

Sunflower Leaf Dataset

Sunflower leaf dataset consists of 4 morphologically different sunflower varieties. The significant morphological characteristics of leaves are serration, angle of shouldering, texture and venation etc. The leaf images in this dataset are captured in the field, where the details such as background, overlapping of neighboring leaves, shadow, illumination etc., are inevitable. Sample images of this dataset are shown in Fig.1.

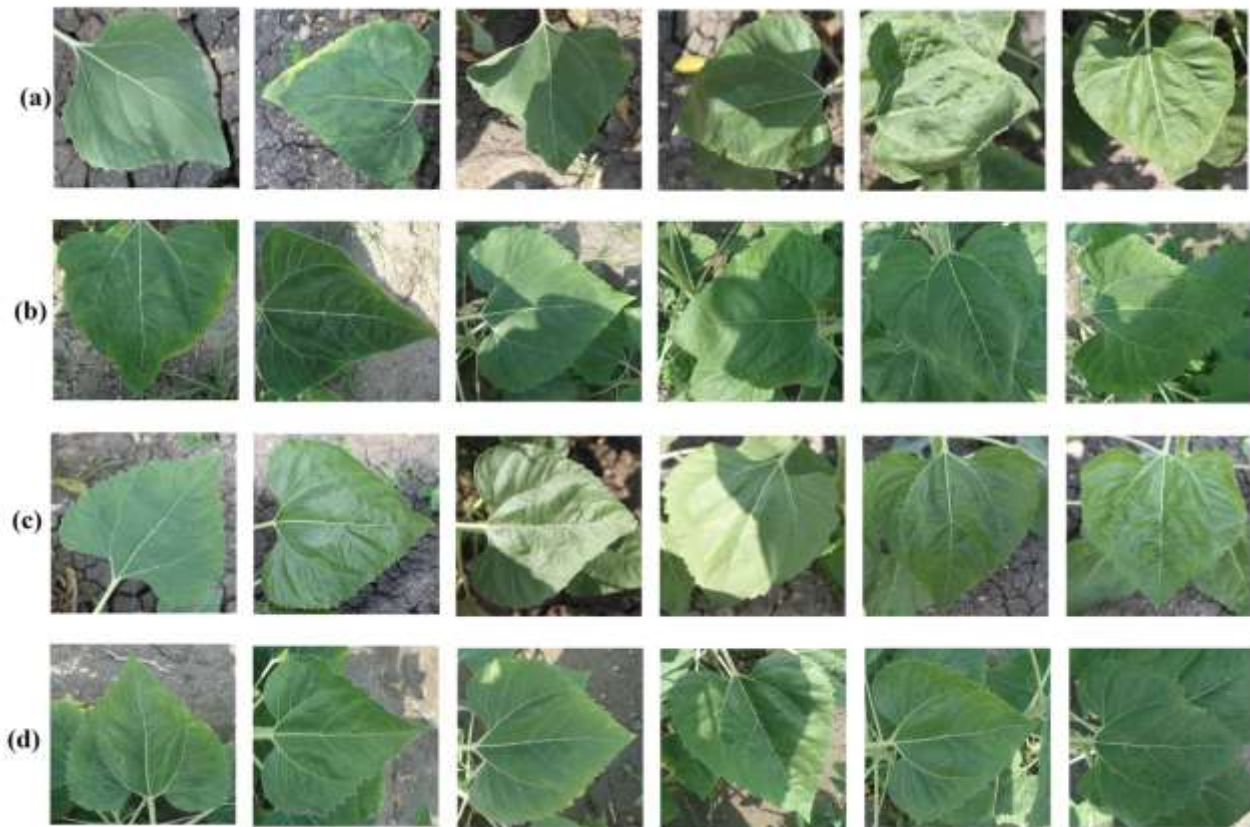


Fig.1: Sample leaf images of the sunflower leaf dataset. The sunflower varieties in the database are - (a) CO2, (b) CO4, (c) DRSH and (d) SUNBRED varieties respectively. The images are captured at different circumstances such as clear background (refer columns 1 \& 2), with shadows (refer columns 3 \& 4), and complicated background with similar leaves from the neighboring plants (refer columns 5 \& 6).

The images are captured using a tripod with adjustable height and 360 degrees rotating head that holds the camera. The images of the leaves are captured by setting the tripod height to a fixed value and the rotating head confined to 0 degree. The tripod mounted with the camera (Canon~500D) is altered between 3 different heights (at 20, 40 and 60 cm) to capture most of the leaves in the plant.

For accessing this dataset, you can send an email to esgopi@nitt.edu or gjbrinda@gmail.com.