



International Association for the
PLANT PROTECTION SCIENCES

IAPPS

NEWSLETTER

Number VIII

August, 2024

WORLD VEGETABLE CENTER AND NATIONAL TAIWAN UNIVERSITY HOST LANDMARK SYMPOSIUM ON IPRI'S 50TH ANNIVERSARY

The 26th Biannual International Plant Resistance to Insects Symposium (IPRI 2024) brought together almost 100 experts from 17 different countries for four days, from April 22nd to 25th, 2024 at the headquarters of the World Vegetable Center in Taiwan. This edition, organized in collaboration with National Taiwan University and National Chung Hsing University, marked the 50th anniversary of IPRI, highlighting its importance.



IPRI 2024 was a center for sharing knowledge and groundbreaking research, promoting partnerships, and responding to evolving priorities in sustainable pest management. Discussions covered plant-arthropod interactions, resistance mechanisms, phenotyping methodologies, and breeding strategies. In addition to staple crops like rice and maize, vegetable crops received more attention, with studies revealing sources of insect resistance and innovative breeding techniques.

The keynote presentations explored tri-trophic interactions, ecological dynamics in pest management, and investigations into the impact of endophytes and soil microbes on insect populations. RNA-based biopesticides were discussed as sustainable pest management solutions.

Seven students from Canada, India, South Africa, and Taiwan competed for student awards, highlighting global participation and nurturing future researchers. IPRI 2024's impact extended beyond academia, fostering interdisciplinary collaboration and equipping participants with insights into plant-insect interactions. As IPRI 2026 shifts to Canada, its legacy of inspiring innovation in global agricultural practices continues, promising a sustainable future.

Dr. Srinivasan Ramasamy

AIRCA Representative on IAPPS Governing Board

E-mail: srini.ramasamy@worldveg.org

SURVEILLANCE AND MANAGEMENT OF CACTUS AND COCHINEAL IN THE MEDITERRANEAN

The FAO Regional Office for Near East and North Africa (MENA) organized a technical workshop to strengthen national capacities for surveillance and management of the cactus cochineal in the Mediterranean region, 12-13 Dec 2023, Marrakech. The objective of the meeting was to share the latest information on cochineal management with the NENA countries.



The technical meeting was attended by the countries in the region that have been affected by the cochineal (Jordan, Lebanon, Palestine, Morocco, Syria, Tunisia, and Ethiopia) and the southern European countries that are facing the threat – Italy, Portugal, and Spain, in addition to representatives from Japan, Mexico, Chile, Argentina and Brazil, Oman, Kingdom of Saudi Arabia and South Africa

At this workshop, I shared the current research program on the cochineal management being carried out at the University Mohamed VI Polytechnic: Genetic Resistance and Biological Control. A presentation in which I insisted on the importance of integrated approach combining all sustainable control methods, genetic resistance, biopesticides, biological control and cultural practices.



Prof. Mustapha El Bouhssini

IAPPS Coordinator Region III and VII: Middle East and North Africa

E-mail: Mustapha.ElBouhssini@um6p.ma

BIOLOGICAL CONTROL OF AN EXOTIC INVASIVE WEED BY A FORTUITOUSLY INTRODUCED NATURAL ENEMY IN BANGLADESH

Parthenium is a neotropical weed accidentally introduced to India in the 1960s and has spread to Bangladesh in 1988. It has already invaded 29 crops including jute, sugarcane, potato, and maize, and caused 40-50% reduction in yields. It causes skin disease, eczema, and bronchitis in humans, and ulcers in the mouths of livestock. The leaf-feeding beetle, *Zygogramma bicolorata* Pallister (Coleoptera: Chrysomelidae), a native



Dr. Rangaswamy Muniappan, Dr. Mohasin Hossain Khan, Mr. Madhab Chandra Das releasing beetles in the field.

of Mexico, was imported into Australia in 1980 and field released in 1981. By natural as well as deliberate spread by farmers, the beetle has established throughout Central, Southern, and Southeast Queensland. In India, biological control of parthenium was started in 1983, with the beetle released in 1984 at Bengaluru. The beetle has spread throughout the country and has fortuitously moved into neighboring Pakistan in 2003, Nepal in 2009, Sri Lanka in 2019, and Bhutan in 2020, without human assistance.

The Integrated Pest Management Activity (IPMA) first reported occurrence of the beetle in a small area in the northwestern part of Bangladesh, closer to border with India in 2022. Patuakhali Science and Technology University in collaboration with IPMA is mass rearing for field release of the beetle to suppress parthenium. On April 20, 2024, first field release of the beetle took place in an area infested with parthenium at Patuakhali. This is the first attempt of biological control of an exotic invasive weed in Bangladesh.

Dr. Madhab Chandra Das

Country Program Manager, IPM Activity
Virginia Tech

E-mail: madhabcd@vt.edu

The IAPPS Newsletter is published by the International Association for the Plant Protection Sciences and distributed in *Crop Protection* to members and other subscribers. *Crop Protection*, published by Elsevier, is the Official Journal of IAPPS.

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 the world's crop and forest ecosystems.

Membership Information: IAPPS has four classes of membership (individual, affiliate, associate, and corporate) which are described in the IAPPS Web Site www.plantprotection.org.

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

**Manuele Tamò
Editor, IAPPS Newsletter
IITA-Benin
08 B.P. 0932 Tri Postal, Cotonou, Republic of Benin
E-mail: m.tamo@cgiar.org**