



HAL
open science

New technologies for sharing and disseminating knowledge on tropical weeds for better management of pastures: the WIKTROP collaborative portal

Thomas Le Bourgeois, Vincent V. Blanfort, Pierre Gard, Prabhakar Rajagopal, Thomas Vattakaven

► To cite this version:

Thomas Le Bourgeois, Vincent V. Blanfort, Pierre Gard, Prabhakar Rajagopal, Thomas Vattakaven. New technologies for sharing and disseminating knowledge on tropical weeds for better management of pastures: the WIKTROP collaborative portal. XXIV International Grassland and XI International Rangeland Virtual Congress 2021, Oct 2021, Virtual, Kenya. hal-03406916

HAL Id: hal-03406916

<https://hal.inrae.fr/hal-03406916>

Submitted on 28 Oct 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

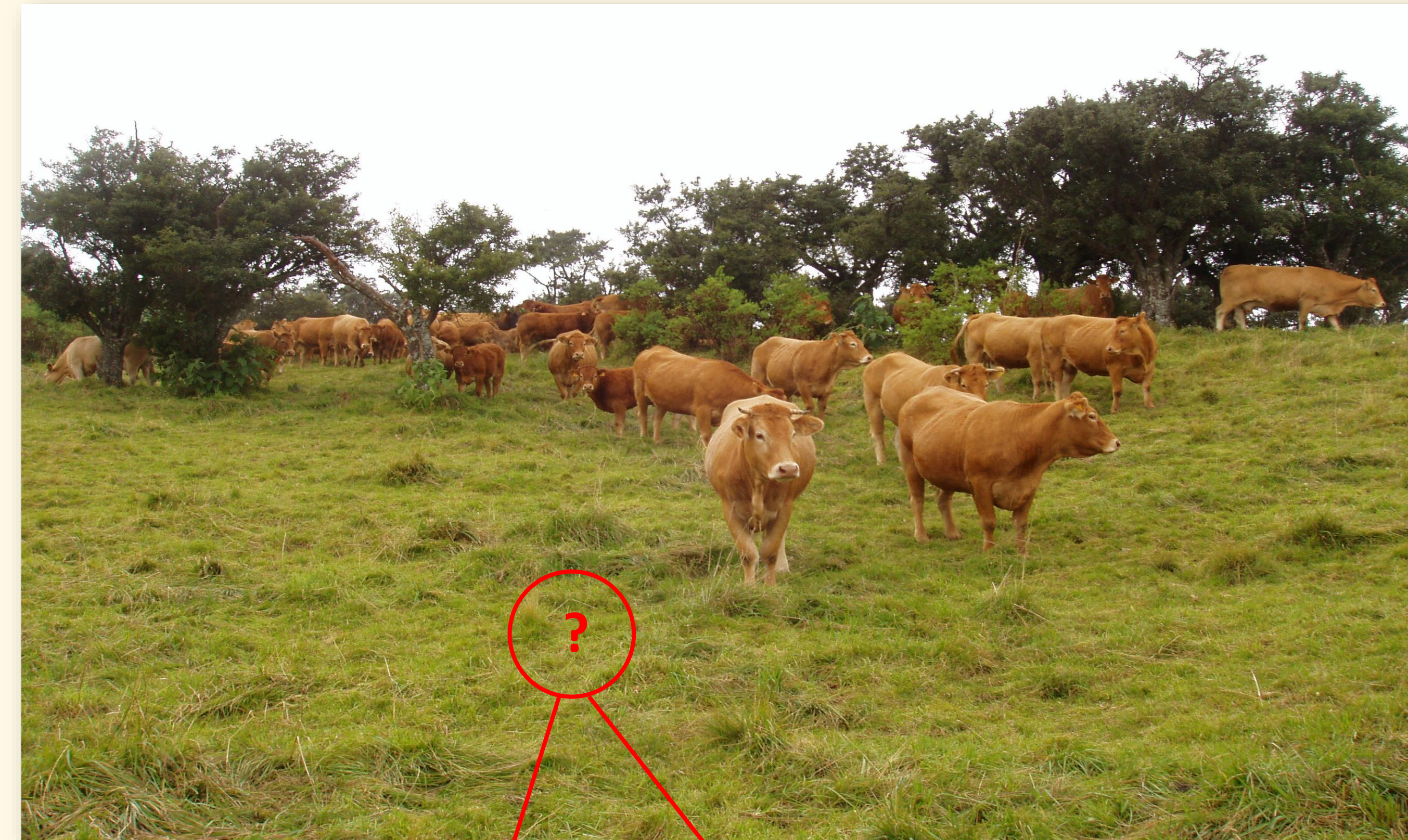
L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

