



## In-situ data collection for agricultural monitoring- the e-shape contribution,

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IIASA



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ATHENS 7-9 DECEMBER 2022



# EUROGEO WORKSHOP 2022



CITIZEN SCIENCE ALLIANCE

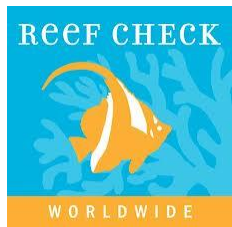
iNaturalist



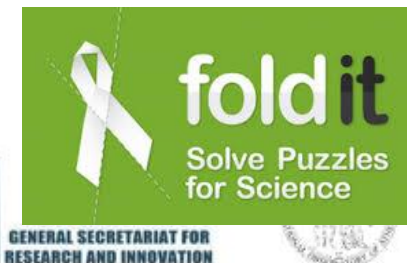
scistarter



eBird

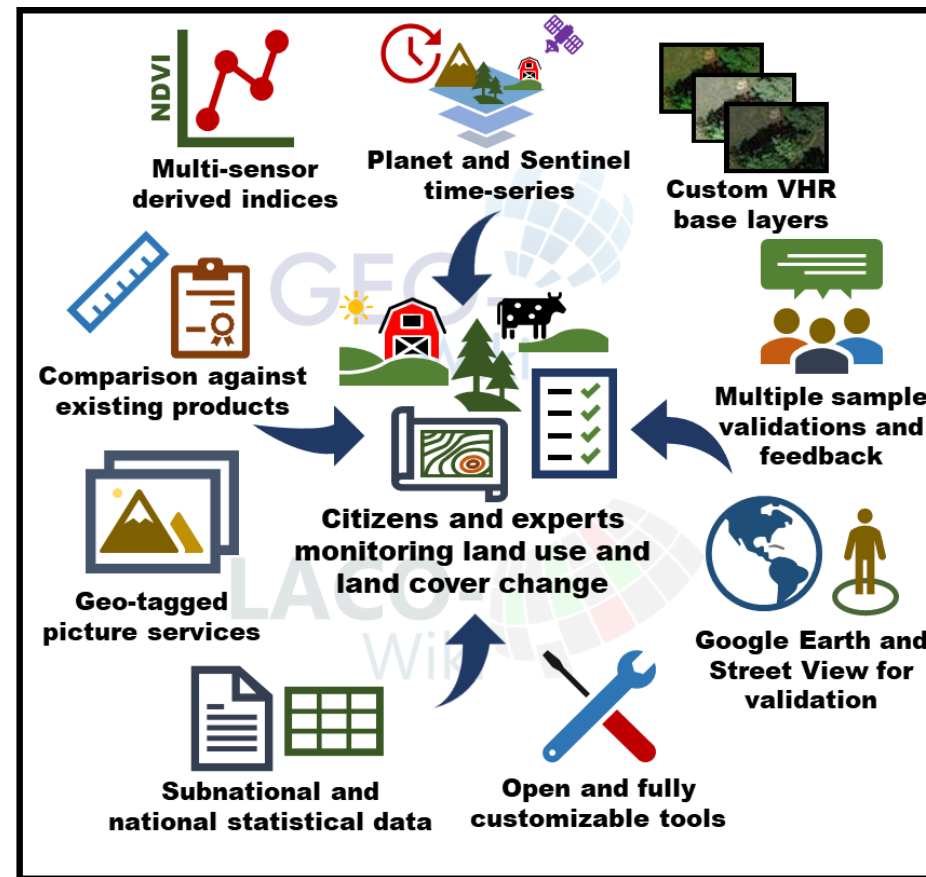


**ecsa** | European Citizen Science Association  
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## Geo-wiki toolbox





