

IPM CRSP Trip Report

Name of Travellers: Arne Witt, Winnie Nunda and Fernadis Makale (all from CABI)

Country Visited: Tanzania

Dates of Travel: 14-17 November 2016

Purpose of trip: To attend a workshop jointly organized by ECHO East Africa (<http://echonet.org/>) and CABI to raise awareness about IAS in Tanzania, especially *Parthenium hysterophorus* and its control. Was also an opportunity to raise awareness about biological control of parthenium weed and to meet with the students undertaking research on the impacts and control of this noxious weed.

Workshop programme:

PROGRAMME FOR CABI WORKSHOP ON MANAGEMENT OF *Parthenium hysterophorus* IN TANZANIA
15-16 November 2016
Arusha Community Church (Seliani Lutheran Hospital), Arusha, Tanzania

15 October 2016		
8:30-9:00	Registration	
9:00-9:15	Opening address	Dr Efren-Fred A. Njau (TPRI)
9:15-9:30	Introductions	
9:30-10:00	Plant invasions in eastern Africa	Arne Witt (CABI)
10:00-10:15	COFFEE BREAK	
10:15-12:45	OVERVIEW OF IAS IN TANZANIA	
10:15-10:45	Invasive plants in Protected Areas	John Bukombe (TAWIRI)
10:45-11:15	Invasive plants in the East Usambaras	John Richard Mbwambo (TAFORI)
11:15-12:15	Impacts and control of mesquite, cacti and other spp.	Arne Witt (CABI)
12:15-12:45	Impacts and management of <i>Chromolaena odorata</i> in Mara Region	Winnie Nunda (CABI)
12:45-14:00	LUNCH	
14:00-17:15	IMPACTS AND MANAGEMENT OF PARTHENIUM	
14:00-14:30	Impacts and management of <i>Parthenium hysterophorus</i> – a global review	Arne Witt (CABI)
14:30-15:00	Management of <i>Parthenium hysterophorus</i> in and around Arusha, Tanzania	Charles Bonaventure (ECHO)
15:00-15:30	Invasion pathways and distribution of <i>Parthenium hysterophorus</i> in Tanzania	Ramadhan Kilewa (TPRI)
15:30-16:00	COFFEE BREAK	
16:00-16:30	Socio-economic impacts of <i>Parthenium hysterophorus</i> in and around Arusha, Tanzania	Winnie Nunda (CABI)
17:00-17:15	Wrap-up	
16 October 2016		
8:30-12:30	INTO THE FUTURE – RESEARCH AND MANAGEMENT OF PARTHENIUM	
8:30-09:00	Overview of USAID funded project on the biological control of <i>Parthenium hysterophorus</i>	Samora Macrice (SUA)

9:00-09:30	Mass rearing of biocontrol agents at TPRI, Tanzania	Ramadah Kilewa (TPRI)
09:30-10:00	Project proposal: Impact of carrot grass (<i>Parthenium hysterophorus</i>) on production of selected crops in Arusha, Tanzania	Hamis Wambura (SUA)
10:00-10:30	COFFEE BREAK	
10:30-11:00	Project proposal: Effectiveness of <i>Zygogramma bicolorata</i> as a bioagent for the control of <i>Parthenium hysterophorus</i> in selected landscapes in Arusha, Tanzania	Joyce Christopher (SUA)
11:00-11:30	Project proposal: Effects of the invasive weed <i>Parthenium hysterophorus</i> on rangelands and livestock production in Arusha, Tanzania	Leticia Musese (SUA)
11:30-12:30	General discussion and wrap-up	
12:30-13:30	LUNCH	
13:30-16:00	Group discussion – Parthenium weed management strategies – prevention, EDRR and control	

The workshop was attended by 80 people from various research organisations, CBO's, farmers, conservationists, journalists and concerned community members. These included staff from the Tropical Pesticides Research Institute (TPRI), The Nature Conservancy (TNC), World Conservation Society (WCS), Grumeti Fund, Oikos East Africa, Tanzania Forest Research Institute (TAFORI), Tanzania Wildlife Research Institute (TAWIRI), Nelson Mandela African Institution of Science and Technology (NM-AIST), MOJIFA – Environmental Care, Selian Agricultural Research Institute (SARI), Horticultural Research and Training Institute Tengeru-Arusha (HORTI), Meru District Council, and others.

