

EARTH'S SECRETS
How might soil bacteria be affected by global warming?



BIOLOGISTS DIG DEEPER

Canada's new Biotron superlab contains miniature chunks of the natural world that will help us predict the impact of climate change on living organisms

BY LINDSAY BORTHWICK

A GROUP OF PLANT SCIENTISTS GATHERED IN VIENNA IN 2005 AT THE International Botanical Congress. The meeting was pretty much what you would expect until its conclusion, when the congress declared: "As a matter of urgency, facilities for controlled, ecosystem-scale experiments are required now." Without a better toolbox to study how the natural world responds to global climate change, "sustained human habitability of Earth" would be at risk.

Fortunately, just such a toolbox was already being designed by Norman Hüner, a Canadian biochemist and plant biologist. Hüner had begun work on his Biotron Institute for Experimental Climate Change Research in 1999. In early 2008 it will open its doors, the first facility in the

Peace in The Garden

LAST FALL IN THE GERMAN city of Kassel, a group of about 15 women harvested a bumper crop of pumpkins, squash, and wine grapes from a small community garden. Nothing unusual there, perhaps—except that the women were from Morocco, Afghanistan, Somalia, and the former Yugoslavia.

The "intercultural garden" in Kassel is one of about 100 in Germany, but the only one run entirely by women. (And after the gardeners had long discussions about the hazards of pesticides, its produce will be totally organic.) The gardens began in 1995, after a group of Bosnian women in Göttingen, waiting out the Balkan conflict, told social workers how much they missed the famous plum and apple orchards of Bosnia's Drina Valley.

There has been adversity along the way. A garden in Berlin had to be placed under police protection after it was targeted by neo-Nazi protesters. In Cologne the gates of another garden have been destroyed three times. And it isn't always easy to coax traditional crops such as Afghan mint, coriander, and Iranian leeks from the mineral-rich German soil. Yet the gardens thrive. Says Behoumi, a 31-year-old from Morocco, "Without the beauty of the garden I could not survive."

—ANGELA BOSKOVICH

Annual per capita water consumption in the United States: 660,430 gallons. In China: 184,920 gallons