Open tools available in the web but also as apps for mobile platforms



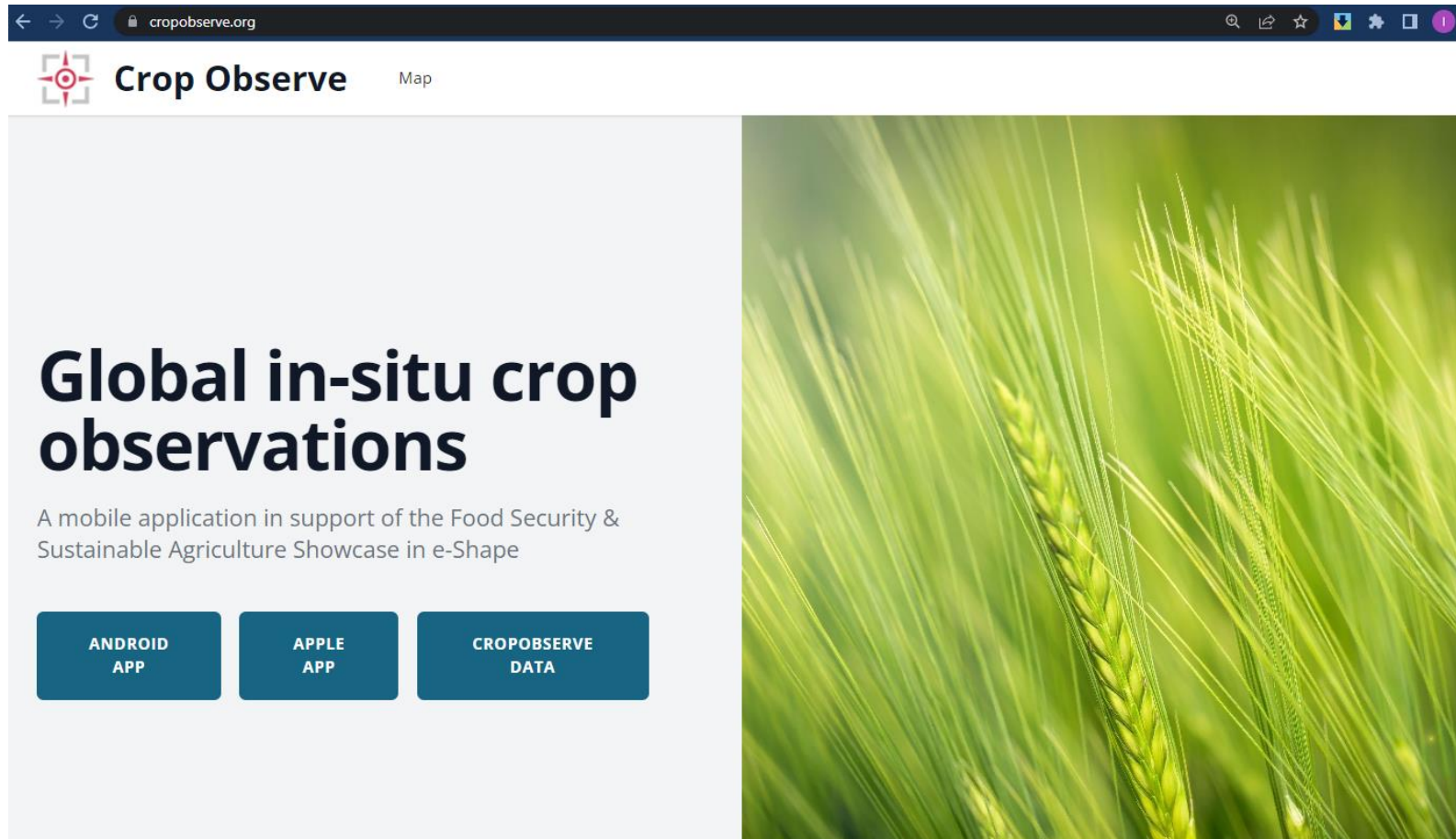
Available on the  
App Store

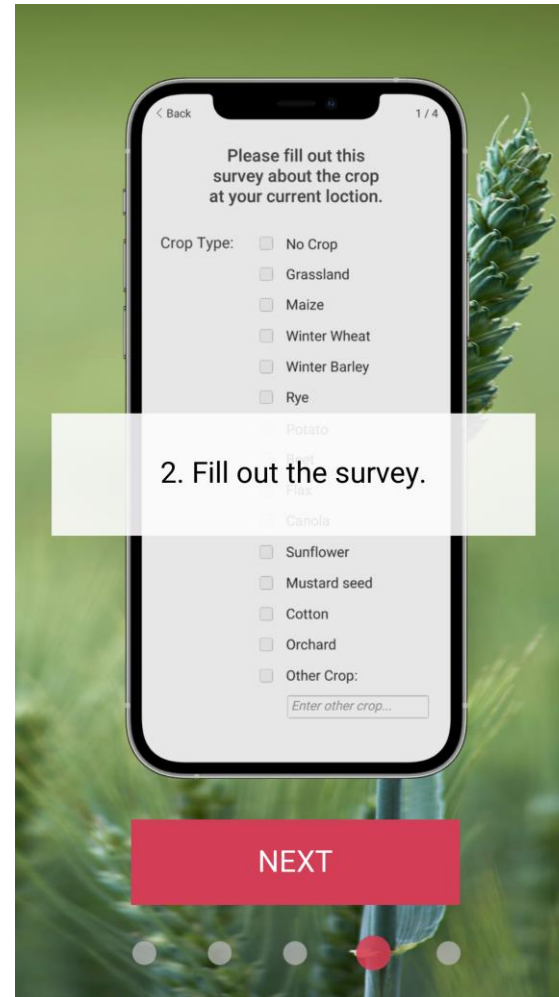
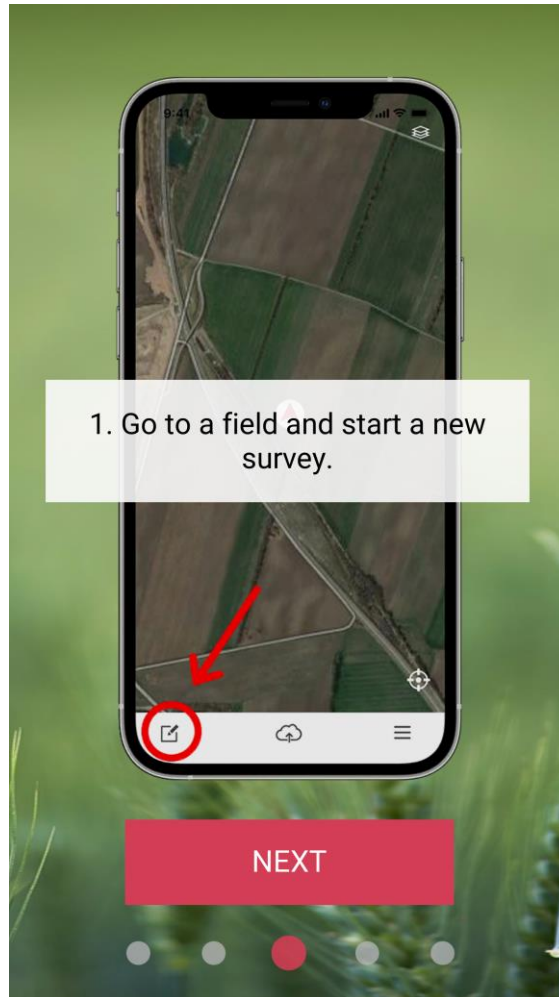
Get it on  
Google play





cropobserve.org





