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FINOTIN, A PROMISING NEW BIOPESTICIDE

Finotin, a plant protein with broad biocidal properties extracted from seeds of the tropical forage legume *Clitoria ternatea* could become the next best natural option for pest and disease control for farmers. This natural biopesticide offers a wide spectrum of activity. In laboratory experiments carried out at the Colombia-based International Center for Tropical Agriculture (CIAT), finotin has showed its effectiveness against insects, a wide range of fungal pathogens, and some bacterial pathogens infecting beans, rice and some tropical forage and fruit species. Just like the commonly used biopesticide *Bacillus thuringiensis* (Bt), finotin holds great promise as an environmentally friendly alternative, using plants own natural defenses to protect and control pests and diseases in a variety of crops.



Tomato plants sprayed with crude finotin preparations twice (#3), or once (#2) a week, and control (water) [#1] under field conditions

Dr. Segenet Kelemu, plant pathologist and leader of the work on finotin, is optimistic about finotin having potential use both in the field and post harvest. 'We are particularly excited about the potential of finotin for use by resource-poor farmers', she expresses. Her vision is for resource-poor farmers to grow *Clitoria ternatea* in their field, collect the seeds, extract the protein and apply it to their crops. Efforts are being made to involve farmers in identifying and developing strategies for its application, in close collaboration with scientists, producers and the private sector. The finotin team also believes that finotin might have biotechnological applications. Currently, they are working on cloning the finotin gene and thus hope to produce transgenic plants that resist pests and diseases; or alternatively, transgenic endophytic bacteria or fungi that could deliver the biocidal protein. Further research and tests are needed to guarantee its ultimate success. As for now, finotin represents one important step towards naturally- produced, affordable and sustainable crop management control solution.

Dr. Segenet Kelemu
IAPPS Regional Coordinator,
Region VIII (Latin America/Caribbean)
E-mail: s.kelemu@cgiar.org

ECOLOGICALLY-BASED PARTICIPATORY AND COLLABORATIVE RESEARCH AND CAPACITY BUILDING IN IPM IN CENTRAL ASIA

USAID is sponsoring a Collaborative Research Support Program for Integrated Pest Management in Central Asia (IPM-CRSP). The project is designed to foster development of a comprehensive IPM initiative, using an ecologically-based and multidisciplinary systems approach. Michigan State University, the University of California-Davis and ICARDA serve as the host institutions for implementing this collaborative and participatory research-education program, designed to facilitate capacity building in IPM in Central Asia.



The Project consists of three components: Landscape Ecology, Biological Control and Education-Outreach. The specific activities to be implemented are based on the needs assessment and priorities identified at the regional IPM Stakeholders Forum organized in Uzbekistan in May 2005.

Component 1: Landscape ecology to enhance biodiversity and biological pest management. This component is designed to investigate the use of native plants for conserving natural enemy communities and enhancing biological control of field crop pests in Central Asia and to investigate and implement the most promising landscape management techniques in partnership with governmental agencies, universities, NGOs and farmers in the region. Team Members are: Dr. Douglas Landis, Michigan State University; Dr. Mustapha El-Bouhssini, ICARDA; Mr. Nurali Saidov, Research Fellow.

Component 2: Enhance efficiency, products line and crop usage of Central Asian Biolaboratories. The overall goal of

this component is to work with Central Asian researchers, educators and farmers to identify, produce and introduce into vegetable production systems candidate entomophages for management of spider mites and insect pests which are not currently targets of those produced by Biolaboratories. Team Members are: Dr. Frank Zalom, University of California, Davis; Dr. Barno Tashpulatova, Research Fellow

Component 3: Develop and implement IPM extension/outreach and university education programs. This project component aims at enhancing IPM educational and outreach programs in the region through training of trainers (TOT), farmer field schools and the development of IPM educational resources/materials to integrate new information, teaching tools and methodologies into existing IPM outreach and educational programs. Team Members are: Dr. George Bird, Michigan State University; Dr. Walter Pett, Michigan State University; Mr. Murat Aitmatov, Education-Outreach Fellow For more information, please contact:

Dr. Karim Maredia,
Director of Central Asia Regional IPM Program,
Michigan State University
E-mail: kmaredia@msu.edu

Dr. Raj Paroda,
Director, ICARDA/PFU,
Central Asia and Caucuses, Tashkent, Uzbekistan
E-mail: r.paroda@cgiar.org

11TH IUPAC INTERNATIONAL CONGRESS OF PESTICIDE CHEMISTRY

The 11th IUPAC International Congress of Pesticide Chemistry, coupled with the theme 'Evolution for Crop Protection, Public Health and Environmental Safety', will be held in Kobe, Japan, during August 6 - 11, 2006. The Congress aims at bringing together scientists who study chemistry, biology and environmental health issues from all over the world in order to present technical achievements and exchange opinions about pesticide chemistry and related biosciences. The sessions will include key note and plenary lectures, session lectures, luncheon and evening seminars, poster presentations and discussions.

For more detailed information on the structure of the scientific program and other events, refer to the Congress Web site: <http://www.iupac2006.itbcom.co.jp>

Dr. Tadashi Miyata
IAPPS Regional Coordinator,
Region V-A (East/SE Asia)
E-mail: tmiyata@agr.nagoya-u.ac.jp

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IAPPS Mission: to provide a global forum for the purpose of identifying, evaluating, integrating, and promoting plant protection concepts, technologies, and policies that are economically, environmentally, and socially acceptable.

It seeks to provide a global umbrella for the plant protection sciences to facilitate and promote the application of the Integrated Pest Management (IPM) approach to a the world's crop and forest ecosystems.

Membership Information: IAPPS has four classes of membership (individual, affiliate, associate, and corporate) which are described [here](#).

The *IAPPS Newsletter* welcomes news, letters, and other items of interest from individuals and organizations. Address correspondence and information to:

Dr. Manuele Tamo, Editor
IAPPS Newsletter
Biological Control Center for Africa, IITA-Benin
08 B.P. 0932 Tri Postal, Cotonou, Republic of Benin
E-mail: m.tamo@cgiar.org