ACP Science and Technology Programme II

AFS/2013/329-240

WIKWIO Project
Weed Identification and Knowledge in the Western Indian Ocean

Launching workshop of the project WIKWIO
January 20-24, 2014
Réduit - Mauritius

Thomas Le Bourgeois - Cirad
Nora Bakker - Cirad
Azaad Gaungoo - MCIA/MSIRI
Alain Paul Andrianaivo - FOFIFA
Jean Augustin Randriamampianina - FOFIFA
Ibrahim Yahaya - CNDRS
Pierre Grard - IFP
Balasubramanian D. - IFP
Ramesh B.R. - IFP

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Mission calendar

17/01/2014		CIRAD and IFP teams arrived in Mauritius
18/01/2014		Field visit
19/01/2014		FOFIFA, CNDRS, CCARDESA and other invited people arrived in Mauritius Finalization of the organizing of the workshop (MSIRI, CIRAD, IFP)
20/01/2014	Workshop	Opening ceremony with Minister of Agro Industry & Food Security, Attorney General of Mauritius Presentation of the project Presentation of tools Partner administrative meeting
21/01/2014	Workshop	List of species and information to be managed
22/01/2014	Workshop	Field trip to vegetable, pineapple, orchards and sugarcane crops Training in the use of the WIKWIO portal
23/01/2014	Workshop	Training in data management Schedule of activities of the project Closing ceremony
21-22-23/01/2014:	Training partners	Training in the use of administrative and financial tools and preparation of financial reports (N. Bakker and partners)
24/01/2014		Visit of the National Herbarium Field trip in rice plantation Visit of the SSR Botanical Garden Pamplemousses Departure of partners

Details of the programme of the workshop and invitation to the Opening Ceremony are presented in Appendix 1.

Introduction

The WIKWIO project

WIKWIO aims to strengthen science and technology orientation to achieving food security by enhancing agricultural productivity in the Southern African region. Agricultural productivity is hampered by many factors, one important among them being weeds. WIKWIO aims to build and leverage a Science & Technology network which will consolidate existing scientific knowledge and facilitate sharing of new information on weeds and effective management practices for food and cash crops of the western Indian Ocean region

The workshop had four objectives:

- Officially open the project to partners and participants
- Present and discuss the tools which will be used for the WIKWIO project
- Training of participants in data management through the participatory portal
- Presentation of administrative and financial aspects of the project to partners

The launching workshop

At the starting of the project, the launching workshop was held for four days in Réduit, Mauritius, at MCIA/MSIRI Research Station.

Fig. 1: Philippe Bonâme Hall MCIA/MSIRI Réduit - Mauritius (© T. Le Bourgeois - CIRAD)

Fig. 2: Banner of the launching workshop (© T. Le Bourgeois - CIRAD)

This launching workshop brought together partner teams of the project (namely CIRAD[1], MCIA[2]/MSIRI[3], FOFIFA [4]CNDRS [5]and IFP[6]), associates (CCARDESA[7], the representative to ASARECA [8]could not participate), invited people from Tanzania, Swaziland, Zimbabwe and South Africa, and actors from Mauritius and Rodrigues islands such as sugarcane agronomists, representatives of small farmers, weed scientists, extension service providers, botanists, University lecturers. Several

[1] CIRAD : Centre de coopération internationale en recherche agronomique pour le développement (France)
[2] MCIA : Mauritius Cane Industry Authority
[3] MSIRI : Mauritius Sugarcane Industry Research Institute
[4] FOFIFA : Centre National de la Recherche Appliquée au Développement Rural (Madagascar)
[5] CNDRS : Centre National de Documentation et de Recherche Scientifique (Comores)
[6] IFP : French Institute of Pondicherry (India)
[7] CCARDESA : Center for Coordination of Agricultural Research and Development for Southern Africa
[8] ASARECA : Association for Strenghthening Agricultural Research in Eastern and Central Africa

personalities were invited to attend the Opening ceremony such as representatives from the Delegation of the European Union in the Republic of Mauritius, COI [9], IUCN[10], SADC [11].

Some 80 people attended the opening ceremony while 40 people participated in the entire workshop. The list of participants is presented in Appendix 2.

Fig.3: Opening ceremony (© A. Parmanum - MSIRI)

The workshop was introduced by Honourable Satya Veyash Faugoo, Minister of Agro Industry and Food Security, Attorney General, Dr Salem Saumtally, Director of MSIRI and Dr. Thomas Le Bourgeois, project leader from CIRAD.

Various points were presented and discussed during the workshop:

- The WIKWIO project and its objectives
- The tools which will be used (e.g. Website, participatory portal, identification tool) during the project
- Weed species list and information to be managed, according to countries and cropping systems
- Training of participant in the use of tools and data management in the portal
- Collaboration opportunities
- Administrative and financial aspects of the project, for partners only

Partners

The WIKWIO project is coordinated by CIRAD in collaboration with 4 partners (MCIA/MSIRI, FOFIFA, CNDRS and IFP. CIRAD was represented at the workshop by Thomas Le Bourgeois (weed scientist and project leader), Nora Bakker (management assistant), José Martin (sugarcane agronomist and weed scientist), Fabrice Lebellec (orchard agronomist and weed scientist). MCIA/MSIRI was represented by Salem Saumtally (director of the institute), Azaad Gaungoo (weed scientist), Arouna Seechurn (Research assistant) and several scientists. FOFIFA was represented by Alain Paul Andrianaivo and Jean Augustin Randriamampianina (weed scientists). CNDRS was represented by Ibrahim Yahaya

[9] COI : Commission de l'Océan Indien
[10] IUCN : International Union for Conservation of Nature
[11] SADC : South African Development Community

(weed scientist). IFP was represented by Pierre Grard (director, expert in computer information systems in botany), Balasubramanian D. (expert in computer systems) and Ramesh B.R. (botanist).

CCARDESA associate was represented by Timothy Simalenga (executive director). MSIRI invited people from Eastern and Southern Africa with whom they already have collaborations in agronomy through training programmes. There were H.F. Kalimba from Tanzania (STRIT Sugar Technical Research Instititute of Tanzania), S. Chinorumba from Zimbabwe (ZSAES), N.E. Musawenkhosi Dlamini from Swaziland (Sugar Assoc. Tachnical Services), and P.J. Pieterse (Lecturer in weed science from Stellenbosch University in South Africa).

Two representatives of the extension services of Rodrigues were invited as well as a number of Mauritian people from the different institutions involved in crop production (sugarcane states, small farmers agency), extension services, Ministry of agriculture, University of Mauritius, Research, Botanical garden, Herbarium.

Researchers, assistants and technicians from MSIRI also attended the opening ceremony.

The list of participants is presented in Appendix 1.

