

Tomatosphere: Tomato Seeds In Students' Hands, After 18 Months In Space

November 16 2005

The 400,000 tomato seeds that were brought back to Earth aboard the Space Shuttle Discovery on August 9 were in the spotlight Monday. Canadian Space Agency Astronaut Robert Thirsk, accompanied by 550 students, kicked off the fifth and final year of the Tomatosphere project.

The 2005-2006 season presents a unique opportunity for students across Canada. They will work with seeds that have spent 18 months in the hostile environment of space.

"This is a novel experience for Canadian students," Robert Thirsk said. "It is a once-in-a-lifetime chance to perform experiments with a payload that has spent such a long time in space."

For Dr. Mike Dixon, Professor and Chair, Department of Environmental Biology, University of Guelph, "Tomatosphere has provided Canada with an excellent opportunity to put a high-quality science learning experience for students in the context of a uniquely Canadian contribution to space science. The realistic prospects of long term human space exploration requires the technology of biological life support and this small step is helping to incite the next generation of scientists and entrepreneurs in this field."

Richard Worsfold, Director of Business Development, Centre for Earth and Environmental Technologies at the Ontario Centres of Excellence (OCE) agrees, adding, "In order to be competitive, Canada needs bright minds focused on innovation and discovery in science. If we want great

scientists in the future, we need to develop curiosity and passion for the subject among young people in our schools today. Tomatosphere is the kind of initiative that will make this goal a reality. We are delighted to have participated in the project since day one."

The Tomatosphere project was undertaken with private and public sector partners and launched in 2000. Since then, over 387,000 young Canadians have had an opportunity to learn about the science of space farming and the role of plants as a source of food, water, and oxygen, and as a way to eliminate the carbon dioxide exhaled by crew during space missions to Mars.

"Heinz is proud to have been a founding sponsor of Tomatosphere," said Scott Makey, Agriculture Manager, Heinz Canada. "Given our experience with tomatoes for more than 130 years, this versatile plant not only looks and tastes great but it provides much needed, vitamins, nutrients, antioxidants, and oxygen necessary for future space missions."

Agriculture and Agri-food Canada research scientist, Andrea Labaj shared the critical value of agricultural research on Earth and in space with the middle school students commenting, "Without agricultural research there would not be food as we know it today-abundant, safe, high quality and nutritious. This is what agricultural research will continue to strive for now and in the future whether here on Earth or in space."

For the 2005-2006 school year, there are already 167,000 students from more than 5,200 classrooms across Canada that have registered to take part in Tomatosphere.

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