

11 July 2008

World standard: Defining the proper tomato



What makes a tomato a proper tomato? What is a fairly easy task for botanists or biotechnologists who are experienced in identifying the crop's fingerprint evokes a polyphonous chorus when it involves consumers and therefore individual tastes. Any confusion will soon belong to the past. In an attempt to establish transparency and give consumer clear choices, an international standard for tomatoes was adopted at last week's meeting of the Codex Alimentarius Commission, which represents food-safety experts from 124 countries. The standard puts an end to seven years of intense debates between countries on what qualifies as a true tomato.

The Codex Alimentarius, or food code, is a global reference point for producers, processors, regulators, and traders. The commission of the same title was created in 1963 by the Food and Agricultural

Organisation (FAO) and the World Health Organisation to come up with food standards and guidelines on food products. The Codex aims to improve the quality and safety of fruit and vegetables. Its limits for toxins, bacteria and other compounds in foods are used by the World Trade Organization (WTO) as the public health benchmark countries should be allowed to enforce with import rules. Measures requiring more stringent standards are considered unfair barriers that can be challenged in the WTO court.

According to the new standard, tomatoes may come in one of four varieties based on shape, size, color, firmness, and defects. They may be round, ribbed, oblong or elongated, or cherry tomatoes and cocktail tomatoes. They must be whole, clean, free from off-odors, free of pests, and fresh in appearance. The standards are not legally binding, but under international trade rules countries can refuse to allow the import of products deemed below minimum quality. It's not forcing all tomatoes to be the same, but it recognizes tomatoes have to have certain characteristics in order to be transported internationally.

The standardization aims to benefit importing countries and consumers, but at the same time it puts pressure on producers to increase product quality. Although

their share of the export market is limited, smallholder farmers in developing countries will face even bigger challenges. It is worth taking a closer look into how this may function in reality. A recent study carried out with support from GTZ in cooperation with University of Hohenheim and AVRDC – The World Vegetable Center has been following the situation of vegetable processing companies in Vietnam. As expected, companies that market their products internationally benefit from implementing international quality assurance programs (QAPs). However, the study also shows that companies targeting only regional markets also win when implementing QAPs despite relatively high initial investments.

With increasing efficiency and optimum use of vegetable crops, even these local enterprises have found success in the national markets and offer products whose quality is appreciated by local consumers. Increasingly, consumers in developing countries appreciate and demand safe vegetables.

Source:

Reuters - A tomato by any other name? Experts set food rules (4 April 2008)

Codex Alimentarius – www.codexalimentarius.net

Marcus Mergenthaler, Katinka Weinberger, Matin Qaim: "Quality assurance programs and access to international markets: Empirical evidence from the Vietnamese horticultural industry" (paper submitted to *Journal of Agricultural and Food Industrial Organisation*, under revision)

The LIBRARY

New publications

...recent articles requested by scientists

Purohit, P., Kumar, A., Kandpal, T.C. (2006). Solar drying vs. open sun drying: A framework for financial evaluation. *SOLAR ENERGY*. v.80(12):1568-1579.

Bram, M.R. (2002). Effects of inbreeding in three populations of the dioecious annual *Amaranthus cannabinus* (Amaranthaceae). *JOURNAL OF THE TORREY BOTANICAL SOCIETY*. v.129(4):298-310.

Eswaran, H., Almaraz, R., Reich, P., Zdruli, P. (1997). Soil quality and soil productivity in Africa. *JOURNAL OF SUSTAINABLE AGRICULTURE*. v.10(4):75-94.

Atiri, G.I., Fayoyin, G.A. (1989). Horizontal resistance to okra leaf curl virus in okra germplasm. *ANNALS OF APPLIED BIOLOGY*. v.114(suppl.):152-153.

You asked for...

Dr. Kartikeya Srivasava in RCA (vBSS) asked for publications on high temperature tolerance in tomato and hot set tomatoes. Here's a brief selection:

Ohkawa, H., Sugahara, S., Takaichi, M., Yabe, K. (2007). Effects of high and low temperature conditions on the fruit setting and growth of the parthenocarpic tomato 'Renaissance'. *HORTICULTURAL RESEARCH (JAPAN)*. v.6(3):449-454.

Camejo, D., Rodriguez, P., Morales, M.A., Dell' Amico, J.M., Torrecillas, A., Alarcon, J.J. (2005). High temperature effects on photosynthetic activity of two tomato cultivars with different heat susceptibility. *JOURNAL OF PLANT PHYSIOLOGY*. v.162(3):281-289.

Sasaki, H., Yano, T., Yamasaki, A. (2005). Reduction of high temperature inhibition in tomato fruit set by plant growth regulators. *JARQ: Japan Agricultural Research Quarterly*. v.39(2):135-138.

Leonardi, C., Giuffrida, F., Scuderi, D., Arcidiacono, C. (2004). Effect of greenhouse covering materials on tomato grown during hot months. *ACTA HORTICULTURAE*. no.659(v.1):183-188.

