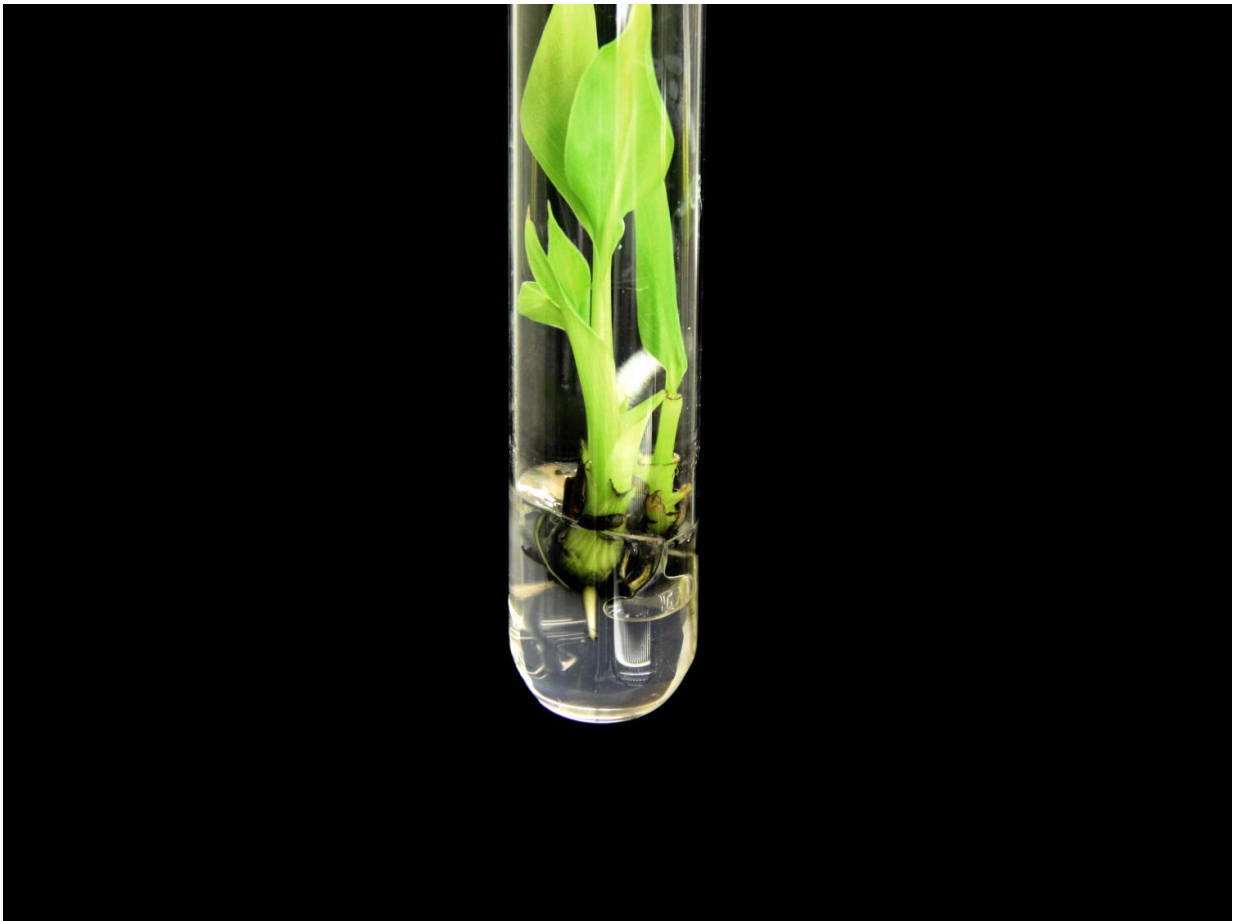


Peruvian potatoes to join world's largest banana collection in Belgium

January 23 2017



For 30 years, KU Leuven has been home to an impressive collection of bananas that already contains over 1,500 varieties and is the biggest in its kind. The collection is recognised as world heritage and will soon be expanded with another food crop: 8,000 potato varieties of the International Potato Centre in Peru are coming to Leuven. Credit: © Bioversity International

For 30 years, KU Leuven (University of Leuven, Belgium) has been home to an impressive collection of bananas that already contains over 1,500 varieties and is the biggest in its kind. The collection is recognised as world heritage and will soon be expanded with another food crop: 8,000 potato varieties of the International Potato Centre in Peru are coming to Leuven.

"Here in Leuven, we have 1,536 of the estimated 2,000 banana [varieties](#)," says Professor Rony Swennen of the KU Leuven Laboratory of Tropical Crop Improvement, which manages the banana collection. The collection now falls under the umbrella of the United Nations as the 'Bioversity Musa Germplasm International Transit Centre'.

To preserve this many varieties, the bioengineers use a cold chamber - containing test tubes with small banana plantlets of 3 to 4 centimetres—and cryotanks with plant [stem cells](#) in liquid nitrogen at a temperature of -196 degrees Celsius. "By using this method of cryopreservation, we can preserve the stem cells for hundreds of years and even regenerate them to a normal plantlet."

The CIP, the International Potato Centre in Peru, manages a collection of potatoes, sweet potatoes and other tuber and root crops from the Andes, and is convinced of the success of the technology used in Leuven. "They also use cryopreservation to preserve potatoes and will soon send us a copy of their own [collection](#) of 8,000 [potato varieties](#)," Swennen continues.



For 30 years, KU Leuven has been home to an impressive collection of bananas that already contains over 1,500 varieties and is the biggest in its kind. The collection is recognised as world heritage and will soon be expanded with another food crop: 8,000 potato varieties of the International Potato Centre in Peru are coming to Leuven. Credit: © Bioversity International

Cryopreservation can also be used for many other plants: "You can apply this technique to all plants that don't produce their own seeds, such as most bananas, or plants whose seeds are difficult to stock, such as coconuts. By doing so, you could build a counterpart to the Svalbard Global Seed Vault, the world seed bank on the Norwegian island of Spitsbergen."



For 30 years, KU Leuven has been home to an impressive collection of bananas that already contains over 1,500 varieties and is the biggest in its kind. The collection is recognised as world heritage and will soon be expanded with another food crop: 8,000 potato varieties of the International Potato Centre in Peru are coming to Leuven. Credit: © Bioversity International

Provided by KU Leuven

Citation: Peruvian potatoes to join world's largest banana collection in Belgium (2017, January 23) retrieved 2 May 2024 from <https://phys.org/news/2017-01-peruvian-potatoes-world-largest-banana.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.