If Robert McGovern of the University of Florida in the USA has his way, more farmers and horticulturalists will be able to obtain a doctor’s advice when their crops and plants fall ill.

McGovern directs the university’s multidisciplinary Plant Medicine Program, whose mission is to train plant doctors in all aspects of the diagnosis, management, and prevention of plant health problems. He gave a presentation about the program to AVRDC staff at headquarters on 19 March 2010.

“We have medical doctors for humans, veterinarians for animals—so why not doctors specifically for plants?” McGovern said.

The innovative program was launched to counter the increasing trend of specialization in the biological sciences. “As scientists and researchers from the ‘baby boom’ generation in the USA retire, we are losing the leadership of people who have been broadly trained to analyze plant diseases from a variety of perspectives,” he said. “Today, a PhD candidate many study just one gene, for
The aim is to provide a more cohesive agricultural education by integrating the disciplines of pathology, entomology, horticulture, soil science, and agronomy. The program supports local and international agricultural production by training the next generation of crop consultants, extension advisors, agricultural regulators, educators, and other agricultural personnel that can address plant and crop health to increase production and food security while protecting the environment.

Students enrolled in the DPM (Doctor of Plant Medicine) degree course do not produce a dissertation. Instead, the intensive curriculum emphasizes building a practical base of knowledge that can evolve as the field develops. Candidates hone their skills in real-world situations to gain a better appreciation of the actual problems farmers and growers face.

Fifty candidates have received the degree since the program began in 2002, and they have found work across the agricultural and horticultural spectrum. Some are crop consultants who put integrated pest management systems into practice for clients; others have taken up careers as arborists and landscape managers. Graduates are running state and national extension programs, teaching, and conducting diagnostics for state and federal plant health laboratories. About a third of the students are from countries other than the US.

“We have found that many of our DPM’s are interested in the regulatory aspect of plant protection,” McGovern said. “They are working in national quarantine labs, on legislation governing plant genetic resources, in government regulatory agencies. They fill a valuable role as liaisons between research organizations, the private sector, and governments.”

The DPM or DPH (Doctor of Plant Health) concept is branching out to other states (the University of Nebraska) and other countries: Universities in Egypt, Japan, and Korea offer the degree, as does Taiwan’s National Taiwan University and the National Pingtung University of Science and Technology.
Welcome

Asma Sembiring, research intern from the Indonesian Vegetable Research Institute, arrived at AVRDC headquarters on 15 March 2010 for two months of training. Funded by the Indonesian Agency for Agricultural Research and Development (IAARD), Asma will work on “Comparative assessment of chili marketing systems in Central Java (Indonesia) and Taiwan” under the supervision of Madhusudan Bhattarai. Contact Asma at ext. 465 or e-mail: <asma_h_1999@yahoo.com>

Visitors

A group of 13 members of the Pumpkin Association from Northeastern University, Liaoning Province, People’s Republic of China, led by Professor Chongshi Cui (above, second from left) visited the Center on 18 March 2010. Cucurbit researcher Chung-cheng Lin (in white T-shirt) introduced the visitors to AVRDC’s inbred pumpkin lines.

