The World Vegetable Center Newsletter

28 November 2008

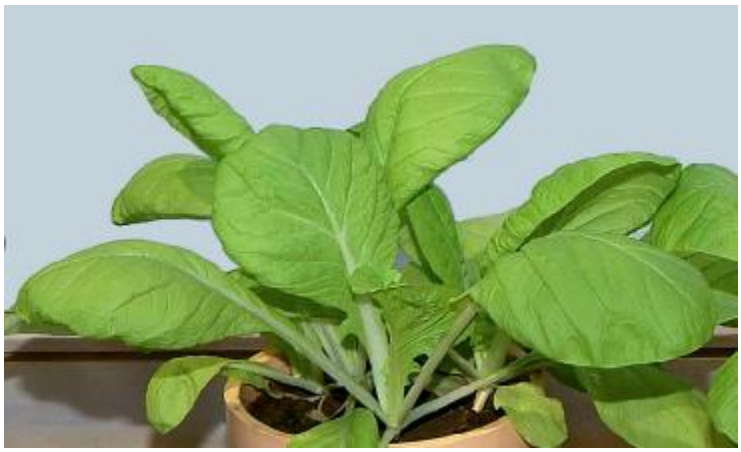
Published by Public Awareness and Information

Markets expand for indigenous vegetables in the USA

One of the features typically attributed to globalization is the spread of local consumer products—such as food—to other countries. While almost all major vegetable crops grown and consumed around the world did some "globetrotting" at one point in history, now lesser-known and often underrated indigenous vegetable crops are of interest to consumers worldwide.

A recent joint study by Rutgers University, the University of Florida, and the University of Massachusetts looked at the popularity of "ethnic" foods in the USA and how they have managed to change dietary habits beyond ethnic boundaries.

Ethnic markets have expanded at a rapid rate in recent years and represent an exciting opportunity for local farmers. Over the past few years, researchers conducted intensive surveys in major markets in the northeastern US to quantify this changing market demand and to identify crops popular among the four largest ethnic groups living along the country's eastern seaboard: Chinese, Asian Indian, Puerto Rican, and Mexican. To find how much they eat and what they are willing to spend, 271 people in each of the four ethnic groups were given choices of vegetables typically found in their community markets and considered potential candidates to grow on East Coast farms. The use of interpreters and bilingual surveys helped bridge any linguistic roadblocks.



Chinese selections included edamame, pak choy, oriental spinach, snow peas, oriental eggplant, edible luffa, baby pak choy, Napa cabbage, perilla, oriental mustard, and Malabar spinach. Asian Indians want eggplant, amaranth, bottle gourd, cluster beans, fenugreek leaves, mint leaves, mustard leaves, ridge gourd, white pumpkin, and bitter gourd. Mexicans prefer anaheim pepper, calabaza, calabacita, chili jalepeno, chili poblano, chili serrano, chili habanero, cilantro, and tomatillo. Puerto Ricans enjoy white and yellow sweet potatoes and chayote squash.

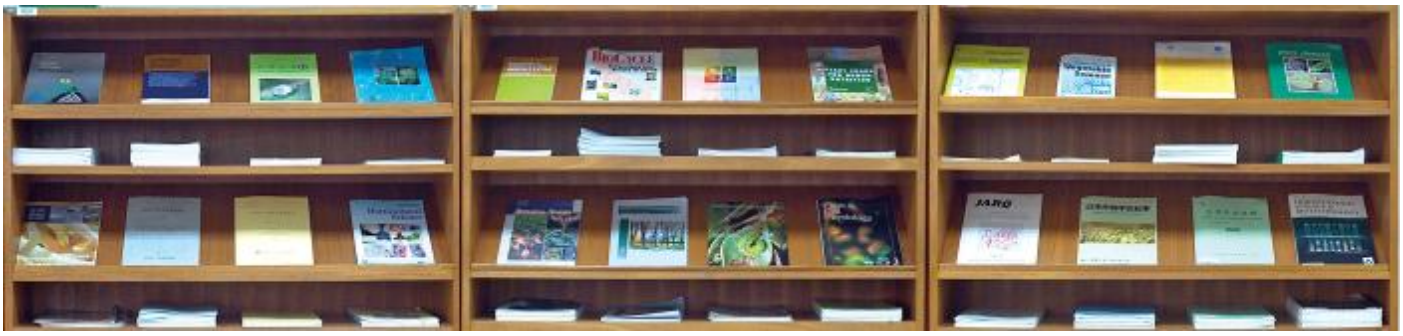
Market research has shown there is a very real shortage of many of these vegetables. Small-scale vegetable producers would do well to investigate the ethnic make-up of their local markets, and begin supplying the veggies ethnic customers seek. With dramatic fluctuations in the price of petrol increasing transportation costs and decreasing imports of ethnic crops from other countries and other regions of the United States, a new market for indigenous vegetables is ripe for the picking.

