

## 《NASA researches space farming in Peru》

In the latest Hollywood box office hit, *The Martian*, actor Matt Damon plays a botanist who discovers how to grow potatoes on the Red Planet. Now, US scientists are conducting an experiment that will bring them a step closer to making that a reality in Peru.

The U.S. space agency, NASA, just touched down in Peru... a development that some might say is no small potatoes, figuratively speaking. NASA will be working with the International Potato Center to take the earthly tuber some 400 million kilometers away.

to the earth's neighboring planet, Mars.

It sounds like a case of science imitating science fiction but the U.S. space agency is working on the birthplace of the potato to see if the humble spud really can be grown on Mars, just like in the Hollywood movie.

In the film, *'The Martian'* the protagonist is a botanist who grows potatoes on the Red Planet.

The planet's surface gravity is just one third of the Earth's, and it has an atmosphere mostly made up of carbon dioxide but lacking oxygen. These NASA-images reveal just how harsh conditions are but, as in the film, potatoes could grow there.

Odds are, says Valdivia, these highly nutritious vegetables could colonize Mars before humans do.

The challenge is finding the right kind of potato from the 45-hundred varieties stored at the center which could survive in the planet's extreme conditions.

The team will simulate Martian atmospheric conditions in a laboratory, using soil from Peru's Pampas de La Joya desert, when the experiment begins. The successful spuds would be cryogenically frozen in a trip that would take more than nine months to be cultivated in a controlled dome on Mars. Mashed, fried or roasted; potatoes are set to be the first home-grown meal eaten by the Red Planet's first human explorers.