Presentations and discussions

1 The WIKWIO project and its ojectives

Relevance of the action

- Agriculture is the mainstay of the livelihoods of population in the Island states of the Indian Ocean, and South Eastern African region too
- Weeds cause enormous economic loss in food and cash cropping systems
- Optimisation of weed management can result in significant boost of production
- WIKWIO will focus on weed knowledge and management through informed scientific and technological approach
- Limited production due to ineffective control of weeds (responsible to 20-80 % of yield losses)

Relevance of the proposal

- New science and technology framework
  - Weed research
  - Weed management in food and cash cropping systems
- Centralised platform of information on weeds

Specific objectives

- Consolidation of existing scientific knowledge for the weed species of food and cash cropping systems
- Enhancing exploitation and dissemination of best weed management practices
- Support the stakeholders in their use of Web 2.0 tools and improve the tools based on their feedback

Fig. 4: Issues of the WIKWIO project

Outputs and expected results

- Established and consolidated network at Western Indian Ocean level
- Fully functional web portal on weeds combining:
  - ✓ Public access / Members working groups
  - ✓ Network management
  - ✓ Field observations
  - ✓ Weed identification
  - ✓ Weed information
- Tools available on several kinds of devices

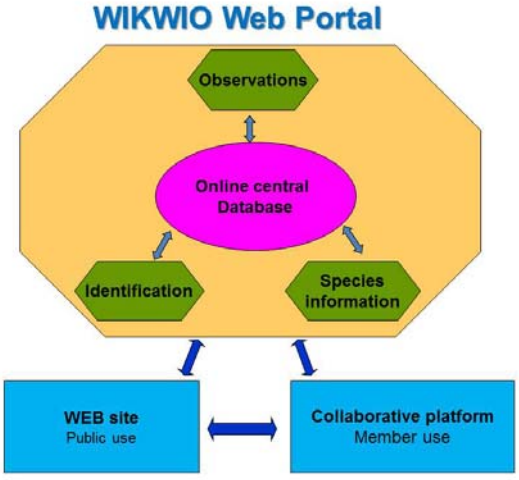

Fig.5: Combination of tools of the WIKWIO project

Project activities

1. Regular workshops with partners and stakeholders
2. Compilation of existing knowledge resources
3. Integration of various datasets and implementation of the knowledge base (identification, information and control measures)
4. Dissemination sessions, feedback and improvement of the WIKWIO Web2.0 portal

2 The WIKWIO website and participatory portal

The project website of WIKWIO is available at http://www.wikwio.org

Fig.6: Home Page of the WIKWIO project website

This website is presenting the WIKWIO project, the various activities (e.g. workshops, missions, techniques used), the partners, the project resources (bibliographical, botanical resources, fact sheets on species and identification system), contact of project coordinators and links to the participatory portal.

The participatory portal of WIKWIO is a Web-2 collaborative space for both public and members of the WIKWIO project available at http://www.portal.wikwio.org
It allows to:

- Access or contribution to species information spreadsheets
- Supply weed observations (e.g. field trips, weed control practices, unidentified weeds)
- Supply maps (the geo-referenced layers can be superposed on a Google physical or OSM base layer map)
- Share information, working documents, check lists of species
- Access the IDAO identification tool online
- Create working groups on specific topics
- Create, animate and participate to online discussions

Any page, document or photo can be subject to comments for/from members of the portal. These comments will include the basis for exchanges between the partners.

This portal is for public consultation but participation and contribution in this portal requires registration. Registration is validated by the project coordinators to prevent automated registrations or registrations from people with other intentions (e.g. people that are clearly not associated to agriculture or botany). By the end of the workshop there are currently 33 members registered to the

portal. The workshop participants have been trained in the use of this portal and are now able to present it in their professional networks and seek new registrations.

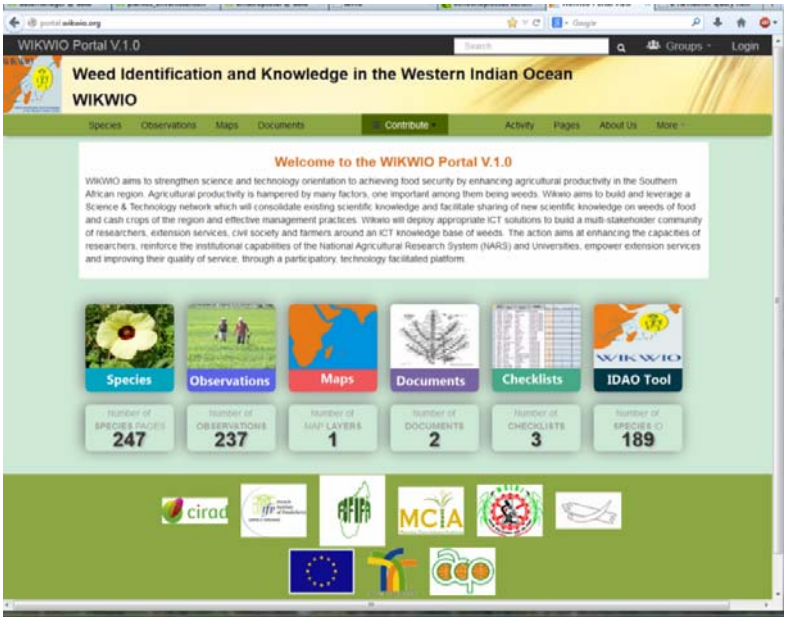

Fig.7 Home page of the WIKWIO portal

The first version of the Website and the portal of WIKWIO is in English but the next release will be bilingual (English/French).

3 The WIKWIO IDAO identification system

IDAO identification of weeds using the identikit tool enables the identification of a first set of 200 weed species of cropping systems in the Indian Ocean at any stage of development or from incomplete samples, without requiring prior knowledge in botany or taxonomy. Moreover, this process is less sensitive to errors than a classical identification-tree, where one mistake can lead to a completely wrong identification.

Species are listed in order of probability of consistency with the information provided by the user.

All the species are fully described in French language, with information on its origin, distribution, ecology and weediness, control methods used, sources (references), and are abundantly illustrated.

This first version will be completed according to the full list of species of the project and at least a bilingual (French/ English) version will be available.

During the discussion it was also proposed to add a version in creole and in Bhojpuri (an Indian language frequently used by farmers in Mauritius). This will mainly depend on the capacity to translate the species spread sheets.

IDAO is a working tool for science and research, but can also serve as a pedagogical means for the dissemination of knowledge and a proven capacity building tool which can used effectively for teaching and training in weed taxonomy for the scientific community. It is accessible from the WIKWIO portal and website.

Several versions will be developed during the project for any kind of use according to the location, the device used and the internet connectivity:

- A CD-rom for use on computer without internet connection.
- A SVG version for online use with computer, tablet or smartphone with 3G+ or WiFi connection from the website and the portal of the project.
- An off-line encapsulated version for tablets or smartphone use without 3G+ connection

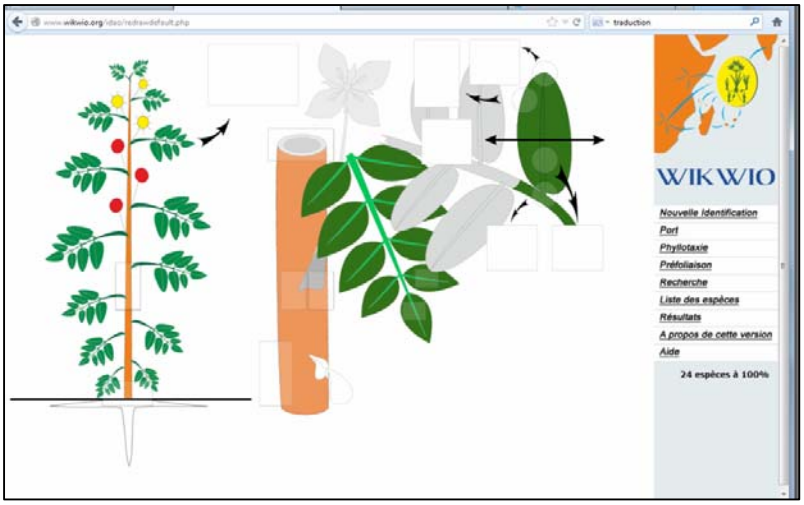

Fig. 8: Screen shot of the WIKWIO IDAO identification tool

4 The WIKWIO species database

The online Database of WIKWIO is directly managed under the portal of the project. This enables online and multi-user data management.

