## Data collection 2025 - Download climate data

When we set up the experiment in 2022, we installed two TMD data loggers in each garden (the white, sword-shaped devices in the plots). These loggers have been recording hourly temperature (air, soil surface, and soil at ~5 cm depth) and soil moisture. Their batteries and storage should last at least until the end of the year. Now we need to check that they are still functioning properly and download the recorded climate data. This can be done directly in the field so the loggers can continue running.



## What you need

- 1. **TMD** adapter required to extract data and configure the logger. We did not send adapters, but you may be able to borrow one from colleagues who do field experiments.
- Lolly Manager software free download here:
   https://tomst.com/web/en/systems/tms/software/. The software works only on Windows PCs. Please note: during installation, the TMD adapter must be plugged into your PC.
- 3. **TMS data loggers** already installed in your plots.

## How to download data

- 1. Plug the TMD adapter into your PC and open the *Lolly Manager* software. Use the default settings for downloading (e.g. download all data since now with plotting).
- 2. Remove the cap from the data logger and clear the top (no need to pull the logger out).
- 3. Attach the TMD adapter to the data logger and make sure it is properly connected (the blue light should turn on). The software will check set-up, after which downloading will start automatically and may take a few minutes.
- 4. Once the download is completed:
  - a. The data will appear in a new window as a graph.
  - b. A CSV file will be saved automatically to the folder:C:\Program Files\Lolly\DATA\
  - c. Please keep only the CSV file named with the logger's serial number (e.g. data\_95329651\_2024\_09\_04\_0). Other files (e.g. command or diagnostic files) are not relevant.
  - d. Each measurement appears as a row in the format: 5;2024.08.13 09:45;4;25,875;25,625;25,375;495;202;0;
- 5. Upload the relevant CSV file to your folder via our project website: <a href="https://ecorama.github.io/projects/data\_collection\_2025/">https://ecorama.github.io/projects/data\_collection\_2025/</a>

You can find more information on the TMD logger website: <a href="https://tomst.com/web/en/systems/tms/software/">https://tomst.com/web/en/systems/tms/software/</a>