International **Potato** Center

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(Re)collecting 40 years of CIP

In January 2011, CIP will celebrate its 40th anniversary. Recognizing that the story of CIP is really the story of its people and partners, we want you, our CIP community, to be at the center of our global celebrations.

Please help us tell the story of CIP's last 40 years by sharing your own CIP stories. We welcome your anecdotes and personal recollections, whether they are funny or serious, date from 4 weeks ago or 4 decades ago. We suggest you limit your stories to no more than 300 words, but feel free to add a photo or two to help tell the tale.

The stories will be compiled into a commemorative anthology (in English and Spanish) of the people and experiences that have made CIP what it is today.

We have created a special website where you can post your stories: https://sites.google.com/a/cgxchange.org/gathering-cip-histories/

Or you may send your story via email to: CIP-CPAD@cgiar.org

Toxic pesticides banned in Ecuador



After 15 years of research and policy efforts, CIP celebrated an important success story when on 29 June 2010, the Ecuadorian Agency for Agricultural Quality Assurance (AgroCalidad) passed a ruling prohibiting the fabrication, formulation, importation, commercialization, or use of class 1a and 1b (highly toxic) pesticides. The ban includes pesticides that contain certain defined concentrations or formulations of carbofuran, methamidophos, fenamiphos, methomyl, etoprop, and aldicarb. This is an important success story for CIP, whose work to provide the scientific base for the elimination of their use started in the 1990s.

"This is really an incredible step forward in protecting the health of resource-poor farm families", says CIP's Director General, Pamela K. Anderson, "our research made a critical cuid be very very proud"

contribution to this outcome. We should be very, very proud."

Potato farmers in Ecuador are some of the country's biggest consumers of pesticides, which they apply using backpacks, with no protective clothing or equipment. They often mix the pesticides with their hands or a stick, so their exposure is very high. Much of the background research regarding this topic was conducted at CIP by Charles Crissman, Donald Cole (University of Toronto), and John Antle (Montana State University, US), who provided the scientific evidence of the negative health impacts on farmers of these pesticides. Their study, called Tradeoffs, investigated the health, environmental, and production impacts of pesticide use. They also led a project called Ecosalud, which focused on capacity strengthening with farmers for safer pesticide use and integrated crop management. Ecosalud included policy analyses and recommendations for policy changes.



Table of Contents

- (Re)collecting 40 years of CIP
- Toxic Pesticides Banned in Ecuador
- Million-hectare study wins best
- practice recognition for CIP Ahipa – little known and nutrient rich
- India International Potato Expo-2010
- Native potatoes are star attractions
- In Memoriam



This policy work helped foment debates in Ecuador and in the international community regarding the dangers associated with the use of these pesticides, particularly for poor rural families. The studies revealed that carbofuran and methamidophos represented 90 per cent by weight of the active ingredients in the insecticides that farmers were using in their potato fields. Both are highly toxic in humans, affecting liver function and the nervous system, potentially leading to neurobehavioral problems. Ingesting one milliliter of carbofuran can be fatal.

Though slow in coming, the new ruling represents an important example of how science can be translated into positive public policy changes.

"It is a good example of an important outcome of CIP's research," concludes Oscar Ortiz, who leads CIP's Integrated Crop Management Division.

Million-hectare study wins best practice recognition for CIP



Congratulations go to Graham Thiele, Guy Hareau, Victor Suarez, Enrique Chujoy, Meredith Bonierbale, and Luis Maldonado on achieving special recognition from the Independent Science and Partnership Council.

The team's impact study: "Varietal Change in Potatoes in Developing Countries and the Contribution of the International Potato Center 1972 – 2007" has been chosen by

the ISPC's Standing Panel on Impact Assessment (SPIA) as an example of best practice in impact assessment research.

What has become known as the million-hectare study was undertaken in 2007 to update findings on potato varietal release and adoption of CIP-related varieties across Asia, Africa and Latin America. "One thing that is particularly good is that we used the same methodology and a repeat survey so that we could compare actual adoption with predicted adoption from the earlier study," says Graham Thiele, CIP Impact Enhancement Division Leader. "We were also able to provide valuable additional information about germplasm distribution as a potential bottleneck."