On the 17th, following the workshop, a meeting was held with Dr Samora Macrice (SUA), Ramadhan Kilewa (TPRI) and the three University of Sokoine students to discuss and refine their MSc thesis proposals. This was followed by a tour of the TPRI facilities to view the laboratories and field sites where the students will be undertaking their research. Was also an opportunity to view the tunnels and cages where mass rearing of *Zygogramma bicolorata* will be undertaken. Plants have already been potted and tunnels erected for mass rearing to commence early in 2017. Feedback on procedures/protocols for growing parthenium weed and mass rearing of the biocontrol agent were provided.

Suggestions, recommendations and/or follow-up items

1. There is widespread concern and support for any activities which may reduce the abundance of parthenium weed in and around Arusha and to inhibit or stop the further spread of this noxious weed. One of the main outputs of the workshop will be to produce a “strategy” to deal with parthenium weed, especially with regard to containment. A number of suggestions were made including field days where outlying populations will be eradicated and awareness created. Other suggestions include the purchase of a vehicle and employment of dedicated staff to map and eradicate outliers in order to stop the further spread. These actions are dependent on financial resources in order to be realized.
2. There was support for the development of a national strategy to combat all IAS – workshop participants felt it important that Tanzania develop and implement a National Invasive Species Strategy and Action Plan. In this regard a pre-proposal will be sent to the relevant Ministries in order to gain support for a GEF supported IAS Project in the next GEF funding cycle.
3. It has also been suggested that more awareness material be produced and disseminated, especially in areas where parthenium weed is not yet present or where it has recently established. Communities need to be aware of the threat that this weed poses and make

every attempt to eradicate new invasions. CABI, working together with partners will develop and disseminate additional awareness material.

4. There is also renewed interest amongst academic institutions to get students to undertake research projects on the impacts and management of IAS, especially parthenium weed. Lecturers from NM-AIST are especially interested. We will be working with them to develop proposals.

5. Although there was initial concern about biological control, especially amongst community members, the workshop provided an ideal opportunity to allay their concerns. However, additional workshops and demonstration trials may have to be undertaken in order to get their full support. They are convinced that an integrated strategy is required in order to get on top of the parthenium problem.

6. There is significant interest and concern amongst many individuals and agencies in Tanzania about parthenium weed. Those attending the workshop are extremely keen to work together to manage this noxious weed. Cooperation is critical in order to avoid duplication and a waste of resources.

7. The three SUA students who are being supported by this Project are keen and motivated and have produced good proposals. Sadly the ongoing drought in Tanzania is delaying the initiation of their studies. We hope that the rains come soon.

8. Based on progress at TPRI we expect to receive another shipment of *Zygogramma bicolorata* from South Africa in late January.

List of contacts made:

Name	Institution	Email
Erwin Kinsey	ECHO	ekinsey@echonet.org
Hamis Daniel	SUA	hamisdaniel@gmail.com
Samora Macrice	SUA	smacrice@suanet.ac.tz
Efrem-Fred A. Njau	TPRI	efrednjau@gmail.com
Matt Perry	Grumeti Fund	
Charles Bonaventure	ECHO	cbonaventure@echonet.org
John Bukombe	TAWIRI	johnbukombe@googlemail.com
Chira Schouten	TNC	cschouten@tnc.org
Ramadhan Kilewa	TPRI	rkilewa@gmail.com
John Richard Mbwambo	TAFORI	jorijomb@yahoo.com
Anna B. Estes	NM-AIST	estes@psu.edu
Prof. Anna Treydte	NM-AIST	anna.treydte@nm-aist.ac.tz
Silvia Ceppi		silviaceppi@gmail.com