

Filling the GAP with Agricultural Know-how

Issues of vegetable hygiene and safety are becoming increasingly important in Vietnam. In recent years the Southeast Asian country witnessed a series of major food scandals, provoked by poor hygiene, massive application of pesticides and improper post-harvest handling. But the times are changing in Vietnam and a “clean vegetable” logo printed on packages symbolizes the new era. This week, the Vietnamese news agency announced that Ho Chi Minh City is the first location in the country to develop clean vegetable production standards in the country’s effort to build a nationwide certification system called Viet-GAP.

Good Agricultural Practices (GAP) are an array of technologies and agricultural practices that assure high quality standards of agricultural products. Instead of applying conventional methods of cultivation, farmers who make use of GAP have to follow strict regulations on soil preparation, sowing and planting, tending, harvesting and post-harvest maintenance to ensure their production practices are safe for the environment and their products are high quality and safe for consumers. Producing agricultural products under GAP involves following a strict procedure overseen by an international or a local authorized organization. GAP products must have a clear origin and are welcomed

in pricy markets such as Europe, the US and Japan.

Currently, GAP are followed in only 5 percent of Vietnam’s vegetable area. Officials in Ho Chi Minh City are reported to aiming to increase the area under clean vegetable production to deliver up to 70 percent of local demand. By 2010, officials say, Vietnam’s clean vegetables are supposed to meet international standards.



After three years of implementing a pilot program on GAP, the country has still a long way to go. High production costs and the difficulties in applying a whole range of measures related with GAP slow down the adoption process. Farmers also feel discouraged by a jungle of procedures and standards. While the Ministry of Agriculture has issued 7 national procedures to be followed for agricultural produce, provinces and cities have issued hundreds of their own .



Standardization comes in as a key aspect here. “The ASEAN member states adopted a set of GAP standards in 2006”, says Peter Ooi, AVRDC’s Regional Director in Bangkok. “To operationalize ASEAN GAP at the level of farmers, we have upgraded our Regional Training Course (RTC) to train vegetable researchers and extension workers and to understand and adopt GAP.”

The 27th RTC will be conducted from 3 November 2008 to 30 January 2009. It is divided into three separate but inter-related modules: Module 1: From land preparation to planting; Module 2: Good Agricultural Practice (GAP) – Growing a healthy crop; Module 3: Harvest to Market. More information on the course is available on:

www.arc-avrdoc.org

Sources:

Vietnam: First ‘clean vegetable’ certificate issued in HCMC (15 August 2008; www.thanhniennews.com)

Vietnam: Struggling with GAP standards to export vegetables, fruit (11 August 2008; [Source: vietnamnet.vn](http://Source:vietnamnet.vn))

Vietnam takes first step on road to growing clean vegetables (22 July 2008; www.thanhniennews.com)

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New publications

... from Center staff

Lin, Y.M., Chou, I.C., **Wang, J.F.**, Ho, F.I., Chu, Y.J., Huang, P.C., Lu, D.K., Shen, H.L., Elbaz, M., Huang, S.M., Cheng, C.P. (2008). Transposon mutagenesis reveals differential pathogenesis of *Ralstonia solanacearum* on tomato and arabidopsis. MOLECULAR PLANT-MICROBE INTERACTIONS. v.21(9):1261-1270.

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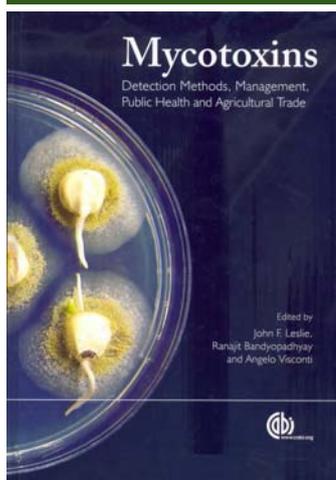
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Singh, R., Ellis, P.R., Pink, D.A.C., Phelps, K. (1994). An investigation of the resistance to cabbage aphid in *Brassica* species. ANNALS OF APPLIED BIOLOGY. v.125(3):457-465.

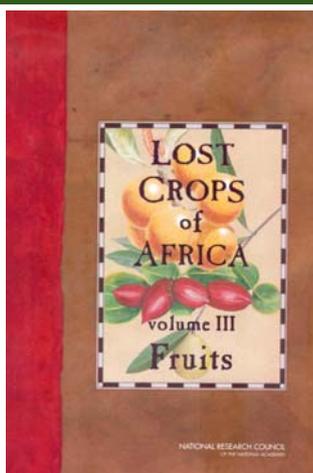
... New books available



Leslie, J.F., Bandyopadhyay, R., Visconti, A. (2008).