New technologies for sharing and disseminating knowledge on tropical weeds for better management of pastures: the WIKTROP collaborative portal

Thomas Le Bourgeois¹, Vincent Blanfort², Pierre Grard³, Prabhakar Rajagopal⁴, Thomas Vattakaven⁴

¹CIRAD UMR AMAP, Univ. Montpellier, CNRS, INRAE, IRD, Montpellier, France
²CIRAD UMR SELMET, Univ. Montpellier, INRAE, SupAgro, Montpellier France, vincent.blanfort@cirad.fr
³CIRAD DGDRS, Nairobi, Kenya
⁴Strand Life Science, Bangalore, India

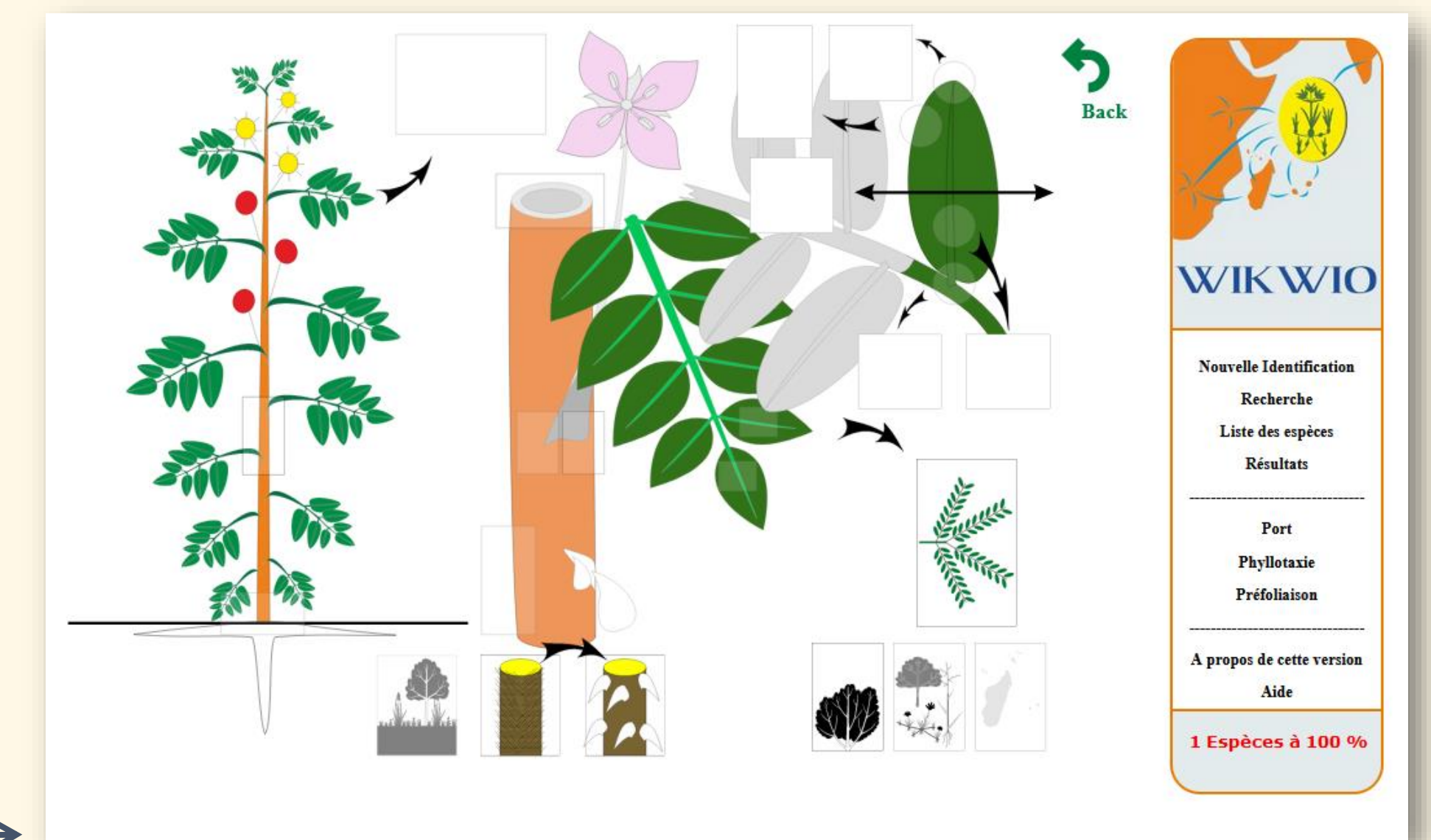
In tropical pastures, weeds are a significant threat and their control is an important issue depending in their ecological and economic impacts.