Some information about few species is already managed and available for a first overview of the system.

The species spread-sheet has been detailed and discussed and is already complete in itself to meet the requirements of the project. However, suggestions were made to include the following fields specific to weeds:

- Main weed types (fern, grass, sedge, broadleaf, climber, parasitic, shrub…)
- Life cycle (annual, vivacious, perennial)
- Main environment (agroforestry, terrestrial, marshland, aquatic)

These fields available directly on the species Web page, will facilitate to filter the browsing of species. Other fields like “weediness” and “control recommendations” were completed according to the different cropping systems concerned in the area, as well as “capability for hosting crop pests or pathogens” and “herbicide sensitivity”.
The information for species spread-sheets is presently being managed in English but the next release will cater for the French language.

Elaboration and discussion on the list of weed species and information

Prior to the workshop, the partners were asked to draw up an initial list of weeds of their respective countries and to assess the weediness of these species according to the different cropping systems. These lists were compiled, gathered and presented for discussion during the workshop. A new species, *Pilea microphylla* (L.) Liebm., a troublesome weed in ornamental nurseries in Mauritius was added to the list.
Finally, a list of 320 species was established concerning 14 cropping systems. The fig. 8 summarizes the number of species per cropping system and country. It is presented in Appendix 3.

Cropping systems and weed species number

Crops	Comoros	Madagascar	Mauritius	Reunion
Sugarcane	33		109	137
Pineapple	22		98	31
Potato			40	
Cabbage palm			25	
Vegetables	45	188	96	65
Orchards	51		25	20
Lentil				83
Banana	66		20	
Cassava	71	175		
Vanilla	65			
Rice		205	30	
Maize		218		
Cotton		109		
Groundnut		119	25	

Total no. of weed species: 320

Fig. 9: Number of weed species per cropping system and country

Rather than selecting the species with the highest weediness, it was decided to work on all species because the weediness of a species may vary considerably from one country to another and from one cropping system to another. Furthermore the portal allows us to feed the database progressively according to the information available.
Checklists of weeds per country with their weediness per cropping system were uploaded in the portal. These checklists will be updated during the project.

Training partners to the use of the identification system on tablets in the field and taking photos of weeds

A field trip was organized in the morning of the third day to visit several kinds of cropping systems of Mauritius (namely vegetables, pineapple, orchard, sugarcane). It was the opportunity to present the use of the IDAO identification system with a tablet directly in the field (fig.9).

Fig. 10: Weed identification in the field with WKWIO IDOA on a tablet (© P. Grard - IFP)

Explanations on the setting up of digital cameras for taking photos of plants in the field were also provided (fig. 10).

Fig. 11: Taking photos of plants (© T. Le Bourgeois - Cirad)

Training partners in uploading their observations in the portal

A training session for observation uploading in the portal was organized for workshop participants. Once registered on the portal, participants learned how to record in the online database of the portal, observations and photos collected in the field. They were also trained to provide information, comments or identification on photos of unidentified or misidentified species.

Fig. 12: Training session on observation uploading (© T. Le Bourgeois - Cirad)

Schedule of activities until the next technical workshop in Madagascar

The next technical workshop is planned to take place in October 2014 in Madagascar, organized by FOFIFA. Due to the recent presidential election in Madagascar, we decided to follow closely the political and social development in the country until end of March before confirming the organization of this workshop there. In case of any doubt, it could be decided to organize the second workshop in Comoros while waiting for the third one to be organized in Madagascar.

Several activities have been scheduled till October 2014:

- Prepare a list of participants and institutions involved or interested in the project on a Google doc: January – October (MSIRI, CIRAD, IFP, FOFIFA, CNDRS)
- Prepare the report of the launching workshop on a Google doc: January (CIRAD, IFP, MSIRI, FOFIFA, CNDRS)
- Prepare the factsheet of the project for ACP S&T programme on a Google doc: January(CIRAD, IFP, MSIRI, FOFIFA, CNDRS)
- Update the format of the species spread sheet on a Google doc: February (IFP, CIRAD, MSIRI, FOFIFA, CNDRS)
- Review species list and nomenclature on a Google doc: February (IFP, CIRAD)
- List of species with no information : February (CIRAD)
- Prepare species synthesis already existing : February -March (CIRAD)
- Upload species fact sheets on the portal : March (CIRAD- IFP)
- Prepare matrix of characters for identification: February -March (CIRAD)
- Visit of T. Le Bourgeois and N. Bakker at Pondicherry to work with IFP team on the update of the website, portal and IDAO tools as well as training of the IFP accountant to administrative monitoring and preparation of the financial report: April (CIRAD-IFP)

- Adaptation of the IDAO identikit: February – April (IFP)
- New release of IDAO WIKWIO: May (IFP)
- Prepare complementary species fact sheets: February – August (MSIRI, CNDRS, FOFIFA)
- Translate species information from French to English: February-October (MSIRI, IFP)
- Collect species information (biology, ecology, weediness, control methods), herbarium specimens, photos: February – October (MSIRI, CNDRS, FOFIFA, members)
- Upload species information, observations and photos in the portal: February – October (partners and members)
- Discussions on documents: February – October (partners and members)

On the first Tuesday of each month, a coordination meeting for partners will be held by video conference (at 9h in France, 11h in Madagascar and Comoros, 12h Mauritius and 14h30 in Pondicherry).

Opportunities for developing other collaborations around the WIKWIO project

During the discussions on the tools (identification, participatory portal) several opportunities of collaborations appeared from participants.

CCARDESA executive director (T. Simalenga) presented CCARDESA activities and more precisely the APPSA programme (Agricultural Productivity Program for Southern Africa) which started in October 2013 and concerns 25 projects initiated in 3 participating countries; i.e. Mozambique (Rice), Malawi (Maize) and Zambia (legumes). The WIKWIO portal is similar to what CCARDESA is looking for to set up for the APPSA programme. Thus, CCARDESA would like to incorporate the WIKWIO tools in this programme and proposed to invite some WIKWIO coordinators to attend the next APPSA meeting in April 2014 in Stellenbosch – South Africa. This would be a first step of contribution and collaboration of CCARDESA in the dissemination of the WIKWIO project in Southern Africa.

SSR Botanical Garden of Pamplemousses is the oldest botanical garden in the Southern hemisphere. After several years of lack of maintenance, a new team is in charge of the rehabilitation of the garden and is preparing a strategic plan for the coming years. Discussions with Kersley Pynee (Botanist) and Poojanraj Khurun (Officer in charge) highlighted the interest they have to propose collaboration in the development of an identification system using the IDAO process for trees of the botanical garden. Such a tool would have both an interest for monitoring plants by the staff of the botanical garden, a tourist attraction for visitors and educational for students who regularly visit the garden. A proposal will be included in the strategic plan which will be presented to the Ministry of Environment of Mauritius.

