

Resource Summary Report

Generated by PRECISE-TBI on Jul 31, 2026

Donald Danforth Plant Science Center Phenotyping Core Facility

RRID:SCR_019049

Type: Tool

Proper Citation

Donald Danforth Plant Science Center Phenotyping Core Facility (RRID:SCR_019049)

Resource Information

URL: <https://www.danforthcenter.org/our-work/core-facilities/phenotyping/>

Proper Citation: Donald Danforth Plant Science Center Phenotyping Core Facility (RRID:SCR_019049)

Description: Core provides instruments including Scanalyzer 3D platform which consists of multiple digital imaging chambers connected to controlled environment Conviron growth house by conveyor belt system, resulting in continuous imaging loop and enables repeatedly image plants at multiple points throughout time. RGB imaging allows visualization and quantification of plant color and structural morphology. Near-infrared (NIR) enables visualization and quantification of plant water-use efficiency. Watering and weighing stations are customizable to deliver water and nutrients on specified schedule by volume or weight. Standard phenotyping services include operation and maintenance of LemnaTec Scanalyzer system, as well as technical support and troubleshooting.

Synonyms: Donald Danforth Plant Science Center DDPSC-Bellwether Phenotyping Facility, DDPSC-Bellwether Phenotyping Facility

Resource Type: core facility, service resource, access service resource

Keywords: USEDit, plant, phenotyping, controlled environment, growth house, plant image, ABRF, ABRF

Availability: open

Resource Name: Donald Danforth Plant Science Center Phenotyping Core Facility

Resource ID: SCR_019049

Alternate IDs: ABRF_1051

Alternate URLs: <https://coremarketplace.org/?FacilityID=1051>

Record Creation Time: 20220129T080343+0000

Record Last Update: 20260731T043044+0000

Ratings and Alerts

No rating or validation information has been found for Donald Danforth Plant Science Center Phenotyping Core Facility.

No alerts have been found for Donald Danforth Plant Science Center Phenotyping Core Facility.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 4 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

Murphy KM, et al. (2025) Excessive leaf oil modulates the plant abiotic stress response via reduced stomatal aperture in tobacco (*Nicotiana tabacum*). The Plant journal : for cell and molecular biology, 121(6), e70067.

Ricono A, et al. (2025) Homoeolog expression divergence contributes to time of day changes in transcriptomic and glucosinolate responses to prolonged water limitation in *Brassica napus*. The Plant journal : for cell and molecular biology, 121(4), e70011.

Ballenger J, et al. (2025) Raspberry Pi-powered temperature monitoring of growth chamber microclimates. Applications in plant sciences, 13(5), e70022.

Ludwig E, et al. (2023) Natural variation in *Brachypodium distachyon* responses to combined abiotic stresses. The Plant journal : for cell and molecular biology.