Agricultural Challenges and Solutions: Organic Farming, Hebei Province, China

Summer Internship  May 22- July 18, 2014

Introduction

This internship builds on an ongoing collaboration between Cornell and Hebei Qimei Agricultural Science and Technology Ltd, an organic vegetable company located in Handan City, Hebei Province, China. The company – called ‘Qimei’ – is currently in a period of expansion, and questions regarding soil management to maintain and improve crop yield and quality need to be addressed urgently.

Professors Jane Mt. Pleasant and Robin Bellinder of the Cornell Department of Horticulture will supervise this internship.

Purpose of the internship

1) To provide Cornell university students an international experience in organic vegetable production in northeast China for 8 weeks, and

2) To provide the partner company, Qimei Agricultural Science and Technology Ltd., with scientific expertise in organic production methods towards the establishment of industry standards and a knowledge-sharing framework across organic producers in
China.

We intend the internship to make the following impacts:

- Enhanced productivity, soil health, and sustainability of Qimei’s farms and the contract farms with which they work;
- Improved understanding of best organic production practices for agro-ecosystems and soil types in northeastern China;
- Increased collaboration between Cornell University and organic producers and agricultural researchers in China.

**Background on Qimei**

Hebei Qimei Agriculture Science and Technology Co., Ltd is the entrepreneurial effort of CEO and co-founder Mrs. Yuqi Zhao. Confident in the potential of organic vegetable production in China, Mrs. Zhao harnessed the support of six partners to establish the company in 1999 and invest in purchasing 200 acres for the first Qimei production site. Here various varieties of asparagus were tested to see which would grow best in the sandy alluvial soils of the acquired production site. A five-acre processing facility was built in 2006, and by 2007 Qimei brand products were organically certified. In hopes of establishing the integrity of the Qimei label, Mrs. Zhao sought not only Chinese certification but also accreditation from international sources as well including the USDA, European Union, Canada, South Korea, Japan, and OCIA International (Organic Crop Improvement Association).

A pivotal moment in the company’s history occurred in 2008 when asked by the Chinese National Olympic Committee to supply the Summer Olympic Games in Beijing. Qimei successfully provided asparagus, garlic, and peanuts and was acknowledged by the Olympic Committee for its quality products and service. This opportunity helped to increase recognition and demand for Qimei products. Furthermore, the success of the Olympics coincided with a growing concern for food safety in China (spurred by food scandals such as the 2008 milk recall), which served to strengthen interest in and demand for organic foods domestically.

By 2011, the company had contracts (both individually and cooperatively by villages) with 3,000 farmers in 11 villages. Engaging with Qimei has had a reportedly positive impact on the surrounding rural communities. Selling organic vegetables to Qimei has not only increased farmers’ income by up to 200 yuan/mu but has improved production efficiency and increased income security. Qimei guarantees a target price regardless of market fluctuations, helping to mitigate risk and will pick up produce from farm sites saving farmers the time and money incurred in transportation.

An additional processing facility has been constructed, greatly expanding the need for organic crops, increasing the number of contract agreements with farmers (up to 11,000 farmers expected). To meet market demand, Qimei recognizes farmers will need to maintain productive and healthy land and thus are interested in means of promoting soil
health so as to ensure the continued success of the company.

In the summer of 2012 three Cornell undergraduates completed an eight-week internship at Qimei that focused on identifying practices that increase soil health and long-term sustainability of the soil resource. Their projects included: 1) sampling for soil health assessment and farmer surveys at five farm sites; 2) establishment of a compost experiment on two farm sites; and 3) establishment of green manure experiments at two sites. Four student interns in 2013 focused on soil health with projects including cover crops and compost. Summer interns in 2014 will continue with this work and may also work on variety selection and pest management.

**Skill Requirements**

Participants in this internship will ideally include students from Agricultural Science, Crop and Soil Sciences, International Agriculture and Rural Development, Plant Sciences, Plant Pathology, Integrated Pest Management, Natural Resources, or students with backgrounds in organic farm production.

**Timeline and Logistics**

**Friday, February 28, 2014:** Applications due. Send to Professor Jane Mt.Pleasant (jm21@cornell.edu) (see attached application)

**Friday, March 15, 2014:** Selection announced; visas and air tickets should be obtained as soon as possible.

**May 22, 2014:** Arrive in Handan City

**July 18, 2014:** Complete the internship

**Financial Support:** Qimei will cover accommodations and food costs. Interns will be housed at the Qimei facility in Handan City. Qimei also provides a stipend of $1000 for each student intern. Students are responsible for airfare.

Students may register for 2 credits of Independent Study

~~ For more information, Contact Jane Mt.Pleasant (jm21@cornell) or Robin Bellinder (rrb3@cornell.edu)