The National Herbarium of Mauritius is under the control of the Ministry of Agro Industry and Food Security but is still based at the MSIRI Research Station. During the visit of the Herbarium we discussed with Dr. Claudia Baider (Herbarium officer) the possibility to digitize the herbarium sheets of weed species present in the list of the WIKWIO project. She also plans to digitize the entire herbarium but lacks a modern photographic equipment for it. It has been proposed that the MSIRI team would share the digital camera acquired under the WIKWIO Project with the Herbarium.

Herbarium sheets of weeds prepared during the WIKWIO will be stored in the National Herbarium and contribute to the collection.

The International Union for Conservation of Nature (IUCN) as part of a European Commission (EuropeAid-ENRTP6) supported action titled 'Preparation and testing of a comprehensive model for preventing and managing the spread of invasive species on island ecosystems' is developing a networking portal for the islands of the Western Indian Ocean called the Western Indian Ocean - Invasive Species Practitioners Network Portal. Olivier Tyack (IUCN coordinator of the project) attended the WIKWIO workshop and was interested in analyzing the opportunities to establish some links in between the two projects.

Visibility actions

Flyers presenting the WIKWIO project in French and English were distributed to workshop participants so that they can distribute through their professional network in their country.

Fig. 13: WIKWIO flyer in English

Fig. 14: WIKWIO flyer in French

Documents used during the workshop (schedule, invitation, banner etc.) included the logos of the European Union and the ACP S&T programme and those of partners (fig. 13).

Fig. 15: Banner of the launching workshop (© T. Le Bourgeois/Cirad)

Caps, bags and umbrellas with the logo of the project, logos of the European Union and the ACP S&T programme, and those of partners were distributed to participants (fig.14).

Fig. 16: Caps, bags and umbrellas of the project during the field trip in rice farm (© T. Le Bourgeois/Cirad, P. Grard/IFP)

Interviews with different coordinators or participants were performed by the MBC Mauritius TV and presented during the TV news on 20/01/2014. The video is available on the website of the project.

Interviews by journalists of Mauritius newspapers were also performed. A press release has been distributed (Appendix 4).

An insert in the Mauritian newspaper "LE DEFI QUOTIDIEN" was issued on January 21 (Appendix 5).

Administrative aspects of the WIKWIO project

Several sessions with partners were organized and managed by Nora Bakker (Project administrative assistant).

She presented and explained:

- General conditions applicable to European Union-financed grant contracts actions that every partner shall have to follow and respect during the project.
- The use of time sheets for every partner participant
- The use of Excel table prepared by CIRAD accountant for the management of expanses and the preparation of financial reports.

She has had several meetings with the Financial Manager and Account Officer of the MCIA, namely Mr. Satish DEENA and Mrs. Noëllette DANTIER respectively, to explain the contract, the general conditions and train them in the use of the financial tools.

Finally a training session with partner scientists from FOFIFA, IFP and CNDRS was performed to show them the use of the financial tools so that they can afterward provide the necessary explanations to the financial officers in respective institutions.

They may also contact her by mails and through skype for any matter during the course of the project.
She will further organize the first year financial follow-up of the project during the second workshop.

Conclusions

The launching workshop of the WIKWIO project was very interesting and remarkably well organized. The attendees were unanimous to say that the WIKWIO project and the tools address an important need for information on weeds of food and cash crops in the Western Indian Ocean. They should facilitate teaching, training and informing farmers and all stakeholders involved in agronomic activities.
There was a general feeling that this project is starting in very good conditions, and everybody is excited to contribute.

Acknowledgement

It was a great Honor to benefit from the opening speech of Honourable Satya Veyash Faugoo, Minister of Agro Industry & Food Security, Attorney General for the opening ceremony of the workshop. This participation demonstrates the importance of the project for Mauritius and the Department's interest in this project.
The project coordinators of WIKWIO acknowledge Dr. Salem Saumtally (Director of MCIA/MSIRI) and the MSIRI team for its efficiency and the quality of the organization of the launching workshop of the WIKWIO project at MSIRI Research Station in Mauritius. In particular we herewith thank Mr. Azaad Gaungoo and Mr. Jugdish Sonatun for their contribution in preparing this workshop and their availability during the course of it.
We would also like to thank Dr. Salem Saumtally for giving an opening, to welcome all participants and present the objectives of the workshop.
We thank the European Union (ACP Secretariat -Science and Technology Programme II) for funding the project WIKWIO through the tender of the 2012 10th European Development Fund, and the Delegation of the European Union to the Republic of Mauritius (namely Mr. Eric Vanhalewyn and Mrs. Tjasa Zivko) for their participation to the opening and closing ceremonies of the launching workshop.

Appendix 1: Programme of the Workshop

The Mauritius Sugarcane Industry Research Institute
under the aegis of the
Mauritius Cane Industry Authority
has the pleasure to invite you to the Opening Ceremony of a workshop on
'Weed Identification and Knowledge in the Western Indian Ocean'
on 20 January 2014 at 9:30 hrs in the Bonâme Hall, MSIRI, Réduit
in the presence of
The Honourable Satya Veyash Faugoo,
Minister of Agro-Industry and Food Security, Attorney General

Guests are kindly invited to be seated by 9:15 hrs

R.S.V.P.
Tel: 4541061

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Weed Identification and Knowledge in the Western Indian Ocean

Launching Workshop

20 - 24 January 2014

Bonâme Hall, MSIRI
Réduit, Mauritius

PROGRAMME

Day 1 – 20 January 2014

8:30 - 9:15	Registration of Workshop participants
9:30 - 10:30	Opening ceremony
10:30 - 11:00	*Coffee break*
11:00 - 12:15	Presentation of partners
12:15 - 13:30	*Lunch*
13:30 - 14:00	WIKWIO presentation - T Le Bourgeois
14:00 - 14:30	IDAO presentation - P Grard
14:30 - 15:00	WIKWIO Web portal presentation - D Balasubramanian
15:00 - 15:15	WIKWIO knowledge database presentation - T Le Bourgeois
15:30 - 15:50	*Coffee break*
15:50 - 17:30	Partners administrative meeting (MCIA/MSIRI, CIRAD, IFP, FOFIFA, CNDRS)

Day 2 - 21 January 2014

8:30 - 9:00	Cropping systems and weed species list - A Gaungoo
9:00 - 10:30	Discussion on the final species list
10:30 - 10:50	*Coffee break*
10:50 - 12:00	Establishment of list of species and information to be managed
12:00 - 13:30	*Lunch*
14:30 - 15:30	Establishment of list of species and information to be managed
15:30 - 15:50	*Coffee break*
15:50 - 17:00	Morphological characters for plant identification
19:30 – 21:00	*WIKWIO Cocktail*

Day 3 – 22 January 2014

8:30 – 12:00	Field trip: visits to different cropping systems
12:00 - 13:30	*Lunch*
13:30 – 15:30	Methodology for managing illustrations (photos, herbarium scan, drawings, etc...)
15:30 – 15:50	*Coffee break*
15:50 - 17:00	Data Management training