Welcome back

Joko Mariyono, Research Associate in Socioeconomics for the ACIAR-funded project "Integrated Disease Management (IDM) for Anthracnose, Phytophthora blight, and whitefly-transmitted Geminiviruses in chili pepper in Indonesia" (ACIAR Project CP/2004/048), has arrived at AVRDC headquarters for a stay of 2.5 months (15 March-31 May 2010). He will analyze data, write reports, and prepare materials for publication in coordination with Madhusudan Bhattarai, Agricultural Economist, and interact with the project manager and other researchers associated with chili research and development activities in Indonesia.
Training for the new Maconomy enterprise management system (ERP) began on 19 March 2010 at AVRDC headquarters. Maconomy trainers Yut-Mie van Lamoen, James Solomon, and Nandini Athiswamy, and AVRDC Systems Administrator Julia Chao introduced some basic financial concepts, then helped a group of 16 staff members from HQ and regional offices find the right keys to press on their computers as they worked through exercises designed to familiarize users with the system’s many features. Training will continue in April with different staff. The “go-live” date for the new ERP system is May 2.
The AVRDC campus in Shanhua, Taiwan is alive with the sound of drills, hammers, and saws now that renovations to the genebank, greenhouses, and cafeteria are underway. New permanent shade cover frames were installed over some greenhouses last week. Excavations have begun at the genebank, which will be insulated and expanded to house two new refrigerated storage units. Expected completion date is late June. The cafeteria is receiving a full floor-to-ceiling overhaul, and major demolition work has been completed. Hungry staff members look forward to enjoying hot meals again when the full renovation is finished in June. The Center’s palm-lined drive—a local landmark—has been rejuvenated; 63 old coconut palms were removed and replaced with an equal number of royal palms. After enduring decades of frequent typhoons, the old trees had become unstable.
New display in research lobby

Visitors to the research building at AVRDC headquarters will now receive a quick and colorful introduction to the Center’s nutrition work when they pass through the building’s lobby. A nine-panel display designed by photographer and graphic artist Chen Ming-che highlights different aspects of AVRDC’s Nutrition Theme, led by Ray-yu Yang. Micronutrients, balanced diets, breeding for nutrition, global hunger, nutritional analysis, indigenous vegetables, and the role of vegetables in health are among the topics addressed in the display.
Focus AFRICA

Plant variety protection: benefits and challenges

Seventy representatives from around the world met to share experiences, strategies, and challenges involved in protecting plant intellectual property during a regional seminar from 23-26 February 2010 at the New Africa Hotel in Dar es Salaam, Tanzania. The event was organized by the International Union for the Protection of New Varieties of Plants (UPOV) and the Ministry of Agriculture, Food Security, and Cooperatives (MAFC), United Republic of Tanzania, in cooperation with the African Regional Intellectual Property Organization (ARIPO), the United States Patent and Trademarks Office (USPTO), and AVRDC – The World Vegetable Center. Participants from 16 ARIPO member states and observer countries discussed Plant Breeders’ Rights (PBR) and Plant Variety Protection (PVP) policies under the framework of the UPOV Convention. Experts from UPOV, USPTO, African Organization of Intellectual Property (OAPI), Community Plant Variety Office (CPVO) of the European Union, Naktuinbouw Company of Netherlands, GNIS Seed Co. Ltd., and Iowa State University USA spoke on the benefits, challenges, and uniqueness of each system.

Stephen M. Wasira, Tanzania’s Minister of Agriculture, noted the need to transform the agricultural sector in Tanzania and all ARIPO member countries. He urged ARIPO to take a leading role in assisting member states to develop national and regional systems for granting and protecting plant breeders’ rights using internationally acceptable standards. Fredrick Ruhindi, Deputy Attorney General and Minister of State for Justice and Constitutional Affairs in Uganda, highlighted his country’s current undertakings toward policy and legal reforms to address challenges and developments in intellectual property. AVRDC’s Director General Dyno Keatinge introduced the Center’s leading role in promoting vegetable research and development in Africa, Asia, and other parts of the world, and stressed the importance of indigenous vegetables in alleviating malnutrition and poverty in Africa. UPOV Vice Secretary-General Rolf Jördens encouraged AVRDC to continue improving vegetable varieties to help small-scale and subsistence farmers.
Nearly 300 participants, almost half of them women, took part in a seed fair organized by AVRDC Regional Center for Africa on 16 February 2010. “High Quality Seeds for High Productivity and Income” brought together vegetable farmers, seed traders, agricultural extension officers, technocrats, Community Based Organizations (CBOs), and policy makers to share progress, discuss the seed sector in East Africa, and sample tasty indigenous vegetables prepared using recipes modified for maximum nutrition.