Figures reported a return on CIP research investment of around 20%, representing a net present value of \$121 million. The area under cultivation with CIP related varieties had surpassed one million hectares worldwide or 10% of all the area planted with potato in the developed world, a milestone that had come 7 years earlier than predicted. Guy Hareau, Agricultural Economist at CIP, points out that the study contained plenty of background information in its annexes, including a timeline of breeding history at CIP. Notes Hareau, "I think that helped document and add interest to the study. One reviewer noted that it is one of the rare studies in the CGIAR that addresses the relevant issue of what is happening to rates of return over time."

The Science Council has commissioned an impact brief based on the report to be posted on the CGIAR website and in response to continual calls from donors who want documented evidence of impacts.

Ahipa – little known and nutrient rich

CIP is engaged in a four-year project to enhance the nutrient-rich ahipa in an effort to improve health, food security, and the sustainability of farming systems in Central and West Africa. Ahipa is the name the Inca gave to the highly nutritious legume root of the American yam bean. It is also one of the nine lesser-known Andean roots and tubers, which are part of the focus of CIP's preservation, conservation, and research efforts.

Native to Central and South America, and related to soybean, yam beans are also grown in Asia and parts of Africa. Among all the storage root forming legumes, they show the widest adaptation and highest yield potential by far. Explains Wolfgang Grüneberg, CIP breeder and lead scientist for the project, "Logically, this crop should be much more important than it is."

The ahipa tubers have a high protein content (8-18% dry weight) compared to other root crops. Also unlike some of the better-known roots and tubers, ahipa is able to fix nitrogen in the soil and can be grown without nitrogen fertilizer. This makes it highly suited to the needs of small farmers as an integral part of a sustainable land-use system. It produces large storage roots, like cassava or sweetpotato, which are consumed raw, cooked, or processed. One potentially popular processed form is as gari, eaten by millions of people every day in West Africa, which is typically made from cassava but could be made from ahipa to provide more protein and micronutrient density.

CIP's project, involves agricultural research institutes in Uganda, Burundi, Rwanda, Benin, DR Congo and the Université Catholique de Louvain (UCL) in Belgium. It is focused on improving the availability of yam bean collections and breeding lines. Scientists are identifying high yielding varieties that are adapted to agro-forestry-based and maize-mixed farming systems. They also are looking for rotenone free genotypes of the crop in order to make the yam bean seed usable for human consumption. Improved commercial ahipa root products are being developed, along with the marketing strategies needed to fully exploit the crop's full potential. Crucial impact assessment studies are underway to identify where resources can most effectively be utilized. "We want to investigate the market opportunities for ahipa," says Grüneberg "so that at the end of the project we can give a clear go ahead for the dissemination and development of this promising crop."



India International Potato Expo-2010



The Second India International Expo-

Potato 2010 was held on 8-9 July 2010 in New Delhi. The expo was organized by the Indian Chamber of Commerce, with a focus on enhancing potato processing and export opportunities to increase their market value at a time when India is facing an overproduction of potato. CIP presented two exhibits at the Expo, in collaboration with the Embassy of Peru. One was located in the main exhibition hall and the other next to the CIP office, which is located in the same building where the event was held.

The Embassy of Peru's Deputy Chief of Mission, Carlos A. Yrigoyen Forno, visited the exhibitions, and said that the Expo was a good opportunity to highlight the importance of the potato economy in the world market for countries like Peru and India. "The issues that are emphasized here, such as strengthening domestic markets, promoting consumption, developing postharvest infrastructure logistics, and cheaper, easier export credits; these are all things that are required for Peru as well. The experience and information from India can be very useful for Peru too."

CIP's Mohinder Kadian participated in the technical presentations with a talk addressing food security and the role of potato production and business development. He called attention to the need to export both ware potatoes and processed potato product if farmers are to earn value added prices on international markets. "India occupies less than 0.5% export share in the international market. Inadequate processing of potatoes, which accounts for scarcely 5% of the total produce, along with losses during glut seasons and the lack of organized marketing mechanisms are major constraints which need to be given proper attention."