Mycotoxins: detection methods, management, public health and agricultural trade.

Wallingford: CAB International. xix, 476 pp.



National Research Council of the National Academies. (2008). ***Lost crops of Africa: volume III: fruits.*** Washington, D.C.: The National Academies Press. xxiv, 353 pp.

Web Link of the Week

“**Bioline International**” is a not-for-profit publishing service committed to providing access to quality research journals from developing countries. The site includes journals on the following subjects: health (tropical medicine, infectious diseases, epidemiology, emerging new diseases), biodiversity, the environment, conservation and international development. Access to individual titles can be free or fee based. The site contains peer-reviewed journals from Brazil, Cuba, India, Indonesia, Kenya, South Africa, Uganda, Zimbabwe and other countries.

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FOCUS: AFRICA

Show with Charisma: Over 1,500 Tanzanians at RCA's both at Nane Nane



The first week of August is the highlight of the year for everyone in Tanzania working in or with agriculture - including our colleagues at the Regional Center for Africa. Nane Nane is the premier agricultural show in Tanzania and attracts thousands of visitors. It features demonstrations and displays ranging from the latest agricultural production technology practices, latest varieties, agricultural machinery technologies, plant protection products and agricultural knowledge systems for a wide range of crops.

The show was held from August 1 to 8 under the theme "Green revolution is redeemer of the Tanzanian". RCA focused on

demonstrations of home gardens and elite indigenous and exotic varieties under the Center's new claim "Prosperity for the Poor, health for all". Micro-irrigation technologies for home gardens were also showcased.

Over 1500 people visited the RCA stand, representing policy makers, research scientists, extension and research personnel, the private sector, NGO personnel, school children and farmers. There was a lot of interest in indigenous vegetables. The crops on live display included Nightshade (*Solanum scabrum/villosum/americanum*), African eggplant (*Solanum aethiopicum/macrocarpon/anguivi*), amaranth, Ethiopian mustard (*Brassica*

carinata), spider plant (*Cleome gynandra*), jute mallow (*Corchorus olitorius*), vegetable cowpea (*Vigna unguiculata*), moringa, bitter leaf (*Vernonia hymenolepsis*), Sunhemp/Slenderleaf (*Crotalaria ochroleuca*), hair lettuce (*Launea cornuta*), wandering jew (*Commelina africana*), purslane (*Portulaca oleraceae*), sweet potato, kangkong (*Ipomea aquatica*), vegetable soybean, mungbean (*Vigna radiata*), comfrey (*Symphytum officinale*), Malabar spinach (*Basella alba*), Galinsoga (*Galinsoga parviflora*), black jack (*Bidens pilosa*), onion, and different types of tomatoes.

In addition, the Ministry of Agriculture of Tanzania and several regional seed companies showcased AVRDC varieties which they are already promoting and marketing successfully. AVRDC-RCA is working very closely with these seed companies in East and Southern Africa to commercialize elite AVRDC vegetable lines.

- Mel Olouch, RCA



SKETCH



Name: Kyeong-Ho Chung

Home: I am from Suwon, Korea (South), where the Rural Development Administration (RDA) headquarters and many affiliated institutions are located.

Position: Korean Second Scientist and Interim head of Legume Unit

Why you do what you do: I was interested in plant breeding.

Therefore, I went to the College of Agriculture, Seoul National University and received my MS and PhD degrees from the university in horticultural science. After completing PhD course work, I entered the National Horticultural Research Institute (NHRI, an affiliated institution of RDA) and worked as a stone fruit breeder.

Why you do it at AVRDC: Molecular breeding is the most efficient way to save time and money in plant breeding. When I was a junior scientist working as a stone fruit breeder, I always wanted to be familiar with molecular breeding. With promotion to a senior scientist, I was transferred to the Horticultural Biotechnology Division of NHRI and gained a valuable opportunity to be a seconded scientist to the headquarters of AVRDC—The World Vegetable Center. My

research activities supported by highly reputed scientists at headquarters will greatly improve my ability for future breeding work.

What's next? For two or three years at AVRDC, I will develop QTL mapping populations and construct the map for tomato late blight resistance. After returning to Korea, I plan to apply molecular breeding tools to my work.

Your favorite experience at the Center:

I had never kept a puppy before coming here. Although there were some troubles, especially because it ran away from home several times, I came to be more familiar with having a pet dog.

Favorite vegetables: Tomato, celery

CORNUCOPIA

AVRDC-The World Vegetable Center in the media

AVRDC-The World Vegetable Center has opened a project office at Solomon Islands Development Trust in Honiara, New Caledonia.

