Jitesh Patel runs Ronak Agro Foods, a grower firm with around 1,000 hectares of land. Expertise and innovation are what make Ronak stand out from the crowd. When asked, Jitesh explains it as follows: "We each have our own area of expertise, and we work as a team. We've got a grower, an agronomist, a microbiologist, and someone with lots of know-how in the field of drip irrigation. We import modern machinery from Germany, and we work using the latest technologies. Every year, we invite other Indian farmers to visit us during the potato season, so they can see and experience for themselves how we work. That way, we get to share our knowledge, and we hope to inspire others."

Twenty years ago, Ronak Agro Foods was the first to use drip irrigation in India. It sure took a while, but in the meantime, more and more farmers have started using this system. According to Jitesh, Indian farmers are never particularly quick to adapt to new circumstances: "We switched to drip irrigation when we were faced with drought in our region in 2002. By now, we've started using it across our entire firm. In other regions, water is not an issue, but lots of farmers fail to understand that you can save a huge amount of water using this technology, and that the potatoes you produce are much higher quality as a result." Even though the business mainly focuses on potato varieties for the potato crisp and French fry market, it decided to go all-in on Colomba — a true table variety — two years ago. And that gamble soon paid off: "Last year, we harvested Colomba in 95 days with a yield of 22 tonnes per hectare: an incredible result. The variety does well in the high temperatures we get during our potato season, and it grows well using our drip irrigation systems. On top of that, it needs a lot less fertiliser than other varieties. The response from the market is positive: Consumers particularly appreciate the taste and the great-looking skin", Jitesh concludes.

All these positives might leave a potato getting a little too big for its roots. Is there really nothing Jitesh would mark this variety down on? "We cut our potatoes in half before planting, and in high temperatures, these cut tubers do have a tendency to rot. Aside from that, the plants are less robust and a little smaller than you get with other varieties. Even so, we couldn't be more pleased with this variety. We started with 10 hectares, we then expanded to 50 hectares, and over the coming years, we'll be expanding that acreage even further."



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