

IT&C and citizen science for a better management of weeds in the Western Indian Ocean Region

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Increasing agricultural productivity faces challenges from multiple factors, significant of them being weed infestations. Weeds are responsible for a minimum of 20% loss of harvests in food and cash crops. Efficient control of weeds requires identification, effective control methods, and dissemination of current data to increase awareness among all actors. A collaborative project has been initiated to provide a participatory platform and a range of tools to support these actions.

WIKWIO: Weed Identification and Knowledge in the Western Indian Ocean aims to develop a suite of science-based, computer-driven tools. A combination of applications will be developed:

- The participatory portal from which 1) The public can consult species information, and upload observations; 3) Members can share and manage species data;
- IDAO application which utilises computer-aided plant identification;

This toolkit will facilitate the sharing of information from actors such as scientists, teachers, agronomists, extension staff, field workers and farmers and to disseminate compiled information to stakeholders in charge of the management of weeds.

All tools can be used from the portal (<http://portal.wikwio.org>).

WIKWIO covers 320 weeds of 14 food or cash crops of the area. Since no single actor or institution can study everything on weeds, the contribution of all to the knowledge of species is essential. By assisting with the identification of weeds and facilitating the sharing of information between interested parties, WIKWIO will promote sustainable agriculture and will contribute to capacity strengthening of local institutions. This project is funded by ACP S&T programme of the European Union.

Keywords: Weed management; Global database; Identification; IDAO; Data sharing; Citizen science; NTIC; Network.



4th International Symposium

Environmental Weeds and Invasive Plants

May 19th to 23rd, 2014

Montpellier SupAgro, Montpellier, France

Program - Abstracts

List of participants



Editors:
Guillaume Fried
(coord.) et al.

Publishers:
EWRS, Anses,
Montpellier SupAgro,
MAAF-DGAI,
USDA ARS-EBCL,
CSIRO, Cirad, FCBN