Source:
Freshplaza: Changing Demographics Provide Opportunities for Small Vegetable Producers, 3 November 2008 - www.freshplaza.com

The LIBRARY

New publications

...from the Crucifers SDI Bulletin



Bennett, R.A., Thiagarajah, M.R., King, J.R., Rahman, M.H. (2008). Interspecific cross of *Brassica oleracea* var. *alboglabra* and *B. napus*: effects of growth condition and silique age on the efficiency of hybrid production, and inheritance of erucic acid in the self-pollinated backcross generation. EUPHYTICA. v.164(2):593-601.

Gerendas, J., Breuning, S., Stahl, T., Mersch-Sundermann, V., Muhling, K.H. (2008). Isothiocyanate concentration in kohlrabi (*Brassica oleracea* L. var. *gongylodes*) plants as influenced by sulfur and nitrogen supply. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. v.56 (18):8334-8342.

Herrick, N.J., Reitz, S.R., Carpenter, J.E., O'Brien, C.W. (2008). Predation by *Podisus maculiventris* (Hemiptera: Pentatomidae) on *Plutella xylostella* (Lepidoptera: Plutellidae) larvae parasitized by *Cotesia plutellae* (Hymenoptera: Braconidae) and its impact on cabbage. BIOLOGICAL CONTROL. v.45(3):386-395.

Liang, J.G., Zhang, J.P., Zhu, L.H., Shi, Y.F., Wu, J.A., Wang, X. (2008). Studies on the resistance to cabbage anthracnose induced by plant growth-promoting rhizobacteria NK1. ACTA HORTICULTURAE SINICA. v.35 (4):595-598.

Liu, C.W., Lin, C.C., Yiu, J.C., Chen, J.J.W., Tseng, M.J. (2008). Expression of a *Bacillus thuringiensis* toxin (cry1Ab) gene in cabbage (*Brassica oleracea* L. var. *capitata* L.) chloroplasts confers high insecticidal efficacy against *Plutella xylostella*. THEORETICAL AND APPLIED GENETICS. v.117 (1):75-88.

Osaki, K., Tanaka, S., Ito, S.I. (2008). Pathogenicity of *Plasmodiophora brassicae* populations from small, spheroid, resistant-type clubroot galls on roots of clubroot-resistant cultivars of Chinese cabbage (*Brassica rapa* L. subsp. *pekinensis*) . JOURNAL OF GENERAL PLANT PATHOLOGY. v.74(3):242-245.

Ramchiary, N., Bisht, N.C., Gupta, V., Mukhopadhyay, A., Arumugam, N., Sodhi, Y.S., Pental, D., Pradhan, A.K. (2008). QTL analysis reveals context-dependent loci for seed glucosinolate trait in the oilseed *Brassica juncea* : importance of recurrent selection backcross scheme for the identification of 'true' QTL. THEORETICAL AND APPLIED GENETICS. v.116(1):77-85.

Xiao, L., Yi, B., Chen, Y.F., Huang, Z., Chen, W., Ma, C.Z., Tu, J.X., Fu, T.D. (2008). Molecular markers linked to Bn;rf: a recessive epidtatic inhibitor gene of recessive genic male sterility in *Brassica napus* L.. EUPHYTICA. v.164(2):377-384.

Cao, J., Shelton, A.M., Earle, E.D. (2007). Sequential transformation to pyramid two Bt genes in vegetable Indian mustard (*Brassica juncea* L.) and its potential for control of diamondback moth larvae. PLANT CELL REPORTS. v.27(3):479-487.

Ayalew, G. (2006). Comparison of yield loss on cabbage from Diamondback moth, *Plutella xylostella* L. (Lepidoptera: Plutellidae) using two insecticides. CROP PROTECTION. v.25(9):915-919.

Kim, H.J., Yun, C.Y., Han, Y.S., Lee, I.H., Kang, Y.J., Jin, B.R., Seo, S.J. (2006). cDNA sequences of two biliproteins, BP1 and BP2, from the cabbage white butterfly, *Pieris rapae* and their tissue- and stage-specific accumulation. INSECT BIOCHEMISTRY AND MOLECULAR BIOLOGY. v.36 (1):54-62.

FOCUS: ASIAN REGIONAL CENTER, THAILAND

Director General at the RTC

Participants in "Managing Vegetable Production and Marketing," the **27th Regional Training Course** recently convened by AVRDC – ARC at the Kamphaeng Saen (KPS) campus of Thailand's Kasetsart University (KU) received some special instruction from an experienced practitioner: AVRDC Director General Dr. Dyno Keatinge. The DG gave a presentation to the group on the Center's efforts to promote prosperity for the poor and health for all through the production of safe vegetables.

In his talk, Dr. Keatinge emphasized the role vegetables play in combating under- and over-nutrition, discussed trends in food consumption and output, highlighted some of the Center's research and outreach programs, and assessed the impact of decreasing donor contributions to agriculture.

