SafeTraces raises funding to help market push

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SafeTraces has raised $1.5m via a funding round to accelerate product development, sales and marketing ahead of going to market by the end of this year.

The product is SafeTracers – an invisible, edible, tasteless DNA barcode that can be applied on food as a coating to enable producers, processors and retailers to gain source and safety assurance.

Each set of microparticles has a unique DNA ‘barcode.’ By taking a swab of the surface, traceability information can be gained from the food.

It is applied in minute amounts, would not have to be labelled and starting materials are not known to be allergens.

Progress from last year and future plans

When we spoke to the firm at the start of 2015, it was targeting end of that year for market launch and Anthony Zografos, founder and CEO, said it was doing pilot tests at the end of last year before it launched into the wider market.

There was also a name change last year from DNATrek to SafeTraces.

“The core product development is completed and we are fine-tuning for specific applications. We have three to four final customers interested in implementing it. One works with apples, one in palm oil, one in olive oil and the other in leafy greens,” he told FoodQualityNews.

“The idea is the customer generates unique barcodes on site and applies them on the product as part of the coating process or for others as part as washing.”

Zografos said it wants to have two or three core customers and commodities by next year.

“We are working with an apple producer in Washington State and hope to expand for adoption in this region, the same with the customer in leafy greens and the chocolate producer for tracing sustainable palm oil,” he said.

“We also have had discussions with a UK customer of ground beef. We tested the waters in the EU with ground beef, you need country by country approval, but we got preliminary approval.
“People we talk to are out of options... desperate for new technology and very open. New customers that are not desperate are very impressed that it exists but sometimes ask why they should pay for it and there is skepticism about the consumer reaction.

“FSMA [has boosted business] a little bit not a ton, most customers are not doing this for FSMA compliance, it is to meet business objectives - people have problem they want to solve.”

SafeTraces' technology is patent-protected with four US patents, two pending US patents and two pending international patent applications.

SafeTracers are recognized as GRAS (Generally Regarded as Safe) by the FDA. The technology was developed by Lawrence Livermore National Laboratory.

**How technology functions**

How it is applied depends on what it is applied to with options include packaging, nutritional supplements, pharmaceuticals and skin care products.

It can be lifted off and analyzed using polymerase chain reaction (PCR) so a tainted apple can be traced back to the orchards.

“We have a small device it is slightly larger than a hand held barcode reader and you can read [the barcode] anywhere – in a plant, as a distributor, exporter or retailer,” said Zografos.

“It costs $1 per test and takes 15 minutes to determine the origin, contrast that with technology today that takes weeks.

“The bandwidth is very large, there is sufficient bandwidth to have the producer, lot date and for specific applications we can add more information by adjusting the bandwidth.

“We haven't come across a product that it won't work on, fresh seafood is very difficult and in terms of economics it might not be viable but we are trying to come up with a way.

“Every commodity, generally speaking, has a step in the processing where it can be applied, that lends itself to application of the barcode so there doesn't have to be big changes.”

The round was led by Maumee Ventures, the VC arm of The Andersons, Inc.

Elliott Grant, SafeTraces board member and CEO of Shopwell Labs, said assuring customers of origin, purity and safety are essential in today's food industry.

"SafeTraces' DNA-based approach is elegant and compelling, because it doesn't force the food industry to add costly steps to their processes. Their solutions are perfectly timed to help growers, shippers, and manufacturers meet rising consumer expectations and the tougher regulatory environment."
DNA barcode traceability tech ready for launch

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