Sato, T., Watanabe, S., Nakano, Y., Kawashima, H., Takaichi, M., Sogawa, S., Shinkawa, T., Nakashita, H., Yasuda, M., Yoshida, S. (2004). The effects of high temperature and high salinity stress on summer single-truss tomato cultivation. *ACTA HORTICULTURAE*. no.659 (v.2):685-692.

Creation of new work groups at headquarters

A restructuring of four existing units at headquarters this week has created a series of smaller and more focused work groups. From this week Communications ceases to exist as an organizational unit and is being replaced by three teams:

Public Awareness and Information, led by Oliver Hanschke will be responsible for public awareness media, corporate image, visitors, information and promotional material.

Editorial and Library, led by Maureen Mecozzi will be responsible for editing, publications, peer-review and the library.

Donor Support and Information Technology led by Warwick Easdown will facilitate donor relations and manage IT and web services.

In addition two new groups have been formed:

Program and Partnership Development led by Markus Kaiser will expand the roles of the former Grant Development Office.

Global Technology Dissemination coordinated by Greg Luther will also involve Edwin Javier, former ICO staff and the Training office, formerly a part of Communications.

CORNUCOPIA

Visitors at HQ



Strong ties: Dr. Paul Sun, Chairman of the Center's Board of Directors, took the opportunity on Wednesday, 9 July to welcome a group of more than 40 retirees from Taiwan's President Company. President was the first company to cooperate with the Center on processing tomato in AVRDC's early years. Part of the program was a visit to the indigenous vegetable plot on campus.

— *Communications*



FOCUS: Africa

Conferences

Katinka Weinberger and **Stefan Pletziger** participated in the AGRA Markets Access Convening (June 26-27, Nairobi), organized by the Bill and Melinda Gates Foundation.

Visitors

Dr. Lutz Goedde, Deputy Director at the Bill and Melinda Gates Foundation and **Dr. Sara Boettinger**, Program Director of Public Intellectual Property Resource for Agriculture (PIPRA) University of California, visited RCA on July 1 to meet with scientists and discuss future collaboration possibilities.

Welcome



Agronomist René Rakoto Herimandimby joined vBSS Madagascar as a Research Technician on 23

June. His e-mail address:

renemandimby@yahoo.fr



Saholy Andrianony joined vBSS Madagascar as an Assistant Administrator on 10 July for six

months to assist the Liaison Officer.

Her e-mail address:

saholy.andria@yahoo.fr



Christine Ludwig (BSc in Nutritional Sciences and Home Economics) from the Justus-Liebig-University Giessen,

Germany, will join the World Vegetable Center Regional Center for Africa in Arusha from July 15 till October 12. She will be collecting data for her master's thesis on assessing vegetable and fruit consumption of children under five years of age in Iringa district, Tanzania.

— *Shilpi Saxena/AVRDC-RCA*

SKETCH



Name: Sylvia Hsu

Home: Kaohsiung, Taiwan & Toronto, Canada

Position: Food & Dormitory Services Manager

Why do you do what you do: My interest in the field of food and beverages started during my days at the vocational high school, when I specialized in restaurant management. Although the school was in Kaohsiung, the 3 years there felt like a journey through the cuisines of the world: Chinese, western style food as well as pastry and bakery. At The Grand Hyatt in Taipei I was exposed to even more

international flair. It was exciting to work in an environment with 3 or 4 languages being spoken in a single department. Thereafter I went to England, Switzerland, and Canada to gain more experience. In Toronto I got a second degree, a B.A. in Hospitality & Tourism. I always enjoyed seeing guests go home with a memory of an unforgettable lunch or dinner. I have an almost sensual approach towards cooking. If you want to know a dish, don't talk to the chef. Use your senses, taste the ingredients, and feel how they harmonize. I also get inspiration from recipe books from all over the world, but mostly I trust my intuition and love for flavors.

Why do you do it at AVRDC: I was actually pursuing my career in Canada, where I worked in restaurant management for 7 years. However, I returned to Taiwan for personal reasons and to spend more time with my family, who needed me at that time very much. I left my resume online, and it was

AVRDC that suddenly contacted me. I had never heard of AVRDC before (my father knew it, though), and I thought it could be interesting, since it is a place dealing with vegetables. I thought it wouldn't be a wrong place. Having come here, I must say it is a huge challenge, but I like challenges.

Your favorite experience at the Center: In the restaurant business there is a saying: If you want to make sure your guests are satisfied, make sure your staff is happy and likes the food that is served. If they are enjoying what they do, the guests will realize that and enjoy his/her stay. I believe in this rule, and we are doing our best.

Favorite vegetable: One word: Zucchini! Zucchini is one of the most versatile vegetables that I can think of. You can fry it, boil it or make a stew out of them. And prepared in a soup, zucchini gives you a boost of flavor when you bite into it.