The [e-shape](#) **CropObserve** mobile application was developed to allow anyone to observe agricultural fields anywhere. The app is focused on collecting crop type, phenological stage, visible damage and management practices.

Data will be open -  
AgroStac 

e-shape



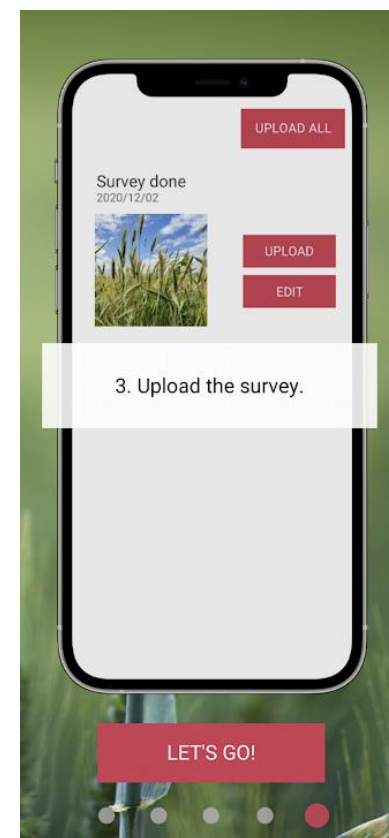
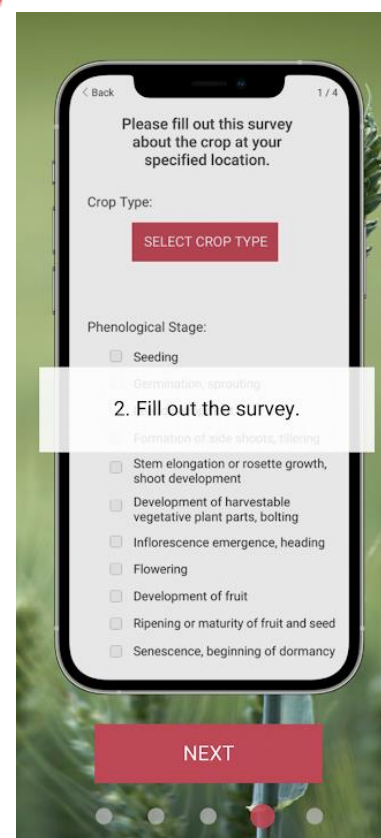


