Dataset Description
Competition Overview

In this competition, your task is to use pasture images to predict five key biomass components critical for grazing and feed management:

- **Dry green vegetation** (excluding clover)
- **Dry dead material**
- **Dry clover biomass**
- **Green dry matter (GDM)**
- **Total dry biomass**

Accurately predicting these quantities will help farmers and researchers monitor pasture growth, optimize feed availability, and improve the sustainability of livestock systems.

Files

test.csv

- `sample_id` — Unique identifier for each prediction row (one row per image–target pair).
- `image_path` — Relative path to the image (e.g., `test/ID1001187975.jpg`).
- `target_name` — Name of the biomass component to predict for this row. One of: `Dry_Green_g`, `Dry_Dead_g`, `Dry_Clover_g`, `GDM_g`, `Dry_Total_g`.

The test set contains over 800 images.

train/

- Directory containing training images (JPEG), referenced by `image_path`.

test/

- Directory reserved for test images (hidden at scoring time); paths in `test.csv` point here.

train.csv

- `sample_id` — Unique identifier for each training *sample* (image).
- `image_path` — Relative path to the training image (e.g., `images/ID1098771283.jpg`).
- `Sampling_Date` — Date of sample collection.
- `State` — Australian state where sample was collected.
- `Species` — Pasture species present, ordered by biomass (underscore-separated).
- `Pre_GSHH_NDVI` — Normalized Difference Vegetation Index (GreenSeeker) reading.
- `Height_Ave_cm` — Average pasture height measured by falling plate (cm).
- `target_name` — Biomass component name for this row (`Dry_Green_g`, `Dry_Dead_g`, `Dry_Clover_g`, `GDM_g`, or `Dry_Total_g`).
- `target` — Ground-truth biomass value (grams) corresponding to `target_name` for this image.

sample_submission.csv

- `sample_id` — Copy from `test.csv`; one row per requested (image, `target_name`) pair.
- `target` — Your predicted biomass value (grams) for that `sample_id`.

What you must predict

For each `sample_id` in **`test.csv`**, output a single numeric **`target`** value in **`sample_submission.csv`**. Each row corresponds to one `(image_path, target_name)` pair; you must provide the predicted biomass (grams) for that component. The actual test images are made available to your notebook at scoring time.