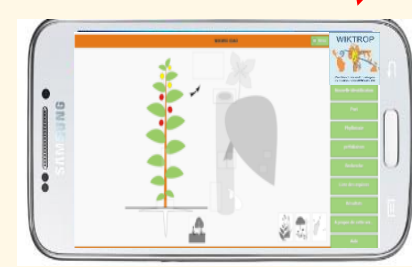
From exhaustive information on weed species, their behavior and their control, farmers can elaborate better strategies for pasture management and weed control

Plants that appear spontaneously in pastures can be native or exotic, can be harmful or/and beneficial depending on the point of view (agricultural, medicinal, food...) and its abundance. How can farmers access information on identifying and managing weeds? Is it necessary to eradicate or reduce the population of a particular species? Can farmers make knowledge-based decisions on the disadvantages and benefits of each species? WIKTROP aims to empower support farmers through free access to information and knowledge on weeds.

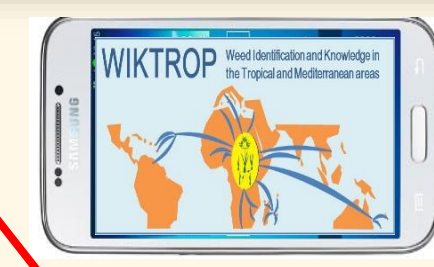
Wiktrop – IDAO identification system
 Help identification by building the robot portrait of the plant



Identifying the weed with Wiktrop-IDAO, a robot portrait system



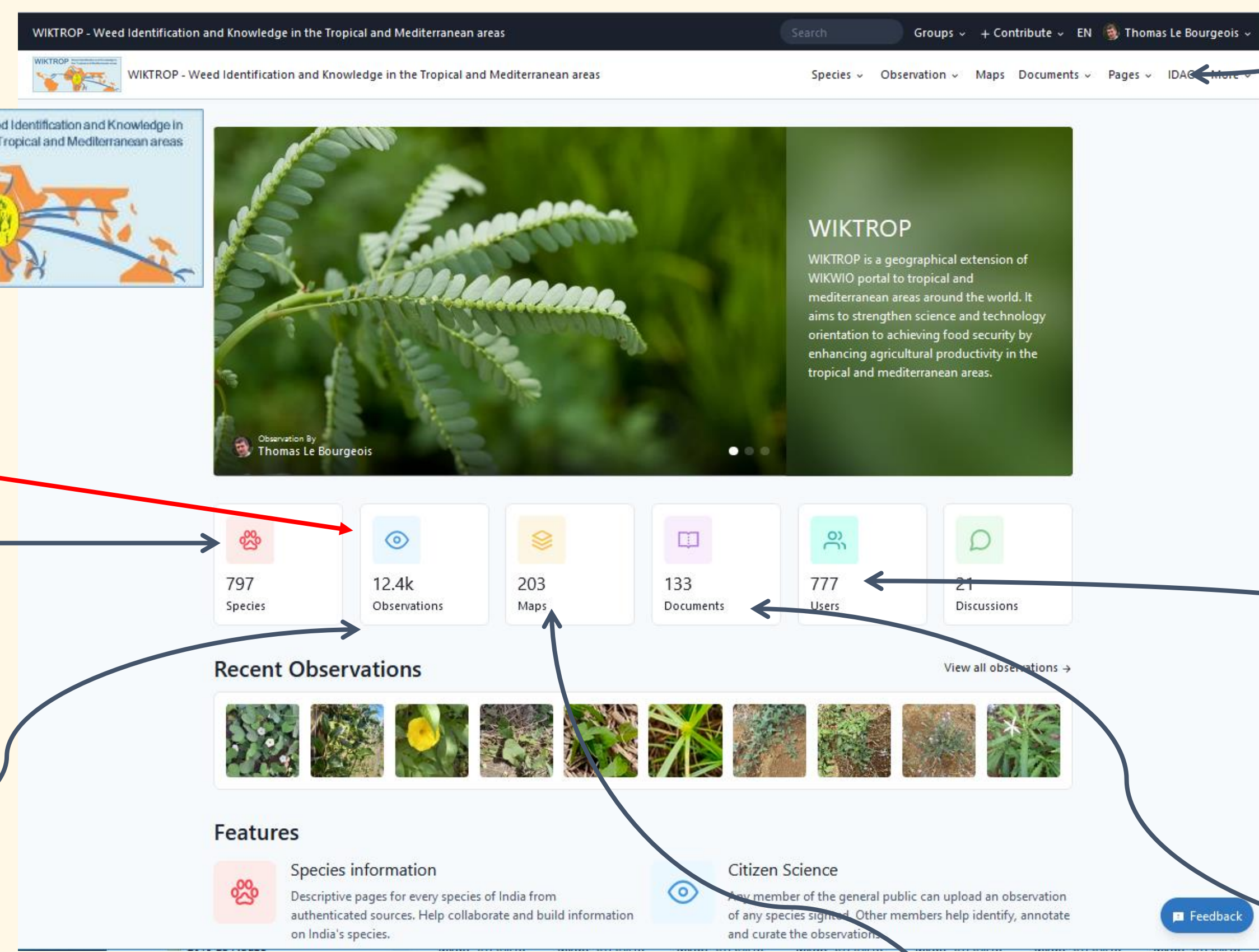
Mimosa pudica L.