The three-month-long, three-module course, launched on 3 November, aims to enhance the managerial skills of researchers and extensionists in Asia to meet the challenges of modern techniques in vegetable production, and to provide an environment for farmers to use their skills to realize the potential of modern agriculture. The course features lectures, demonstrations, and group discussions, and exposes students to actual field conditions in farmer field schools.

The Director General had stopped over in Thailand on his way to Arusha to attend the Global Horticulture Initiative board meeting, and while in the country took the opportunity to meet the representative of the President of KU on 19 November and express thanks to the Royal Thai Government for its continuing support of AVRDC, which reflects Thailand's desire to join with the Center to achieve poverty alleviation in the region. In the afternoon, Dr. Keatinge met with the acting Executive Director of the Asia and Pacific Seed Association (APSA), and was glad to learn APSA's Special Interest Group was very likely to support the bitter gourd proposal from ARC and ASEAN. He also had a look at the ARC in KPS, and provided very good advice on how to move forward in a consolidated manner.

— Dr. Peter Aun-Chuan Ooi,
Regional Director, Asian Regional Center

PEOPLE

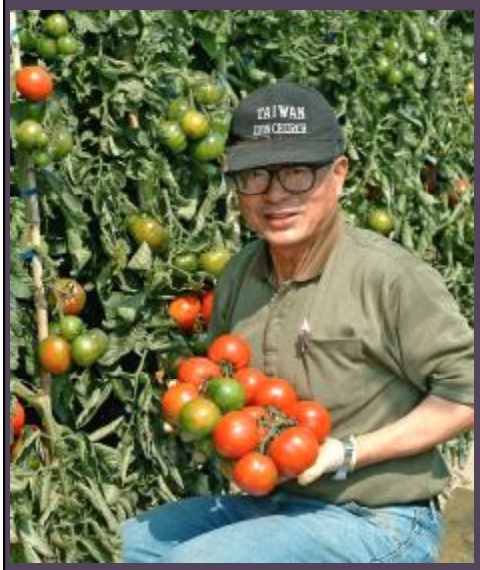
New staff

Ms. Nathalie Baxter has joined AVRDC's ACIAR-funded project, "Integrated Crop Management Package for Sustainable Smallholder Gardens in Solomon Islands" as a Horticulturist. Ms. Baxter is an Australian Volunteer and started work 21 July 2008 for an assignment period of 18 months.

Reach Nathalie at this e-mail address:

nathalie.baxter@worldveg.org

Farewell



Mr. Jen-tzu Chen retires from AVRDC after working as a tomato breeder for more than 29 years. His loyalty and contribution to the breeding program at AVRDC has been commendable, and his expertise will be greatly missed.

We wish him good health and happiness in the future.

Stay in touch with Jen-tzu: He can be contacted at: 06-288-2939; 0953-337-273 (cell phone). E-mail: *jtchen@totalbb.net.tw* Address: No. 31, Alley 6, Lane 3, Chung-shan 1st Street, East District, Tainan.

— Human Resources

SKETCH

Name: Peter Aun-Chuan Ooi

Home: Malaysia

Position: Regional Director

Why do you do what you do?

It is about an ongoing passion for helping the poor to get out of poverty and bringing research and development together to achieve that. It is about understanding poverty in the region and helping rural people understand ecology so that they can take advantage of ecological factors to keep pest populations down and sustain high production.

Why do you do it at AVRDC?

AVRDC is unique as an international institution that recognizes the synergy of research and development, and hence is able to bring together both in the field of ecology to improve vegetable production. Our pro-poor approach is very appropriate and inspires me to work at AVRDC. It allows us to focus on bringing science to farmers, an evolution from "research for development" into a participatory mode of working with farmers as partners in research.

Research

Biological control and Integrated Pest Management. As of November, 2008, a total of 212 publications on these and related development work of bringing science to farmers. Apart from my personal interest, I have been supportive of breeding and nutrition work at ARC.

What's next?

A strong ARC-AVRDC engaged in participatory farmer education and research will create a very positive image of what AVRDC — The World Vegetable Center stands for in terms of alleviating poverty and promoting health. As ARC completes its 27th Regional Training Course it has evolved into three separate modules, which may be taken singly or as a whole. This shows that ARC is "listening to the customers," and that ARC addresses the needs of the vegetable researchers and producers in the region.

Your favorite ASEAN experience

I learned the reality of IPM from farmers growing vegetables, rice, cocoa, coconut, and cotton. To watch farmers learn about the nature of ecology in keeping pests in check and seeing their faces glow and their eyes gleam with the process of discovery makes the effort so worthwhile. Farmers' understanding of IPM through discovery will enable sustainability in vegetable production.

Your favorite vegetable?

Many indigenous vegetables, including bitter gourd, *Sesbania* flowers, and *Acacia pennata* leaves.