The Expo put forward a 10-point agenda for improved policy. Areas for attention included effective dissemination of technologies, the creation of post harvest infrastructure, reduced interest rates for export as an incentive for exporters, the implementation of public private partnerships to develop modern infrastructure, and the creation of a centralized Potato Promotion Board to oversee issues from cultivation to consumption.



VENTS

Native potatoes are star attractions

The native potato was featured as the "star" product during Peru's Mistura festival, held in Lima 7-11 September. Mistura is a huge gourmet food fair, which includes international chefs and gourmet stars from Lima's top restaurants and attracts over 200 thousands visitors. This year's festival was inaugurated by Peruvian President Alan Garcia, gourmet chef and Mistura co-founder, Gaston Acurio, the Mayor of Lima, and numerous other government ministers and dignitaries.



CIP was very visibly present at **Mistura** through its Innovation and Competitiveness for Peruvian Potato (INCOPA) project and Swiss Agency for Development and Cooperation partners. Led by CIP's Miguel Ordinola, INCOPA organized two impressive displays of native potatoes, which highlighted their remarkable diversity and graced the main entrance of the Mistura Grand Market. The Grand Market is a display zone and serves as one of the fair's main venues. It is designed to highlight the dynamic fusion between rural producers, urban markets, and the world of haute cuisine. Gaston Acurio, whose fame as a chef and restaurant entrepreneur has done much to propel Peruvian food to the top of the international gourmet world, described the display zone as a fitting recognition of the great work done by Peru's small-scale farmers. "It's in the field that the great journey that ends in the kitchen begins," he says. "That's why there will be farmers there from all over the country offering their potatoes."

INCOPA brought together native potato producers from Huancavelica, Junin, Apurimac, Ayacucho, Cajamarca, Puno, and Huanuco to participate in the festival. There were also numerous collaborating partners in the initiative, including Capac-Peru (representing the potato production chain), the Aymara Consortium in Puno, the 'Papas Andinas' Initiative, and NGO's such as Aders, FOVIDA, Vets and Agronomists Without Borders (VSF-CICDA), and CARE Peru.

The native potato's starring presence at Mistura generated great media attention and public recognition. But it also played a role in a wider CIP-INCOPA strategy. "We are taking advantage of the increased demand for and interest in native potatoes in Peru to better position them at the international level, generating new opportunities and niche markets to generate new revenue for producers in the high Andes," explains Miguel Ordinola, "At the same time, we are consolidating coordination with our partners at the producer level."



In Memoriam

On 6 September 2010, CIP lost a dear colleague, Maria White, following her brave fight with liver cancer. Maria joined CIP as Deputy Director General for Strategy and Corporate Development. She came to CIP to "follow her heart", passing up the opportunity for a higher paying position to work for an organization in whose cause she strongly believed. Maria will be missed around CIP, where she left many good friends and colleagues. It is hard to find many people in one's lifetime who embody so much warmth, passion, and wish to help others. Our deepest sympathy goes to her parents, her brother, and her closest friends, Tom, Tuyen, Christine, and Julie.



On Sun, 29 Aug 2010, CIP lost another former colleague and friend, James Bryan, who



died peacefully in his sleep at home in Seattle, Washington. He was 80 years old. Kenneth Brown, another CIP alumnus, sent us this appreciation:

Jim Bryan had a wealth of experience in potato seed production gained from years of experience in the industry in Idaho, USA, and 20 years at CIP. In close collaboration with CIP's Virology Department he developed innovative methods of propagating virus-free, in-vitro plantlets that formed the basis for distributing plant materials produced by the breeders. Jim was an excellent teacher who trained potato researchers world-wide. With his very individual brand of Spanish he was able to travel throughout Latin

America helping the national programs. Early in his career he survived a near fatal car accident in the Andes and suffered back pain for the rest of his life. This made long air travel a painful experience, but he was still sought after by colleagues throughout the CIP Regional Program. He was extremely hospitable and he and Jeanne held barbecues at their home every year for visiting colleagues from abroad. At these, he was usually sitting in an armchair eating peanut butter straight from the jar. Jim will be much missed by all his friends and colleagues who had the privilege of working with him all those years.



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