

Citizen Scientists Roadmap

Thank you for supporting our mission to promote soil health across Europe!

This short guide will take you on your journey as a citizen scientist from the first steps to collecting and sending back soil samples...



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START



- Download the 'ECHO Soil' app from the Google Play Store or the App Store.
- Register as a citizen in the app.
- Read the ECHO app terms of use, available in the app's download section.
- Complete your profile in the app (optional).

APP STORE



GOOGLE PLAY



RECEIVING YOUR ECHO-TOOLKIT

- Are you already in regular contact with your ambassador? Great! Then arrange a time and place with them to pick up your toolkit.
- No? Then feel free to contact your ambassador and ask.
- Note:
- If you are unable to contact them for any reason, or if you encounter other problems, please send us an email and we will be happy to help: echo@uni-hohenheim.de



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SURVEY

- Before you start taking soil samples, please take about 15 minutes to fill out an initial survey, which will appear as soon as you click on "Soil sample." You can do this at your home.

PREPARATION FOR SOIL SAMPLING

After you have completed the first survey and before you go into the field:

- Read the information sheets and field instructions carefully; you can find them in the download section of the app.
- Check all the components of your ECHO toolkit.
- Visit our YouTube channel [@ECHOsoilproject](https://www.youtube.com/@ECHOsoilproject) for helpful videos – don't forget to activate the subtitles in your language!



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NOW IT'S GETTING DIRTY! COLLECTING SOIL SAMPLE



- Select a location where you would like to check the soil health
- Scan the QR code from your ECHO toolkit in the 'soil sample' section of the app.
- Follow the guided steps to assess the soil health indicators and upload your results.

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RETURNING YOUR SOIL SAMPLES



- Contact your ECHO ambassador to return both soil samples
- Make sure that the samples are packed in the designated bags with the QR code attached.
- Your ambassador will collect soil samples from other participants in your region and store them until we come to pick them up.

IMPORTANT



- Wash and disinfect your hands.
- Mix the soil well before analyzing organic matter or other indicators.
- Bring tap water with you - you will need it to determine the soil structure.

Collect two soil samples for the laboratory (According to instructions)

- One for analyzing microbial diversity.
- One for analyzing nutrients and heavy metals.

VIEW YOUR RESULTS

- You can track your contributions and view the data in our open repository ECHOREPO.
- Once the laboratory analyses are complete the results on microbial diversity, nutrients and heavy metals will be available there. Check regularly to see if your data has already been uploaded!



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SECOND SURVEY

After you have returned your soil samples, please take about 8–10 minutes to complete the second survey.

Note:

- A few months after participating in ECHO, you will complete another survey. The third survey will appear in the ECHOREPO as soon as your lab data has been entered there.

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ARE YOU TAKING ANOTHER SOIL SAMPLE?

- If you want to take another soil sample, you can simply repeat steps 5 to 8.
- But remember that you will need additional materials for this. Just contact your ambassador or write us directly at: echo@uni-hohenheim.de



Congratulations – you have successfully completed your journey as an ECHO citizen scientist!

Thanks for contributing to healthier soils across Europe!

NOTE ON THE GPS-COORDINATES

- If an error message appears when entering the GPS coordinates on the map, you can ignore it by clicking 'Cancel'. However, you will then have to move the map manually so that the red dot/ cross marks the approximate location where you are taking the sample. Once you have found the location, click on the blue 'Set' button and the coordinates will be saved.
- Please check that you have entered the correct location.

These surveys help us to evaluate the impact of ECHO in our community.