

# LES HERBONAUTES

HOW CROWDSOURCING CAN HELP  
YOU TO GET BIODIVERSITY DATA

VÉRONIQUE SCHÄFER, CYRILLE CHATELAIN, MARC PIGNAL,  
SIMON CHAGNOUX, JULIEN HUSSON, EVA PÉREZ

## FEW DATA

Images are uploaded  
with their associated  
taxonomic  
informations

## COMPLET DATA

Once a task (called a  
mission) is done the data are  
downloadable in csv files for  
the mission manager & are  
uploaded into the Recolnat  
database



LESHERBONAUTES.MNHN.FR

## HERBARIA

Herbarium specimens contain lot  
of biodiversity data but it is hard  
to reach them - travels and time  
consuming

Recolnat data acquisition process

## SCAN

Herbarium specimens from  
french & moroccan (Rabat)  
museums are now in a  
digitalizing process

## LES HERBONAUTES

Crowdsourcing the label  
informations of herbarium  
specimens on the web to get  
the informations needed

THE FRENCH RESEARCH  
INFRASTRUCTURE  
RECOLNAT ([recolnat.org](http://recolnat.org))  
aims to make natural  
history collections  
available online.  
The infrastructure has  
already digitalized more  
than 7 millions of  
herbarium specimens.  
These specimens totaling  
350 years of collects, they  
contain historical and  
modern biodiversity data.

AN IMAGE WITHOUT  
ASSOCIATED biodiversity  
data is quite hard to use...  
The Muséum national  
d'Histoire naturelle of  
Paris developed a  
crowdsourcing program  
allowing citizens to help  
with the transcription of  
informations.  
This platform is named  
Les Herbonautes.

LES HERBONAUTES  
KEY PRINCIPLES  
> fun: gamification with  
podiums, badges  
> training: levels,  
quizzes - to assure the  
data quality  
> social: comment  
sections in mission page  
and specimen  
transcription pages

WE ARE NOW OPENING  
our crowdsourcing  
program to researchers  
who needs data for  
projects in diverse  
fields ranging from  
taxonomy to climate  
change studies.

## EXAMPLE OF NORTH AFRICAN MISSIONS

One of the Conservatoire et  
jardin botaniques (CJB) de la  
Ville de Genève programs is  
to update the WEB project  
of the maghreb flora.  
In this topic the project  
opened a mission on Les  
Herbonautes about  
*Geraniaceae* and plans to  
lead a serie of them to cover  
the maghreb flora.  
This mission was sucessfull  
and allowed to get new  
maps of *Geraniaceae*  
species.

HAVE A LOOK:  
[lesherbonautes.mnhn.fr/missions/4174704](http://lesherbonautes.mnhn.fr/missions/4174704)

## LES HERBONAUTES MISSIONS PROCESS



LOOKING FOR  
images in Recolnat  
database with info.  
like taxonomy &  
continent



FILL A  
presentation page  
with popularized  
text explaining the  
project



ADD QUESTIONS  
for databasing  
eg. which country?  
which collector?



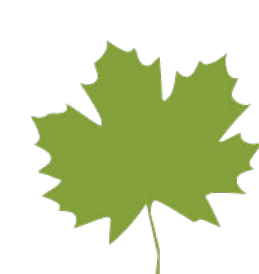
OPEN  
the mission to  
community  
contribution

## MORE INFORMATIONS



> Marc Pignal - Recolnat  
Director: [pignal@mnhn.fr](mailto:pignal@mnhn.fr)  
> Véronique Schäfer - Les Herbonautes  
Community manager: [veronique@tela-botanica.org](mailto:veronique@tela-botanica.org)  
> [contact@recolnat.org](mailto:contact@recolnat.org)

[LESHERBONAUTES.MNHN.FR](http://LESHERBONAUTES.MNHN.FR)



Les herbonautes  
L'herbier numérique collaboratif citoyen



MUSÉUM  
NATIONAL D'HISTOIRE NATURELLE



Agence Nationale de la Recherche  
ANR