Day 4 - 23 January 2014

8:30 - 10:30	Data Management training
10:30 - 10:50	*Coffee break*
10:50 – 12:00	Data Management training
12:00 – 13:30	*Lunch*
13:30 – 15:30	Schedule of activities for the project
15:30 – 16:00	*Coffee break*
16:00 – 16:30	Closing ceremony

Day 5 – 24 January 2014 *(Partners only)*

8:30 – 9:30	Visit of Mauritius Herbarium
9:30 – 10:30	Debriefing session
10:30 – 10:50	*Coffee break*
10:50 - 12:00	Debriefing session
12:00 - 13:30	*Lunch*
13:30 – 15:30	Debriefing session
15:30 – 16:00	*Coffee break*
16:00 – 17:20	Debriefing session

Appendix 2: List of attendees

Fig. 17: Group photo of participants (©A. Parmanum **/MSIRI)**

Name	***Organisation***	***Country***	***Contact***
Permanent participants			
Prof Timothy Simalenga	CCARDESA, Executive director	Botswana	tsimalenga@ccardesa.org
Mr Ibrahim Yahaya	CNDRS, Weed scientist	Comoros	yahayam@yahoo.fr
Mrs Nora Bakker	CIRAD, WIKWIO administrative	France	nora.bakker@cirad.fr
Dr Thomas Le Bourgeois	CIRAD, WIKWIO project coordinator	France	thomas.le_bourgeois@cirad.fr
Mr Fabrice Le Bellec	CIRAD, Fruit agronomist	France, Réunion	lebellec@cirad.fr
Mr José Martin	CIRAD, Sugarcane agronomist	France, Réunion	jose.martin@cirad.fr
Mr D. Balasubramanian	IFP, Computer expert	India	balu.d@ifpindia.org
Dr Pierre Grard	IFP, Director	India	pierre.grard@ifpindia.org
Dr B.R. Ramesh	IFP, Botanist	India	ramesh.br@ifpindia.org
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Launching Workshop - List of invitations

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Mr R K Soniah, Director, Farmers' Service Agency, MCIA, Réduit
The Director, Control Board and Arbitration Department, MCIA, Réduit
Mr T. Gunesh, FSC Manager, St Pierre
Mr A. Awotara, FSC Manager, Rose-Belle
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EU delegation
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Mr Eric Vanhalewyn, First Secretary, Delegation of the European Union
Ms Tjasa Zivko, Programme Manager, Delegation of the European Union

Appendix 3: List of weed species of the WIKWIO project

Code EPPO	Genre	Espèce	Famille
ASYCO	Asystasia	gangetica	ACANTHACEAE
THNAL	Thunbergia	alata	ACANTHACEAE
THNFR	Thunbergia	laevis	ACANTHACEAE
TEATE	Tetragonia	tetragonoides	AIZOACEAE
TRTPO	Trianthema	portulacastrum	AIZOACEAE
TRTPE	Zaleya	pentandra = Trianthema pentandra	AIZOACEAE
SAGGU	Sagittaria	guayanensis = Lophotocarpus g	ALISMATACEAE
ALLNE	Allium	neapolitanum = Nothoscordum inodorum	ALLIACEAE
ACYAS	Achyranthes	aspera	AMARANTHACEAE
AERJA	Aerva	javanica	AMARANTHACEAE
ALRPH	Alternanthera	philoxeroides	AMARANTHACEAE
ALRRE	Alternanthera	repens	AMARANTHACEAE
ALRSE	Alternanthera	sessilis	AMARANTHACEAE
AMADU	Amaranthus	dubius	AMARANTHACEAE
AMAHY	Amaranthus	hybridus	AMARANTHACEAE
AMALP	Amaranthus	lividus	AMARANTHACEAE
AMASP	Amaranthus	spinosus	AMARANTHACEAE
AMAVI	Amaranthus	viridis	AMARANTHACEAE
CEOAR	Celosia	argentea	AMARANTHACEAE
CEOTR	Celosia	trigyna	AMARANTHACEAE
CYHPR	Cyathula	prostrata	AMARANTHACEAE
GOMCE	Gomphrena	celosioides	AMARANTHACEAE
CLLAS	Centella	asiatica	APIACEAE
APULE	Cyclospermum	leptophyllum = Apium leptophyllum	APIACEAE
HYDBO	Hydrocotyle	bonariensis	APIACEAE
CXSES	Colocasia	esculenta	ARACEAE
PIIST	Pistia	stratoites	ARACEAE
ACNAU	Acanthospermum	australe	ASTERACEAE
ACNHI	Acanthospermum	hispidum	ASTERACEAE
EUPRI	Ageratina	riparia	ASTERACEAE
AGECC	Ageratum	conyzoides	ASTERACEAE
AMBCU	Ambrosia	psilostachya	ASTERACEAE
ARTVU	Artemisia	vulgaris	ASTERACEAE
BIDPI	Bidens	pilosa	ASTERACEAE
ERICA	Conyza	canadensis = Erigeron canadensis	ASTERACEAE
ERIFL	Conyza	sumatrensis = Erigeron naudinii	ASTERACEAE
CMSCA	Cosmos	caudatus	ASTERACEAE
CRSCR	Crassocephalum	crepidioides/rubens	ASTERACEAE
ECLAL	Eclipta	prostrata	ASTERACEAE
ELPSC	Elephantopus	scaber	ASTERACEAE
EMICI	Emilia	citrina	ASTERACEAE
EMIFO	Emilia	sonchifolia	ASTERACEAE
ERIKA	Erigeron	karvinskianus	ASTERACEAE
GASPA	Galinsoga	parviflora	ASTERACEAE
GNAPU	Gamochaeta	purpurea	ASTERACEAE

