



A Bolivian university student, above, demonstrates a solar seed germinator. Bolivian farmers use compost, below, and greenhouses, right, to grow crops in their country's mountains.

MSU Scientists Assist NATIONAL GUARD Partnership

By Bob Ratliff
Photos by Mike Collins



The Mississippi National Guard has enlisted the help of MSU in a partnership with a South American ally.

Bolivia, a landlocked South American country, participates in the National Guard State Partnership Program, which matches U.S. states with countries in Eastern Europe, Asia, Central America and South America to pursue activities of mutual benefit.

Bolivia is Mississippi's partner country, and the partnership includes cooperation between the Mississippi National Guard and the Bolivian military. It was that partnership that brought a group of Mississippi State University scientists to the mountainous region of South America in 2005.

"We became aware of the program through the Mississippi Air National Guard unit in Jackson," said Mike Collins, head of the MSU Plant and Soil Sciences Department. "Our goal was to assemble a team to provide assistance with horticultural crop production, cheese production and to improve livestock feed."

Collins was a member of an MSU team that also included horticulturists Christine Coker and Bill Evans and food scientist Julie Wilson. Texas A&M animal scientist Ronald Richter also accompanied the group on the six-day visit funded through the Mississippi National Guard.

The group flew to the Bolivian capitol of La Paz, where they spent a day getting acclimated to the 12,000-foot elevation before head-

ing to the “Alto Plano” area near Lake Titicaca. Their initial work was with Bolivian marines at a base in the area. The Bolivian military is made up primarily of conscripts, some as young as 14.

“One of the primary objectives of the Bolivian military is vocational training that the young soldiers can take back to their villages,” Coker said. “Teaching these young men to efficiently grow food not only helps feed a military base, it also teaches them how to feed villages throughout the country.”

The group’s object on the trip was to listen and learn as much as possible about the area’s food-production situation, both on the local military base and in surrounding villages. Although resources are limited, Coker noted that the Bolivians do a good job of producing a small number of greenhouse crops.

“Their greenhouses appear primitive, with mud walls and thick plastic roofs supported by rebar. However, they use compost and manure to do a very good job of producing several crops, including lettuce, radishes and herbs,” she said. “What they lack is knowledge of other crops they could grow very well and that would greatly improve their diet.”

A second trip to Bolivia is planned for 2006, and the group has set some goals that could have long-lasting impacts, including possible student exchanges.

“We see a real opportunity for agricultural student exchanges with Bolivia,” Collins said. “Our graduate students would benefit from learning about production under the conditions that exist in the mountainous areas of the country and training Bolivian students here in horticulture, livestock production and other areas could have real long-term value for their country.”

