



International Association for the
PLANT PROTECTION SCIENCES

IAPPS

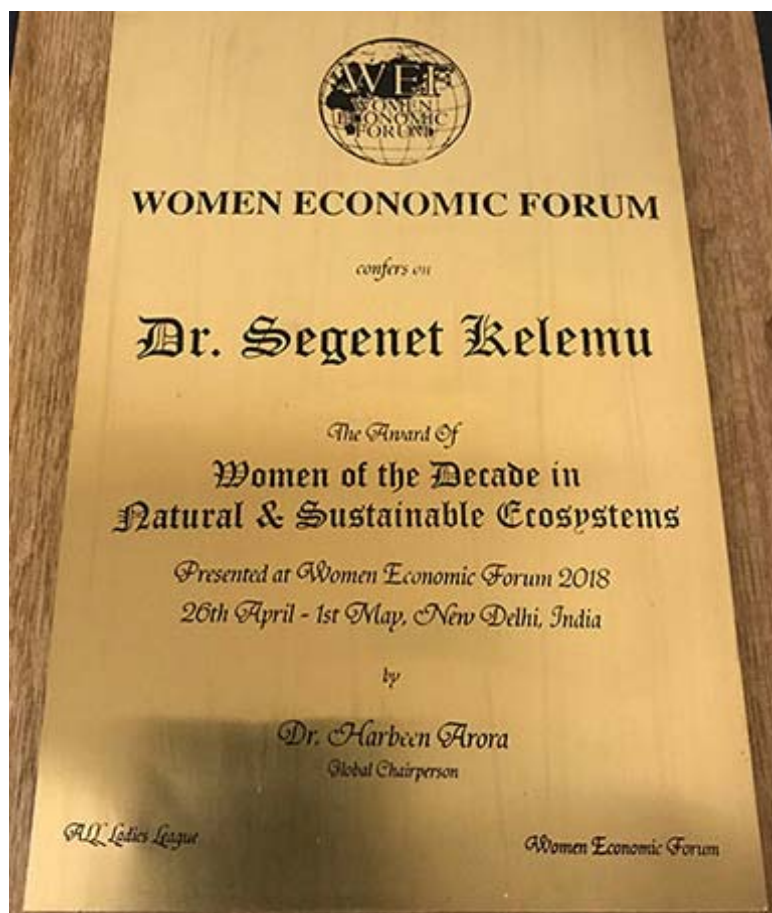
NEWSLETTER

Number IX

September, 2018

DR SEGENET KELEMU BESTOWED WITH WOMEN OF THE DECADE AWARD

Dr Segenet Kelemu, the Director General of the International Centre of Insect Physiology and Ecology (icipe), and former IAPPS Governing Board member, is among the recipients of the 2018 **Women of the Decade award, the highest recognition conferred by the Women Economic Forum (WEF)**. A global conference of the ALL Ladies League (ALL), WEF is the largest women chamber in the world, with about 70,000 members in 150 countries.



Dr Kelemu received the award in the Natural and Sustainable Ecosystems category at this year's WEF event, held under the theme: The Economics of Goodness: Empowering Potential, Engineering Change. In a heartfelt speech delivered to over 2000 people from across the globe, Dr Kelemu spoke about her journey from rural Ethiopia, to graduate studies in the United States, and 15 years at the International Center for Tropical Agriculture (CIAT), Colombia, first as a Senior Scientist, and later Leader of Crop and Agroecosystem Health Management. She emphasized: her upbringing, mentorship and support of family and community; vast experience of the challenges and successes associated with agricultural research; colleagues, mentors and mentees; and global research partners, as the key factors that have shaped her career and professional

growth, and vision for science-led development in Africa.

“As a scientist and a scientific leader, my dream has always been to assist in the building of an excellent world-class research capacity in developing countries, and in particular in Africa, where

such competence is most urgently needed,” Dr Kelemu said. “This recognition, and its title, Women of the Decade Award, presents a chance to retrospect on my contribution towards this goal over the past 10 years; a significant period for the continent,” she added noting that in August 2007, after 25 years away, she decided to return to Africa, to find a continent at crossroads, emerging from years of economic distress to remarkable growth.

Between 2007 and 2012, as the Director of the Biosciences eastern and central Africa (BecA) Hub, based in Nairobi, Kenya, Dr Kelemu played a role in changing the face of African biosciences, opening up new possibilities for addressing agricultural constraints. After almost a year as Vice President of programs at the Alliance for a Green Revolution in Africa (AGRA), Dr Kelemu took over the leadership of icipe in 2013, the only international institution in Africa working primarily on insects and related arthropods, and a globally recognized center of excellence in this field.

On behalf the IAPPS Governing Board and the entire IAPPS family, I would like to congratulate Segenet for this life-time achievement.

