

Around 1,600 brand new bananas grown on Dutch soil have been harvested in the greenhouse of *Neder Banaan* in Ede where researchers work on new cultivation methods and banana varieties that contribute to more sustainable banana cultivation worldwide.

The harvested Dutch bananas are used as an ingredient for banana cakes and a new specialty beer.

But the trunk and the banana peels are not wasted either: the peels are made into a vegan meat substitute and the trunk fibers are processed into lingerie and transport pallets.

The *Neder Banaan* greenhouse is the first and only banana greenhouse in the Netherlands. In the greenhouse, bananas are grown in an innovative way.

The banana plants are not grown in soil, but in pots with the substrate, made from coconut fibers.

Lifting banana plants from soil prevents attacks by a handful of enemies such as soil-borne fungi, bacteria and nematodes.

Saving the bananas

Fungi, such as *Fusarium*, the cause of *Fusarium wilt* or *Panama disease*, pose a global threat to banana cultivation.

WUR has therefore been exploring and researching [new cultivation methods and banana varieties](#) for years.

This is taking place under the guidance of Gert Kema, Professor of Phytopathology and spiritual father of the *Neder Banaan*. The knowledge the research generates is shared globally.

“If we do not develop new banana varieties and cultivation methods, the banana will perish,” Kema said.

“For consumers in the West, this may be bearable, but for more than 400 million people in the tropics, the banana is their main source of nutrition. For many farmers in the tropics, it is also an indispensable source of income. Therefore, we really need to take action.”

Most of the Dutch bananas from the greenhouse in Ede will soon end up in mini eclairs, small banana cakes and a special beer made from bananas.

Innovative companies that cooperate with Neder Banaan will utilize the banana peels and plants on which the bananas grow.

The peels are marinated and fried by the company [Banana Business](#), which creates 'Pulled Peel', a vegan meat substitute. [Musa Intimates](#) makes lingerie out of fibers extracted from the stems of the banana plant, and [Yellow Pallet](#) presses fibers into transport pallets: an environmentally friendly wood substitute.

"By using waste streams, less in the way of new raw materials is needed," Pieter Vink, Director of Neder Banaan said.

"Of course, we are innovating on a small scale, but worldwide, there are enormous volumes of plants and banana peels that currently end up as waste. We hope that our innovations inspire banana growers worldwide and contribute to a more sustainable sector."