Taking pictures of the weed with Wiktrop app.



Posting observations to the Wiktrop collaborative portal



769 Members (scientists, agronomists, lecturers, technicians, students, farmers)
 31 450 Visitors

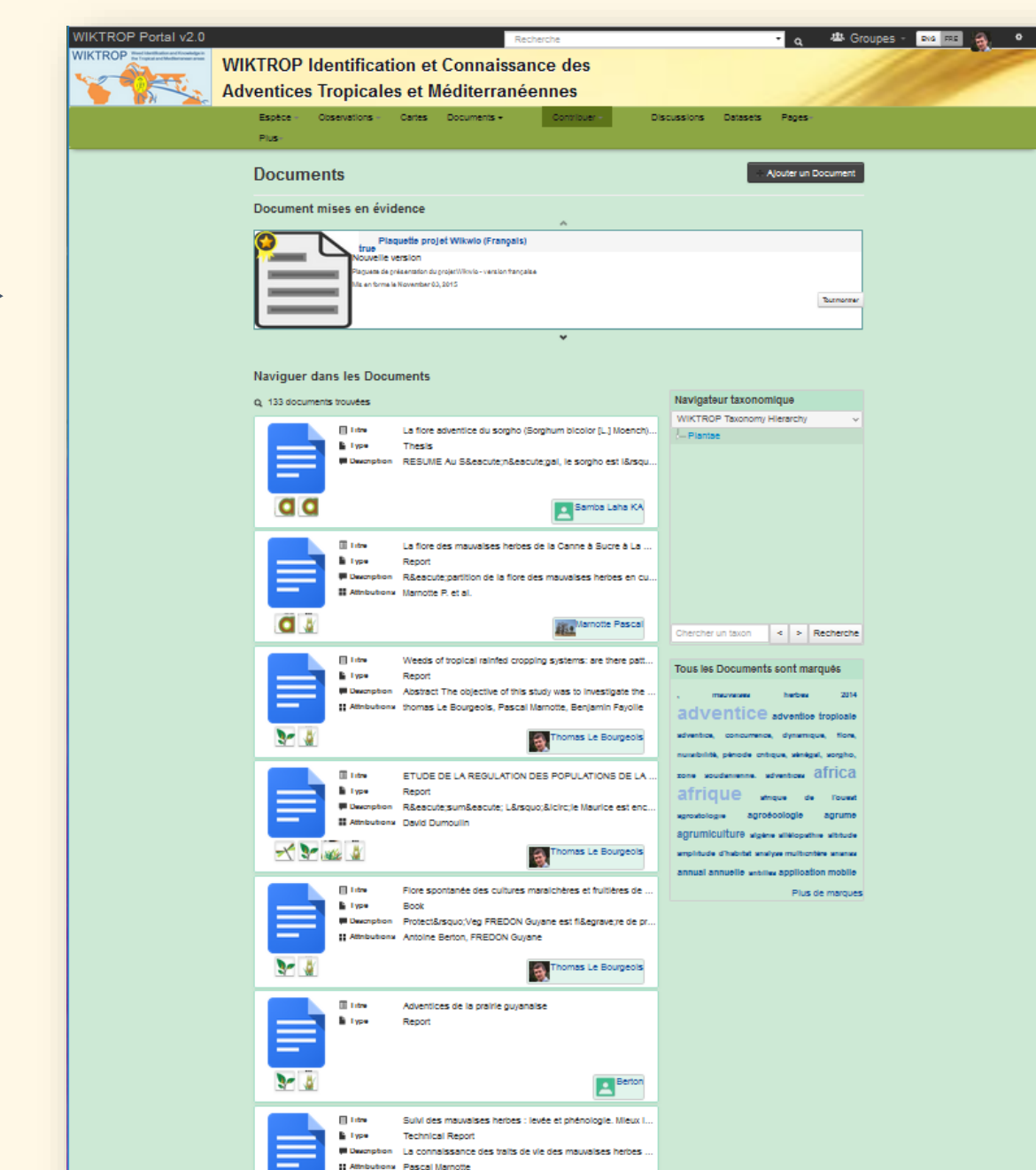
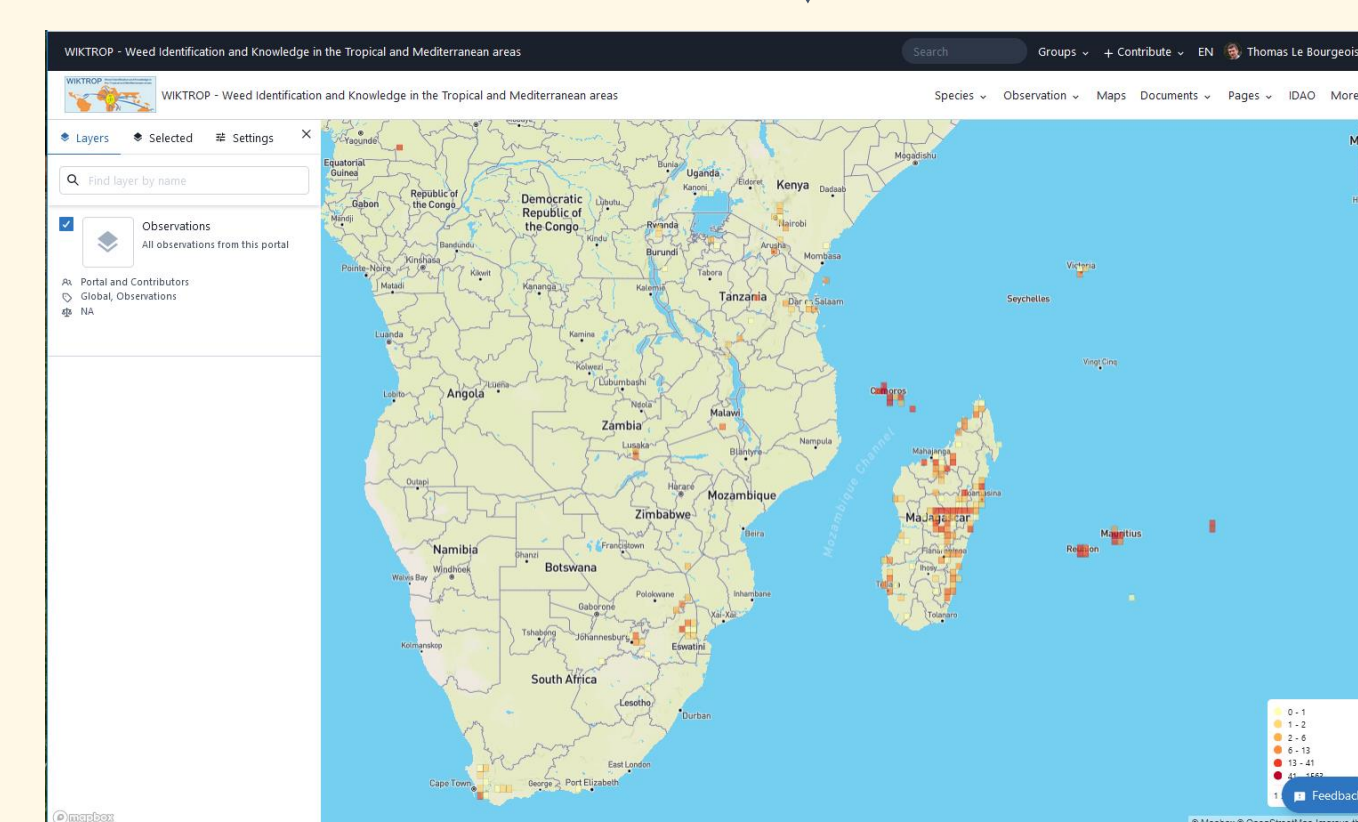


797 Species pages with details on
 Taxonomy
 Botanical description
 Ecology
 Biologie
 Distribution
 Harmfulness
 Control
 References

12 412 Observations
 1 039 Species
 45 758 Images

<http://portal.wiktrop.org>

Mapping of observations, with different map layers



133 Documents on weed science and weed management shared (technical, scientific, protocols, theses...)