Prof. E. A. “Short” Heinrichs
Secretary General, IAPPS
E-mail: ehenrichs2@unl.edu

BIFAD AWARD FOR SCIENTIFIC EXCELLENCE



Laouali Amadou, a Ph.D. student in entomology from the National Agricultural Research Institute of Niger (INRAN) and registered with the ‘Université Dan Dicko DanKoulodo’ of Maradi, Niger, has won the **Award for Scientific Excellence from the Board for International Food and Agricultural Development (BIFAD)**. The award is presented to a student working in a Feed the Future Innovation Lab who has demonstrated creativity in improving

sustainable agriculture, food security, economic growth, and the communication of methods and technologies to communities. Moreover, the work the awardee completes must avoid any harm to the environment. Amadou’s studies focus on the development of biological controls for the pearl millet head miner. Pearl millet is Niger’s most crucial crop, but the millet head miner threatens to

damage nearly 85% of its yields. The loss and degradation of the crop could cause millions to go hungry; further, control of the pest using insecticides is unrealistic for subsistence farmers. The millet head miner has several natural enemies, including parasitoids that Amadou and his fellow researchers will release or are already releasing in Niger's fields. In relation to Amadou's work, George Norton, Virginia Tech Professor in the Department of Agricultural and Applied Economics, said that even if only 15% of farmers are affected by beneficial insects, the gains over twenty years would equal several hundreds of millions of dollars. The hope is that the mass-rearing and dissemination of the parasitoids will create a cottage industry that local people, like women's groups and farmers, will be able to get involved in for additional income.

Amadou recently spent time at Virginia Tech, one of his many collaborators, receiving mentorship and guidance to help him complete his thesis on the biological controls of the pearl millet head miner. Upon completion, he will become Niger's eighth entomologist, which makes winning the prestigious Award for Scientific Excellence that much more valuable. Amadou has received his award on May 10 in Washington, D.C after which he will return to his country to continue his work.

Sara Hendery

Communications Coordinator, Feed the Future IPM Innovation Lab

E-mail: saraeh91@vt.edu

WEEDS ACTING AS ALTERNATE HOSTS FOR MEALY BUGS VIS-À-VIS MEALY BUGS ACTING AS BIOAGENTS IN WEED MANAGEMENT

Parthenium hysterophorus L., an obnoxious, alien, fast growing annual weed, one of the seven most dangerous weeds of the world, is a major source of nuisance, because of its ability to destroy natural vegetation and create havoc in field. Samba and Jammu districts of Jammu and Kashmir, India were surveyed intensively from May – June, 2013 onwards till August, 2017 to identify weed species infested by mealy bugs. Heavy infestations of mealybugs were found on *P. hysterophorus* at all locations (Dhiansar, Bari Brahmana, Chhatha, Jammu, and Tarore, Vijaypur). Besides *Parthenium*, several other weed species were also found infested with mealy bugs, viz., *Amaranthus viridis*, *Cannabis sativa*, *Boerhavia diffusa*, *Achyranthes aspera*, *Euphorbia hirta*,



Sida acuta and *Lantana camara*. *P. hysterophorus* was observed to be heavily infested by mealy bugs during the drier months, end of May – July, but with the onset of monsoon by end of June – July, rain water splashes, aid in their dispersal to shorter as well as longer distances.

Heavy infestation of mealy bugs, development of sooty mold and complete drying of the weed *Parthenium hysterophorus*

Symptoms of mealybug infestation become obvious

when the population of reproducing females starts to increase. At the nymphal stage, mealybugs remain hiding on the dorsal surface of leaves or on the stem. Due to the light greenish yellow colouration at nymphal stage, they are camouflaged and so not quite visible from a distance, at the early stage of infestation. Mealybugs secrete honey dew, as a result of which there is development of sooty mold, giving a black sickly appearance to the *P. hysterophorus* plants from a distance.

This mealybug species has the ability to increase rapidly in population size and spread to cover vast areas where host plants occur, in a relatively short period of time. Number of mealy bugs present per ten cm stem of *P. hysterophorus* was quite high (up to 170 nymphs and adults) during June – July. As a result of feeding by mealybugs, the weed *P. hysterophorus* completely dried up. However, with excessive rains, mealy bug population plummeted and the dried up *P. hysterophorus* plants recovered. Besides, the biocontrol agent *Zygogramma bicolorata* appeared in good numbers on the fresh flush of *P. hysterophorus* and defoliated them. Though mealybugs are pests to several species of crop plants, under certain circumstances, they may act as a biocontrol agents in managing several notorious weed species, in harmony with other bioagents like *Zygogramma*.

Dr. Reena, Dr. Anil Kumar and Dr. P.K. Rai

Advanced Center for Rainfed Agriculture, Jammu, Jammu and Kashmir, India

E-mail: bkreena12@gmail.com

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**