

# Juice keeps two weeks longer

**Hoogesteger is using pulsed electric field technology for its fresh fruit juices. Now this Dutch company can deliver to the wider European market.**

TEXT ASTRID SMIT PHOTOGRAPHY HOOGESTEGER



If people ask me what I do, I always say 'I squeeze oranges', says Michiel van 't Hek, director of juice company Hoogesteger. 'It's really no more than that. Only the scale on which we do our squeezing makes our job more complex.' Every year, the Zwanenburg company produces 17 million litres of juice, 60 percent of which is orange juice and 40 percent other juices. Many producers have the fruit pressed in the country where it is harvested, ship the concentrate to the Netherlands and add water there. Not Hoogesteger though. This company ships the fruit to the Netherlands and makes juice from it without adding anything or pasteurizing it. 'That's why our fruit juices taste much more lively', says Van 't Hek. But there is a downside to this approach – the fresh juice has a shelf life of only eight days. That's enough for the Dutch market but not if you want to deliver to other countries. 'Hardly any supermarkets sell fresh juice in the countries around us so there is a real gap in the market for us to exploit', says Van 't Hek. But that would require Hoogesteger to extend the shelf life of its juices.

So the company approached Wageningen UR Food & Biobased Research, which already had experience with the application of pulsed electric field (PEF) technology. PEF involves exposing food to brief electric pulses. The pulses deactivate the microbes. 'We wanted to know whether this technology was suitable for fresh juice. Are the microbes deactivated enough and do the nutritional value, vitamins, flavour and aroma remain reasonably intact?' explains Van 't Hek. The researchers were able to demonstrate that this is indeed the case: the processed juice has a shelf life of 21 days. The researchers also helped Hoogesteger incorporate the technology into its production process. 'We worked out how to scale it up from lab to factory and coordinated the exercise', says Marjolein van der Glas, business development manager at Food & Biobased Research. Hoogesteger has been using the PEF technology since November 2011. Van 't Hek: 'We mainly use PEF for fruit juices destined for the Dutch catering sector but we also now supply several supermarkets in Germany and Belgium.' ■



**‘We now supply several supermarkets in Germany’**