The centre develops vegetable varieties and technologies that improve vegetable production and nutrition.

This leads to more income generating and healthier diets for the poor.

The size of its smallholder garden project here is to increase the economic status and potential income generation opportunities for Solomon Islanders.

It is by developing and promoting improved crop management by people raising smaller vegetable gardens, such as villagers.

The centre is described as the world's leading research and development centre for vegetables.

It was founded in the Asian Vegetable Research Development Centre in 1971, with headquarters in Taiwan.

The AVRDC-Solomon Islands project is funded by the Australian Centre for International Agricultural Research.

This is through a project called 'Integrated Crop Management Package for Sustainable Smaller Gardens in Solomon Islands'.

Site Coordinator Dr. Ravindra Chandra Joshi joined this project on 14 July.

Joshi after arriving in Honiara, Dr. Joshi established the local project office together with locally hired liaison staff, Dr. Doreen Joshi.

The most recent addition to the project is Nalinika Thaker, from Australian Volunteers International, who joined last week.

She will help with the market and farmer surveys in the project in Honiara.

—This project in Solomon Islands will launch by the end of April 2008.

Dr. Mervyn C. Pridmore, AVRDC's Acting Deputy Director, said:

"The project had the inception and planning workshop in Honiara in July last year. Local project partners will soon start to work."

Ministry of Agriculture and Livestock.

Marketing Material Association

Asian Basin Rural Training Centre

South Wales Department of Plant Industries

World Hunger More Solomon

World Farmers Limited

Other partners include the Regional Assistance Mission (RAMSI), Community Expert Marketing Agency, World Vision International, and Australian Volunteers International.

The specific objectives of the project here are to:

1. Assess targeted socio-economic dimensions of smallholder gardens.
2. Evaluate selected 'new' vegetable varieties.
3. Evaluate selected low-input crop management practices such as low-cost drip irrigation and starter fertilizer, and manage major insect pests and diseases.
4. Build up and strengthen the capacity of local partners and collaborating institutions in carrying out research and extension activities.

A greenhouse has been built at Don House for vegetable production.

From the end of July replicator and non-replicated variety trials by various cultivators will be started.

These will be on Sluggery Kales, sweet pepper, tomato, chili pepper, yard long bean, common pumpkin, leafy onion, cabbage, etc.

The aim is to identify outstanding varieties for farmers evaluation.

With project office will be officially opened in a ceremony on 25 August, beginning a 24th.

'World Vegetable Centre launches project here' - Solomon Star, 9 August 2008

Meeting to enhance R&D of vegetables

The 14th ASEAN-ARC (Asian Vegetable Research and Development Centre) Regional Network for Vegetable Research and Development Meeting was held in Honiara, Solomon Islands.

Delegates to a group photo.

By HJ Ahmed Shafiq

AAVDC-ARC (Asian Vegetable Research and Development Centre) Regional Network for Vegetable Research and Development Meeting was held in Honiara, Solomon Islands, on 25th August 2008. The meeting was attended by delegates from Malaysia, Vietnam, Thailand, Indonesia, Asian Vegetable Research and Development Centre - Asian Vegetable Research and Development Centre (AVRDC-ARC) and officials from the Asian Secretariat.

Present and welcoming remarks were given by High Hon. Hajah Aidah Hj Mohd Hanifah, Acting Deputy Director of Agriculture and Forestry.

The meeting will also discuss and consider matters related to the status, funding mechanism and plans of action of projects being conducted by member countries. The program member countries and AVRDC-ARC, with the assistance of the Asian Secretariat will present the updated reports on the status of the program.

During the program being conducted by the committee, coordinated introduction and collaborative testing in field trials, including selection and conservation of indigenous vegetables by rural farmers in Asian countries. Evidence of change in soil measurement of quality and soil fertility. The meeting will also consider new projects proposals being submitted by member countries in their respective countries.

The delegates will also make a site visit to the vegetable trial and plots of interest during their stay in Honiara.

'Meeting to enhance R&D of vegetables' - Borneo Bulletin, 28 May 2008

Two recent media articles highlight the expanding work of the Center across Southeast Asia and the Pacific. Praising the Center's training work and projects, the Acting Deputy Director for Agriculture in Malaysia Hajah Aidah Hj Mohd Hanifah said, "our technical partner, AVRDC, specifically ARC based in Thailand has rendered remarkable assistance to the relevant ASEAN government agencies".

In the Solomon Islands a new project led by Ravindra Joshi has also made a good start having already established offices, trials green houses and a wide network of partners. The project offices will be officially opened in Honiara on August 25th.