

DASH.

DIGITAL AGRICULTURAL SYSTEMS HUB™



Agricultural Research Service
U.S. DEPARTMENT OF AGRICULTURE

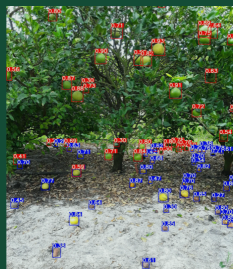
Empowering American Agriculture Through Scalable AI-Powered Solutions

DASH delivers real-world tools - faster!



SCALABLE INFRASTRUCTURE

- Maximizing USDA investments by using SCINet high-performance computing
- Integration across satellites, drones, robots, and tractors



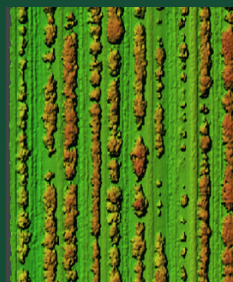
DATA & MODEL DEVELOPMENT

- Annotated image repositories for robust training across all agricultural species
- Models that move across scales; from single plant to whole fields



DEPLOYABLE AI TOOLS

- User-friendly integrated software & hardware tools
- Precision mapping of pests and stresses for decision systems



DELIVERING RESULTS

- Accelerated cultivar release and breeding decisions
- Nationwide open-source access to decision support tools for researchers and farmers

DASH. harnesses cutting-edge agricultural research:

- Into Artificial Intelligence (AI) tools aiding U.S. farmers, breeders and researchers to make better decisions.
- Closes the deployment gap, increasing research efficiency, and fully utilizing USDA's SCINet computing center.
- Transforms research innovations into real-world across the U.S.





DASH. BY THE NUMBERS

1

Unified SCINet
Integration Strategy

5+

Deployment Tool
Platforms

29

States Implementing
ARS Technology

AI Solutions

From handheld and unicycle-mounted monocams to comprehensive tractor-mounted multicams, our versatile ModCam systems capture high-quality data across environments and commodities. Together with benchbot, our robotic semi-field platform, broad UAV collection, and the National Agricultural Image Repository (AgIR), a cloud-based library of thousands of metadata-rich images of crops, cover crops, and weeds, we deliver the robust foundation for your most innovative AI solutions.



Delivering new crop cultivars and precision pest, nutrient, and water management solutions across corn, soybean, sugarbeets, wheat, cotton, citrus, sugarcane, olives, grapes, almonds, pistachios and counting!



TED Talk about
AI in Agriculture

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