HRYRA	Hypochoeris	radicata	ASTERACEAE
LGGAL	Laggera	alata	ASTERACEAE
LAPCO	Lapsana	communis	ASTERACEAE
MIKMI	Mikania	micrantha	ASTERACEAE
PTNHY	Parthenium	hysterophorus	ASTERACEAE
LACIN	Pterocypsela	indica = Lactuca indica	ASTERACEAE
SIKOR	Sigesbeckia	orientalis	ASTERACEAE
SONAS	Sonchus	asper	ASTERACEAE
SONOL	Sonchus	oleraceus	ASTERACEAE
SYDNO	Synedrella	nodiflora	ASTERACEAE
TRQPR	Tridax	procumbens	ASTERACEAE
VENCI	Vernonia	cinerea	ASTERACEAE
UOUJA	Youngia	japonica	ASTERACEAE
BOGCO	Anredera	cordifolia = Bousingaultia cordifolia	BASELLACEAE
BOOTE	Bothriospermum	tenellum	BORAGINACEAE
HEOAM	Heliotropium	amplexicaule	BORAGINACEAE
HEOIN	Heliotropium	indicum	BORAGINACEAE
TRHZE	Trichodesma	zeylanicum	BORAGINACEAE
BARVE	Barbarea	verna	BRASSICACEAE
BRSCH	Brassica	chinensis	BRASSICACEAE
CARHI	Cardamine	hirsuta	BRASSICACEAE
COPDI	Coronopus	didymus	BRASSICACEAE
LEPAF	Lepidium	africanum	BRASSICACEAE
RAPRA	Raphanus	raphanistrum	BRASSICACEAE
CASOB	Senna	obtusifolia/tora	CAESALPINIACEAE
CASOC	Senna	occidentalis	CAESALPINIACEAE
LOBCL	Lobelia	cliffortiana	CAMPANULACEAE
CNNIN	Canna	indica	CANNACEAE
CLEHI	Cleome	hirta	CAPPARIDACEAE
CLEVI	Cleome	viscosa	CAPPARIDACEAE
CERGL	Cerastium	glomeratum	CARYOPHYLLACEAE
DRYCO	Drymaria	cordata	CARYOPHYLLACEAE
PCYCO	Polycarpaea	corymbosa	CARYOPHYLLACEAE
SPRAR	Spergula	arvensis	CARYOPHYLLACEAE
STEME	Stellaria	media	CARYOPHYLLACEAE
CHEAL	Chenopodium	album	CHENOPPODIACEAE
CHEAA	Chenopodium	ambrosioides	CHENOPPODIACEAE
COMAK	Commelina	africana var. krebsiana = C. lyalli	COMMELINACEAE
COMBE	Commelina	benghalensis	COMMELINACEAE
COMDI	Commelina	diffusa	COMMELINACEAE
CVCCA	Cuscuta	campestris	CONVOLVULACEAE
IPOAQ	Ipomoea	aquatica	CONVOLVULACEAE
IPOCP	Ipomoea	coptica	CONVOLVULACEAE
IPOER	Ipomoea	eriocarpa	CONVOLVULACEAE
IPOHF	Ipomoea	hederifolia	CONVOLVULACEAE
IPOAC	Ipomoea	indica	CONVOLVULACEAE
IPONI	Ipomoea	nil	CONVOLVULACEAE
IPOOB	Ipomoea	obscura	CONVOLVULACEAE
PHBPU	Ipomoea	purpurea	CONVOLVULACEAE
IPOTR	Ipomoea	triloba	CONVOLVULACEAE
IAQTA	Jacquemontia	tamnifolia = J. capitata	CONVOLVULACEAE
IPOPE	Merremia	aegyptia	CONVOLVULACEAE
MRRDI	Merremia	dissecta	CONVOLVULACEAE
COCGR	Coccinia	grandis	CUCURBITACEAE
MOMCH	Momordica	charantia	CUCURBITACEAE

CYPLU	Courtoisina	cyperoides	CYPERACEAE
CYPBF	Cyperus	balfourii = C. confusus	CYPERACEAE
CYPDI	Cyperus	difformis	CYPERACEAE
CYPES	Cyperus	esculentus	CYPERACEAE
CYPIR	Cyperus	iria	CYPERACEAE
CYPAE	Cyperus	prolifer = C.aequalis	CYPERACEAE
CYPRO	Cyperus	rotundus	CYPERACEAE
ELODU	Eleocharis	dulcis = E plantaginea	CYPERACEAE
ELOLI	Eleocharis	limosa = E. baronii	CYPERACEAE
ELOMI	Eleocharis	minuta	CYPERACEAE
FIMDI	Fimbristylis	dichotoma = F diphylla	CYPERACEAE
FIMLI	Fimbristylis	littoralis	CYPERACEAE
FIMQU	Fimbristylis	quinquangularis	CYPERACEAE
FUICI	Fuirena	ciliaris	CYPERACEAE
FUIUM	Fuirena	umbellata	CYPERACEAE
KYLBU	Kyllinga	bulbosa	CYPERACEAE
KYLEL	Kyllinga	elata	CYPERACEAE
PYCMU	Pycreus	mundtii	CYPERACEAE
PYCPO	Pycreus	polystachios	CYPERACEAE
PYCTR	Pycreus	tremulus	CYPERACEAE
SHKPE	Schoenoplectiella	perrieri = Scirpus perrieri	CYPERACEAE
SCPJO	Schoenoplectus	juncoides = Scirpus juncoides	CYPERACEAE
SCLSS	Scleria	sp	CYPERACEAE
PTEAQ	Pteridium	aquilinum	DENNSTAEDTIACEAE
ACCIN	Acalypha	indica	EUPHORBIACEAE
CVNBO	Croton	bonplandianus	EUPHORBIACEAE
EPHCT	Euphorbia	cyathophora	EUPHORBIACEAE
EPHHL	Euphorbia	heterophylla	EUPHORBIACEAE
EPHHI	Euphorbia	hirta	EUPHORBIACEAE
EPHPE	Euphorbia	peplus	EUPHORBIACEAE
EPHPT	Euphorbia	prostrata	EUPHORBIACEAE
PYLAM	Phyllanthus	amarus	EUPHORBIACEAE
PYLNO	Phyllanthus	niruroides	EUPHORBIACEAE
PYLTE	Phyllanthus	tenellus	EUPHORBIACEAE
PYLUR	Phyllanthus	urinaria	EUPHORBIACEAE
AESIN	Aeschynomene	indica	FABACEAE
ALZOV	Alysicarpus	ovalifolius	FABACEAE
ALZRU	Alysicarpus	rugosus	FABACEAE
ATYSC	Cajanus	scarabeoides	FABACEAE
COSPU	Centrosema	pubescens	FABACEAE
CVTGO	Crotalaria	goreensis	FABACEAE
CVTON	Crotalaria	ononoides	FABACEAE
CVTRE	Crotalaria	retusa	FABACEAE
CVTSS	Crotalaria	sp	FABACEAE
DEMVI	Desmanthus	virgatus	FABACEAE
DEDAD	Desmodium	adscendens	FABACEAE
DEDCA	Desmodium	incanum	FABACEAE
DEDIN	Desmodium	intortum	FABACEAE
DEDTO	Desmodium	tortuosum	FABACEAE
INDHI	Indigofera	hirsuta	FABACEAE
LUAGL	Leucaena	leucocephala	FABACEAE
PHSLY	Macroptilium	lathyroides	FABACEAE
MIMIN	Mimosa	invisa	FABACEAE
MIMPU	Mimosa	pudica	FABACEAE
MUCPR	Mucuna	pruirens	FABACEAE

