

CAL POLY STRAWBERRY CENTER

Current Automation Research 2024

The goal of the Strawberry Center research is to increase the sustainability of the California strawberry industry through research and education that addresses industry needs. Key benefits to current research include non-chemical pest and disease control and workforce efficiency and safety.



PROJECT	DESCRIPTION	STATUS	MORE INFORMATION
Heated Hole Puncher	Deploys a mechanical rig that burns a hole through the mulch.	Commercially Available The manual is available to industry members.	CONTACT: Tony Sandoval FarmNG tony@farm-ng.com
Cost-Effective UV-C	Implements a non-chemical way to manage pests and disease, reducing powdery mildew in strawberries when applied at night.	Commercially Available	CONTACT: Adam Stager President & CEO, TRIC Robotics adam@tricrobotics.com
Optimized Spray Rig	Improves application coverage and uniformity.	Commercially Available	CONTACT: Caleb Fink CSC production automation engineer cfink@calstrawberry.org
Hoop House Arch Remover	Provides labor support by autonomously disassembling hoop arches in the field.	Late-Stage Prototype	CONTACT: Ryan Vived Cal Poly, bio resource engineer, lab technician rvived@calpoly.edu
Mechanical & Laser Runner Cutter	Identifies and manipulates weed and runners for autonomous removal.	Early-Stage Prototype	CONTACT: Mojtaba Ahmad CSC senior production engineer Mahmad@calstrawberry.org
Lygus Bug Monitor	Improves Lygus bug detection and integrated pest management practices.	Early-Stage Prototype	CONTACT: John Lin Director Automation Engineering jlin@calstrawberry.org
Equipment Operator Aid (for Spray Rig & Bug Vac)	Signals tractor driver when equipment is performing optimally.	Early Prototype	CONTACT: Caleb Fink CSC production automation engineer cfink@calstrawberry.org