

'Cherry tree from space' mystery baffles Japan

April 11 2014, by Shigemi Sato



A cherry tree in bloom, grown from a cherry pit that spent time onboard the International Space Station (ISS), is shown at the Ganjoji temple in Gifu city, central Japan, April 3, 2014

A cosmic mystery is uniting monks and scientists in Japan after a cherry tree grown from a seed that orbited the Earth for eight months bloomed years earlier than expected—and with very surprising flowers.

The four-year-old sapling—grown from a cherry stone that spent time

aboard the International Space Station (ISS)—burst into blossom on April 1, possibly a full six years ahead of Mother Nature's normal schedule.

Its early blooming baffled Buddhist brothers at the ancient temple in central Japan where the tree is growing.

"We are amazed to see how fast it has grown," Masahiro Kajita, chief priest at the Ganjoji temple in Gifu, told AFP by telephone.

"A stone from the original tree had never sprouted before. We are very happy because it will succeed the old tree, which is said to be 1,250 years old."

The wonder pip was among 265 harvested from the celebrated "Chujohime-seigan-zakura" tree, selected as part of a project to gather seeds from different kinds of [cherry trees](#) at 14 locations across Japan.

The stones were sent to the ISS in November 2008 and came back to Earth in July the following year with Japanese astronaut Koichi Wakata, after circling the globe 4,100 times.

Some were sent for laboratory tests, but most were ferried back to their places of origin, and a selection were planted at nurseries near the Ganjoji temple.

By April this year, the "space cherry tree" had grown to around four metres (13 feet) tall, and suddenly produced nine flowers—each with just five petals, compared with about 30 on flowers of the parent tree.

It normally takes about 10 years for a cherry tree of the similar variety to bear its first buds.



Japanese astronaut Koichi Wakata holds a pack of cherry seeds in the International Space Station, April 13, 2009

The Ganjoji temple sapling is not the only early-flowering space cherry tree.

Of the 14 locations in which the pits were replanted, blossoms have been spotted at four places.

Two years ago, a young tree bore 11 flowers in Hokuto, a mountain region 115 kilometres (70 miles) west of Tokyo, around two years after it was planted.

It was of a variety that normally only comes into flower at the age of eight.

Cosmic rays

The seeds were sent to the ISS as part of "an educational and cultural project to let children gather the stones and learn how they grow into trees and live on after returning from space," said Miho Tomioka, a spokeswoman for the project's organiser, Japan Manned Space Systems (JAMSS).

"We had expected the (Ganjoji) tree to blossom about 10 years after planting, when the children come of age," she added.

Kaori Tomita-Yokotani, a researcher at the University of Tsukuba who took part in the project, told AFP she was stumped by the extra-terrestrial mystery.

"We still cannot rule out the possibility that it has been somewhat influenced by its exposure to the space environment," she said.

Tomita-Yokotani, a plant physiologist, said it was difficult to explain why the temple tree has grown so fast because there was no control group to compare its growth with that of other trees.

She said cross-pollination with another species could not be ruled out, but a lack of data was hampering an explanation.

"Of course, there is the possibility that exposure to stronger [cosmic rays](#) accelerated the process of sprouting and overall growth," she said.

"From a scientific point of view, we can only say we don't know why."

Wakata is back aboard the ISS, where he is in command of the station.

The astronaut took part in a video link-up on Thursday with Japanese

Prime Minister Shinzo Abe and US Ambassador to Japan Caroline Kennedy, chatting about his daily life hundreds of kilometres above the Earth.

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