# GEO WORKSHOP 2022

## Collect In situ



- **New app: CropObserve**
- Involve non-experts
  - Basic information:
  - Crop type
  - Phenological stage
  - Damage
  - Management activities
- All data is made open!
- Already > 2000 points
- Alpha release: LPS 2022





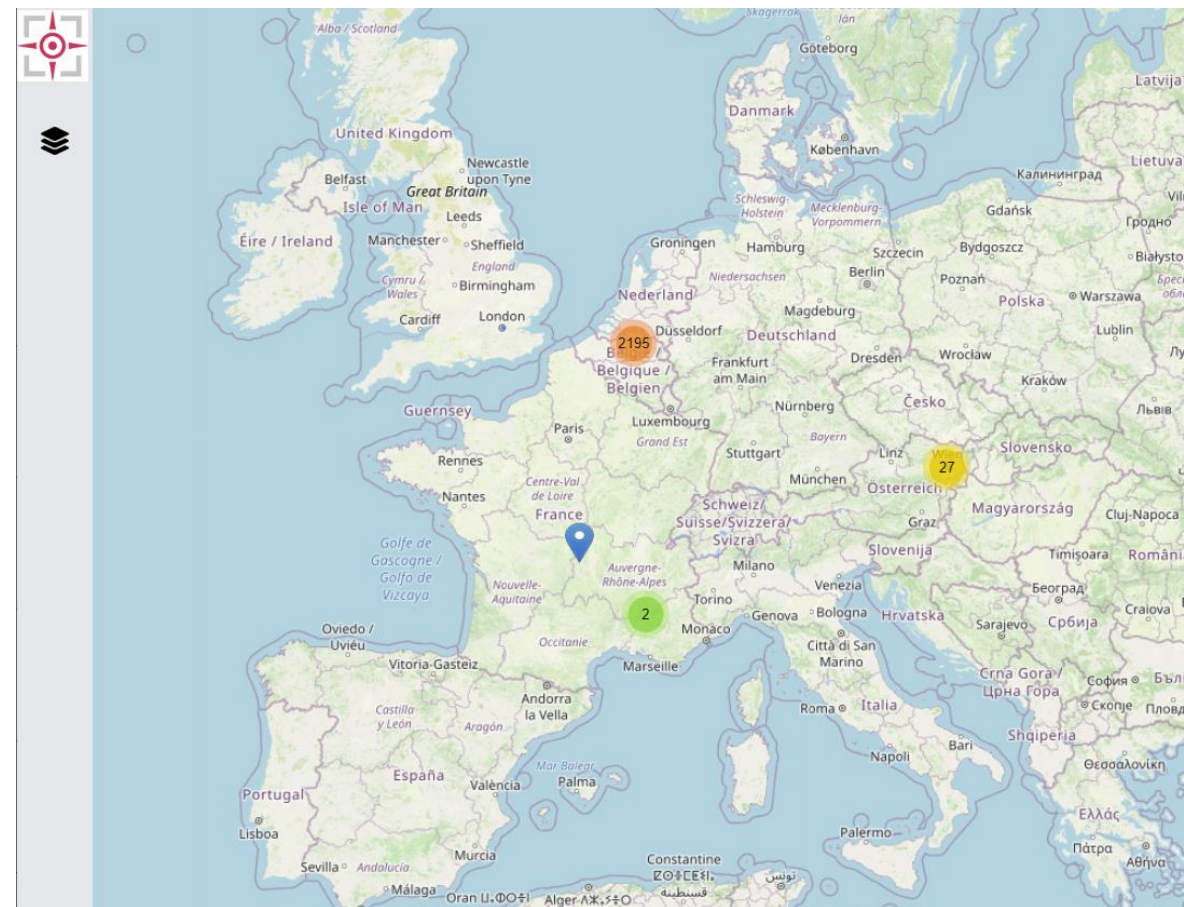


# GEO WORKSHOP 2022

## Collect In situ



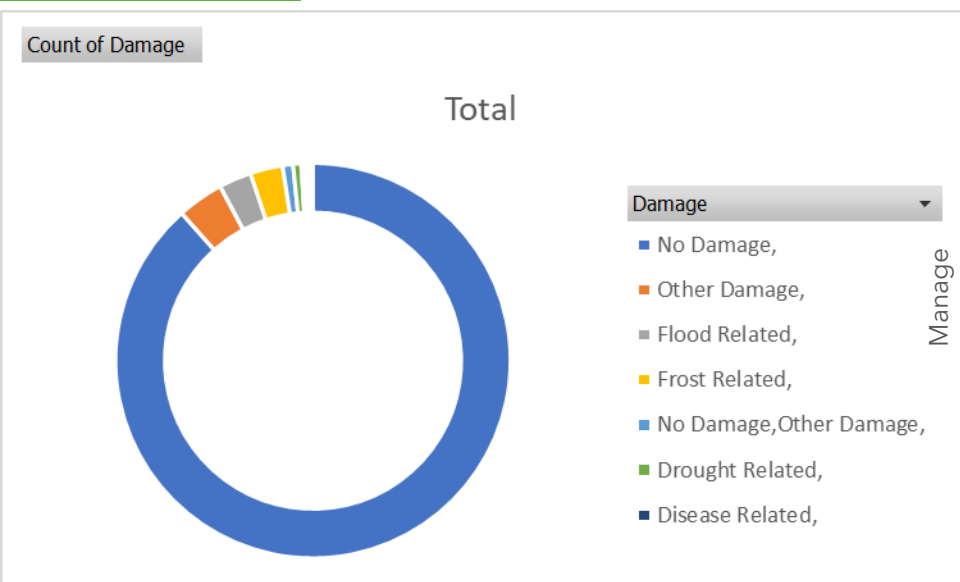
- **cropobserve.org**
- Contains links to mobile application (cross-platform), map and data



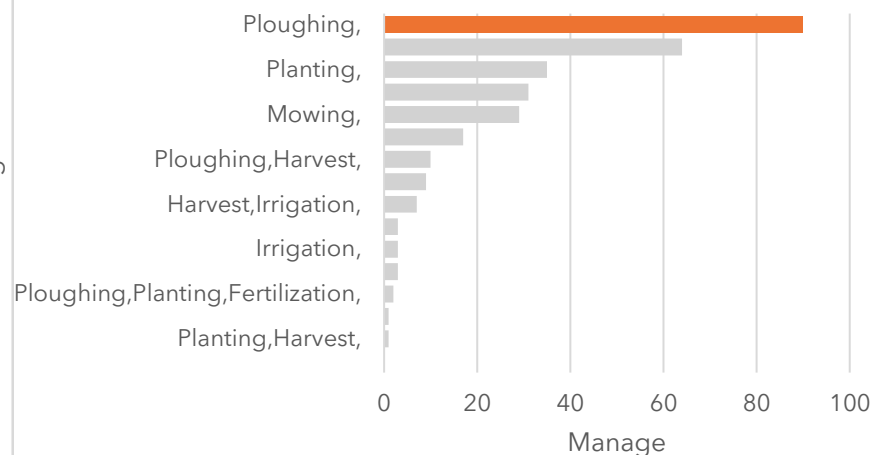




## Resulting Data



'Manage': **Ploughing**, appears most often.



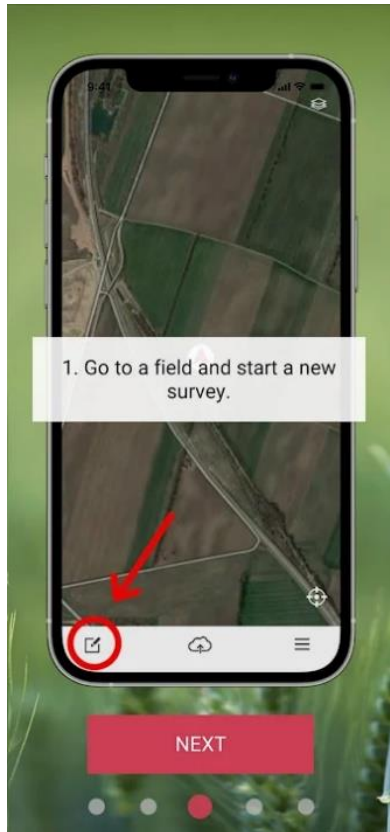
Row Labels	Count of Phenology
Germination, sprouting,	394
Leaf development,	302
Stem elongation or rosette growth, shoot development,	260
Formation of side shoots, tillering,	132
Flowering,	100

Row Labels	Count of Crop
Temporary grass crops	333
Grasses and other fodder crops	312
Maize	309
Unknown	255
Bare soil	237
Crop residue	173
Other crops	158
Winter wheat	153
Other crops - temporary	148
Bare Soil	144
Temporary oilseed crops	136
Winter rye	94
Oats	92
Fallow	68
Crop residue	46
Flower crops	38
Berries	36
Potatoes	32
Permanent grass crops	28
Non-crop (weeds)	25
Other fruit-bearing vegetables	22
Winter barley	10



# GEO WORKSHOP 2022

## The integrated approach



Automatic  
push

Quality  
control

**AGROSTAC**

Automatic  
extraction

Fit for  
purpose