RHNSE	Rhynchosia	malacophylla	FABACEAE
SEBSE	Sesbania	sesban	FABACEAE
TEPLI	Tephrosia	linearis	FABACEAE
TEPPU	Tephrosia	purpurea	FABACEAE
TERLA	Teramnus	labialis	FABACEAE
VICHI	Vicia	hirsuta	FABACEAE
VICSA	Vicia	sativa	FABACEAE
ZORLA	Zornia	latifolia	FABACEAE
TTRCR	Crocosmia	x crocosmiiflora	IRIDACEAE
SISMI	Sisyrinchium	micranthum	IRIDACEAE
HPYPE	Hyptis	pectinata	LAMIACEAE
HPYSP	Hyptis	spicigera	LAMIACEAE
LAMAM	Lamium	amplexicaule	LAMIACEAE
LEONE	Leonotis	nepetaefolia	LAMIACEAE
LECSI	Leonurus	sibiricus	LAMIACEAE
LEVLA	Leucas	lavandulifolia	LAMIACEAE
LEVMA	Leucas	martinicensis	LAMIACEAE
OCICA	Ocimum	canum	LAMIACEAE
LISGU	Litsea	glutinosa	LAURACEAE
ABMFI	Abelmoscus	ficulneus	MALVACEAE
ABUAS	Abutilon	asiaticum	MALVACEAE
ABUIN	Abutilon	indica	MALVACEAE
CRGAE	Corchorus	aestuans	MALVACEAE
CRGOL	Corchorus	olitorius	MALVACEAE
CRGSS	Corchorus	sp	MALVACEAE
HIBAS	Hibiscus	asper	MALVACEAE
HIBSU	Hibiscus	surattensis	MALVACEAE
MAVCO	Malvastrum	coromandelianum	MALVACEAE
MEOCO	Melochia	corchorifolia	MALVACEAE
MEOPY	Melochia	pyramidata	MALVACEAE
SIDAC	Sida	acuta	MALVACEAE
SIDAL	Sida	alnifolia	MALVACEAE
SIDCO	Sida	cordifolia	MALVACEAE
SIDGT	Sida	glutinosa	MALVACEAE
SIDRH	Sida	rhombifolia	MALVACEAE
SIDRT	Sida	rotundifolia	MALVACEAE
SIDUR	Sida	urens	MALVACEAE
URNLO	Urena	lobata	MALVACEAE
WALAM	Walteria	indica	MALVACEAE
MASMI	Marsilea	diffusa	MARSILEACEAE
CXAHI	Clidemia	hirta	MELASTOMATACEAE
BOEDI	Boerhavia	diffusa	NYCTAGINACEAE
BOERV	Boerhavia	repens	NYCTAGINACEAE
MIBJA	Mirabilis	jalapa	NYCTAGINACEAE
NYMST	Nymphaea	nouchali = N. stellata	NYMPHEACEAE
IUSRG	Ludwigia	peploides subsp. glabrescens = Jussiaea repens	OENOTHERACEAE
LUDER	Ludwigia	erecta	OENOTHERACEAE
OEOER	Oenothera	glazioviana	OENOTHERACEAE
OEOST	Oenothera	stricta	OENOTHERACEAE
OXACO	Oxalis	corniculata	OXALIDACEAE
OXACB	Oxalis	debilis	OXALIDACEAE
OXALA	Oxalis	latifolia	OXALIDACEAE
OXATE	Oxalis	tetraphylla	OXALIDACEAE
ARGME	Argemone	mexicana	PAPAVERACEAE

FUMMU	Fumaria	muralis = F. officinalis auct. non L.	PAPAVERACEAE
PAQFO	Passiflora	foetida	PASSIFLORACEAE
	Passiflora	parnassifolia	PASSIFLORACEAE
PAQSU	Passiflora	suberosa	PASSIFLORACEAE
PHTAM	Phytolacca	americana	PHYTOLACCACEAE
PLALA	Plantago	lanceolata	PLANTAGINACEAE
AOXOD	Anthoxanthum	odoratum	POACEAE
AXOCO	Axonopus	compressus	POACEAE
	Brachiaria	arrecta	POACEAE
BRAER	Brachiaria	eruciformis	POACEAE
BRANA	Brachiaria	nana	POACEAE
BROCA	Bromus	catharticus	POACEAE
CCHBI	Cenchrus	biflorus	POACEAE
CCHEC	Cenchrus	echinatus	POACEAE
CHRBA	Chloris	barbata	POACEAE
CHRRA	Chloris	pycnothrix	POACEAE
CHRVI	Chloris	virgata	POACEAE
CYNDN	Cynodon	dactylon	POACEAE
DTTAE	Dactyloctenium	aegyptium	POACEAE
DIGAD	Digitaria	ciliaris	POACEAE
DIGHO	Digitaria	horizontalis	POACEAE
DIGTI	Digitaria	radicosa	POACEAE
ECHCO	Echinochloa	colona	POACEAE
ECHCG	Echinochloa	crus-galli	POACEAE
ECHPY	Echinochloa	pyramidalis	POACEAE
ECHST	Echinochloa	stagnina	POACEAE
ELEIN	Eleusine	indica	POACEAE
ERAAS	Eragrostis	aspera	POACEAE
ERAME	Eragrostis	cilianensis	POACEAE
ERACY	Eragrostis	cylindriflora	POACEAE
ARAAM	Eragrostis	tenella	POACEAE
ERATE	Eragrostis	tenuifolia	POACEAE
HOLLA	Holcus	lanatus	POACEAE
IMPCA	Imperata	cylindrica	POACEAE
ISCRU	Ischaemum	rugosum	POACEAE
LERHE	Leersia	hexandra	POACEAE
RHYRE	Melinis	repens	POACEAE
OPLHI	Oplismenus	hirtelus	POACEAE
PANMA	Panicum	maximum	POACEAE
PANPK?	Panicum	pseudovoeltzkowi	POACEAE
PANRE	Panicum	repens	POACEAE
PANSB	Panicum	subalbidum	POACEAE
PANUM	Panicum	umbellatum	POACEAE
PANWA	Panicum	walense	POACEAE
PANGE	Paspalidium	geminatum	POACEAE
PASCO	Paspalum	conjugatum	POACEAE
PASDI	Paspalum	dilatatum	POACEAE
PASPA	Paspalum	paniculatum	POACEAE
PASSC	Paspalum	scrobiculatum = P. commersonii	POACEAE
PASUR	Paspalum	urvillei	POACEAE
PASVA	Paspalum	vaginatum	POACEAE
PESCA	Pennisetum	cafrum	POACEAE
PESCL	Pennisetum	clandestinum	POACEAE
PESPO	Pennisetum	polystachion	POACEAE
PRRPA	Perotis	patens	POACEAE

TYPAR	Phalaris	arundinacea	POACEAE
POAAN	Poa	annua	POACEAE
ROOEX	Rottboellia	cochinchinensis	POACEAE
SAEAF	Sacciolepis	africana	POACEAE
SAESS	Sacciolepis	sp	POACEAE
SETBA	Setaria	barbata	POACEAE
SETPF	Setaria	pumila = S. pallide-fusca	POACEAE
SETVE	Setaria	verticillata	POACEAE
SORVE	Sorghum	verticilliflorum	POACEAE
SPZAF	Sporobolus	africanus	POACEAE
STPSE	Stenotaphrum	dimidiatum	POACEAE
THMQU	Themeda	quadrivalvis	POACEAE
BRADE	Urochloa	deflexa = Brachiaria deflexa	POACEAE
PANRP	Urochloa	reptans = Brachiaria reptans	POACEAE
AIGLE	Antigonon	Leptopus	POLYGONACEAE
POLCH	Polygonum	chinense	POLYGONACEAE
RUMAB	Rumex	abyssinicus	POLYGONACEAE
RUMCR	Rumex	crispus	POLYGONACEAE
EICCR	Eichhornia	crassipes	PONTEDERIACEAE
POROL	Portulaca	oleracea	PORTULACACEAE
PTMNO	Potamogeton	nodosus = P. fluitans	POTAMOGETONACEAE
ANGCO	Anagallis	arvensis	PRIMULACEAE
RUBAC	Rubus	alceifolius	ROSACEAE
RUBFR	Rubus	fraxinifolius	ROSACEAE
RUBRO	Rubus	rosifolius	ROSACEAE
GALAP	Gallium	aparine	RUBIACEAE
MTCVI	Mitracarpus	hirtus	RUBIACEAE
OLDCO	Oldenlandia	corymbosa	RUBIACEAE
PAEFO	Paederia	foetida	RUBIACEAE
RCHSC	Richardia	scabra	RUBIACEAE
BOILF	Spermacoce	alata = Borreria alata	RUBIACEAE
BOIVE	Spermacoce	verticillata = Borreria stricta	RUBIACEAE
SAVMO	Salvinia	molesta	SALVINIACEAE
CRIMI	Cardiospermum	microcarpum	SAPINDACEAE
RPCLO	Rhamphicarpa	fistulosa	SCROFULARIACEAE
STRLU	Striga	lutea = S. asiatica	SCROFULARIACEAE
DATIN	Datura	inoxia	SOLANACEAE
DATST	Datura	stramonium	SOLANACEAE
NICPH	Nicandra	physaloides	SOLANACEAE
SOLAM	Solanum	americanum	SOLANACEAE
SOLAG	Solanum	indicum	SOLANACEAE
SOLMR	Solanum	mauritianum	SOLANACEAE
SOLTO	Solanum	torvum	SOLANACEAE
SPDZE	Sphenoclea	zeylanica	SPHENOCLEACEAE
TRBCI	Tribulus	cistoides	TRIBULACEAE
TRBTE	Tribulus	terrestris	TRIBULACEAE
TOPMA	Tropaeolum	majus	TROPAEOLACEAE
TURUL	Turnera	ulmifolia	TURNERACEAE
PILMI	Pilea	microphylla	URTICACEAE
LANCA	Lantana	camara	VERBENACEAE
STCJA	Stachytarpheta	jamaicensis	VERBENACEAE
STCUR	Stachytarpheta	urticifolia	VERBENACEAE
VEBBO	Verbena	bonariensis	VERBENACEAE
VEBBS	Verbena	brasiliensis	VERBENACEAE
HEYGA	Hedychium	gardnerianum	ZINGIBERACEAE