Five seed companies (Kibo Seed Company, East Africa Seed Company, Alpha Seed Company, Pop Vriend Seed Company, and Multiflower Seed Company) displayed their vegetable seed material in booths and in the field. Ali Mmbwana, Zonal Research Director - Northern Zone-Tanzania, Mercy Sila, District Commissioner, Arumeru District, and AVRDC Director General Dyno Keatinge attended the event. ITV, a popular satellite television and radio network, reported on the fair and helped create awareness throughout Tanzania and East Africa. During a Q & A session, farmers discussed some of the vegetable production constraints they encounter; the farmers indicated that pesticides failing to provide effective control of whitefly, thrips, mites, and other pests was a major concern.
A new foundation

A foundation stone for the new auditorium at AVRDC’s Regional Center for Africa was laid by AVRDC Director General Dyno Keatinge, Mercy Sila, the Arumeru District commissioner, and Ali Mmbwana, Tanzania Zonal Research Director, on 16 February 2010 at RCA in Arusha, Tanzania.

(Above): Abdou Tenkouano, director, AVRDC Regional Center for Africa (right) explains the plan for the new auditorium to Mercy Sila (center) and Ali Mmbwana (left).

(Bottom): Mercy Sila, Ali Mmbwana, and Dyno Keatinge with the staff of AVRDC Regional Center for Africa.
Face to face

On 16 February 2010 DG Dyno Keatinge met with AVRDC Liaison Officers Ekow Akyeampong, Christophe Kouamé and Benjamin Rakotoarisoa at RCA, and was briefed by host institutions Global Horticultural Initiative, Bioversity, and Farm Concern. The DG also visited seed company Rijk Zwaan Afrisem, a producer of tomato, African eggplant, and Ethiopian mustard seed.

DG Keatinge gave a presentation at a Donor’s Forum on 18 February 2010 at the Embassy of Ireland in Dar es Salaam. S. Lugeye, Chief Adviser – Rural Livelihood and Growth, Irish Aid, chaired the meeting. Representatives from the Food and Agriculture Organization of the United Nations (FAO), African Development Bank (AfDB), Japan International Cooperation Agency (JICA), European Union (EU), United States Agency for International Development (USAID), Rural & Agricultural Development Advisory Group (JICA-RADAG), and Korea International Cooperation Agency (KOICA) attended. The DG also met with Katharina Jenny, Deputy Head of Cooperation, Swiss Cooperation Office; David Nyange, Senior Agricultural Economist – USAID; Vincent Vercruysse, Country Representative, Belgian Technical Cooperation; Anne Barrington, Irish Ambassador; Kevin Farrell, Ireland Special Liaison for Hunger; and Gilbert Addy, Team Leader of the EU mission.

MoU signed

A Memorandum of Understanding (MoU) was signed between AVRDC – The World Vegetable Center and the Government of Tanzania in Dar es Salaam on 25 February 2010. Permanent Secretary of the Ministry of Agriculture, Mohamed Said Muya (photo, left) and DG Dyno Keatinge signed the document in the presence of some AVRDC employees, members of the Tanzania Ministry of Agriculture, Legal Unit, and Communication Unit, and the press.
Twelve AVRDC breeders, pathologists, agricultural and social scientists, and research assistants from the Center’s Subregional Office for West and Central Africa in Bamako, Mali took part in a workshop to learn about using global positioning systems (GPS) in research. Trainer Florence Dumon (below, center) introduced the participants to the history of the technology and explained the possibilities for using GPS to collect data. Small working groups were formed to collect data in different areas around the office as the first step in learning how to manipulate the GPS units. Practical exercises in the field included determining the dimensions of plots and registering the coordinates of certain objects (trees, crops, buildings) and places. The next day, the participants discussed the data that had been transferred to computers using the Map Sources software program. Additional practical exercises were conducted to review and confirm the knowledge that had been acquired the previous day. The final activity: visualization of the data from the six working groups in Google Earth.

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