Appendix 4: Press release

Press release

WIKWIO

Weed identification and knowledge in the Western Indian Ocean

A project funded by
European Commission's ACP Science and Technology II Programme

Launching workshop

20 - 24 of January 2014
Réduit - Mauritius

The WIKWIO project

Food security in the western region of the Indian Ocean and an important part of its economy depend mainly on the local or regional agricultural production. However, the agricultural production, whether food or cash crops, suffers from various constraints including weeds. Weeds are considered a major cause for loss in production. In an international context of reduction of production costs and sustainability, more environment-friendly weed management is a major concern for all stakeholders' namely farmers, extensionists, agronomists, researchers and policy makers.

That is why it becomes a priority to facilitate sharing of the scientific knowledge and therefore collectively address questions and problems with weed management as a community.

New technologies of information & communication (ICTs/NTIC), online databases, assisted identification systems easily available on the Web and mobile devices give us now the capability to reach the objectives that WIKWIO has set:

- networking of all stakeholders in agricultural production, research and education for building an active community around the project
- sharing of knowledge on weeds and their control methods
- collective analysis of the problems

- through the combination of tools and information to contribute to strengthening the scientific and technical skills of local structures of research, teaching and development, and integrate the initiative into existing regional frameworks for sustained long term impact

Therefore, if each of us through our experience, brings even fraction of the knowledge that we generate into the collaborative platform, all of us can benefit from the collective wisdom, which will be accrued and available in real time and on any location (office, laboratory, field), whether to decide on a technical practice in the field to give a recommendation, or to teach or to go in a research project.

Objectives of the workshop

The launching workshop of the project Wikwio is held for a period of 5 days (20-24 of January 2014 at MCIA/MSIRI research station at Réduit - Mauritius). It is the first meeting of all the partners' together (Cirad, MCIA/MSIRI, FOFIFA, CNDRS, IFP and associate institutions CCARDESA and ASARECA) with the actors of the NARS and universities and extension services of Mauritius and African countries along the Indian Ocean to assure their participation to the implementation of the participatory platform.

The tools, such as identification assisted by computer, Web 2.0 portal, database and so on will be presented and discussed.

Discussions will be held to agree on a first list of weed species in the area where the project work will be carried out and logical data formats.

Training sessions will be organized for field data and knowledge management through the WIKWIO Web 2.0 portal.

A work plan of the activities, that will be carried on before the next technical workshop at Madagascar by the end of 2014, will be elaborated by the partners.

Expected outcomes of the project WIKWIO

- A strengthened regional S&T network
- A participatory Web 2.0 portal on weed knowledge and management
- Identification and knowledge tools available for several kind of devices (PC, mobile devices) for use at the office or directly in the field, for action, recommendation, teaching or policy making.

Web site of the project: http://www.wikwio.org
Web portal of the participatory platform: http://portal.wikwio.org

Appendix 5: Insert of the project in "LE DEFI QUOTIDIEN" newspaper

LE DEFI QUOTIDIEN
Tuesday, 21 January 2014 09:59

Haro sur les mauvaises herbes

Written by Rajmeela Seetamonee

Plusieurs experts et acteurs du domaine de l'agriculture participent actuellement à un atelier de travail régional visant à identifier et lutter contre les mauvaises herbes. Le but étant d'accroître le rendement agricole et d'éliminer les maladies.

Les mauvaises herbes sont l'ennemi naturel numéro un des agriculteurs. Pour les combattre, il est nécessaire de mettre en place des stratégies, des systèmes et des solutions de désherbage. Dans ce contexte, Maurice accueille un atelier de travail au Mauritius Sugarcane Industry and Research Institute (MSIRI), à Réduit, dans le cadre du projet « Weed Identification and Knowledge in the Western Indian Ocean ».

Les résultats serviront à initier une base de données en ligne afin de faciliter les collaborations et la mise en réseau des acteurs concernés. « Cet atelier permet un partage des connaissances sur les mauvaises herbes et les moyens pour les identifier et de les contrôler.

Les résultats renforceront les capacités dans le domaine des sciences et technologies pour améliorer les systèmes de cultures des îles de l'océan Indien et des pays d'Afrique du sud-est. Le but étant de faciliter la diffusion de meilleures pratiques de désherbage dans la région », a indiqué le Dr Thomas Le Bourgeois, Weed Scientist et Project Leader de la société française CIRAD, lors de l'ouverture du workshop lundi.

Satish Faugoo, ministre de l'Agro-industrie, a dit accueillir cet atelier qui, selon lui, est une première à Maurice. « Les mauvaises herbes sont une nuisance pour l'agriculture et fragilisent la sécurité alimentaire. Les retombées de ce projet permettront aux agriculteurs d'améliorer la productivité et d'éviter l'envahissement de leurs champs par les adventices. Ces connaissances inciteront aussi à une utilisation plus judicieuse de l'herbicide. D'ailleurs, environ Rs 300 millions sont injectées chaque année dans des herbicides, qui constituent un danger pour l'environnement et la santé », a-t-il ajouté.

Le nouveau site web dédié à l'identification et la gestion des mauvaises herbes a également été présenté lundi. Ce portail permet aux agriculteurs d'avoir accès à l'inventaire des mauvaises herbes et d'identifier, avec le concours des experts de la région, ceux qui ne sont pas répertoriés. Le projet sera financé par le programme « ACP Sciences et Technologies II » de la Commission européenne sur les trois prochaines années. Les pays participants sont le Botswana, les Comores, la France, la Réunion, l'Inde, Madagascar, l'Afrique du Sud, le Swaziland, la Tanzanie, le Zimbabwe, Rodrigues et Maurice.