

Hydroponic Tomato Intensive Workshop

with *Dr. Triston Hooks*
January 7th, 8th, & 9th, 2022

Online and On-site



THE UNIVERSITY OF ARIZONA
BIOSYSTEMS ENGINEERING

Controlled Environment
Agriculture Center

Friday, January 7th

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|--------------------|--|
| 8:15 am- 8:30 am | Welcome and Introductions |
| 8:30 am- 9:10 am | Introduction to CEA |
| 9:10 am- 9:20 am | Questions |
| 9:20 am- 10:00 am | Hydroponic Tomato Production Overview |
| 10:00 am- 10:10 am | Questions |
| 10:10 am- 10:20 am | Break |
| 10:20 am- 11:00 am | Tomato Propagation (seeds, substrate, irrigation, environment, and grafting) |
| 11:00 am- 11:10 am | Questions |
| 11:10 am- 11:50 am | Tomato Morphology and Steering (vegetative vs. generative) |
| 11:50 am- 12:00 pm | Questions |

ON-SITE PARTICIPANTS

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|-------------------|---|
| 12:00 pm- 1:00 pm | Lunch provided |
| 1:00 pm- 1:30 pm | Greenhouse rules and plant assignments |
| 1:30 pm- 2:00 pm | UA-CEAC facilities tour |
| 2:00 pm- 3:00 pm | Hands-on tomato propagation |
| 3:00 pm- 3:15 pm | Break |
| 3:15 pm- 5:00 pm | Tomato greenhouse work <ul style="list-style-type: none">o Identification of meristem, nodes, internodes, trusseso Pruning and steeringo Clips and truss supporto Leaning and lowering |

Saturday, January 8th

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| 8:30 am- 9:10 am | Tomato Nutrient Solution Recipes, Fertigation, and Nutrient Deficiencies |
| 9:10 am- 9:20 am | Questions |
| 9:20 am -10:00 am | Tomato Environmental Factors and Greenhouse Controls |
| 10:00 am- 10:10 am | Questions |
| 10:10 am- 10:20 am | Break |
| 10:20am- 11:00 am | Tomato Pests and Diseases |
| 11:00 am- 11:10 am | Questions |
| 11:10 am- 11:50 am | Tomato IPM practices |
| 11:50 am- 12:00 pm | Questions |

ON-SITE PARTICIPANTS

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|-------------------|--|
| 12:00 pm- 1:00 pm | Lunch provided |
| 1:00 pm- 2:00 pm | Hands-on tomato greenhouse fertigation system and EC/pH measurements |
| 2:00 pm- 3:00 pm | Hands-on tomato greenhouse environmental sensors and controls |
| 3:00 pm- 3:15 pm | Break |
| 3:15 pm- 4:15 pm | Hands-on scouting and pest identification |
| 4:15 pm- 5:00 pm | Hands-on biological control |



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Sunday, January 9th

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| 8:30 am- 9:10 am | Tomato Flowers, Pollination, and Fruit Development |
| 9:10 am- 9:20 am | Questions |
| 9:20 am -10:00 am | Tomato Harvesting, Grading, and Storage |
| 10:00 am- 10:10 am | Questions |
| 10:10 am- 10:20 am | Break |
| 10:20 am- 11:00 am | Food Safety and Certification |
| 11:00 am- 11:10 am | Questions |
| 11:10 am- 12:00 pm | Review and final questions |

ON-SITE PARTICIPANTS

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| 12:00 pm- 1:00pm | Lunch provided |
| 1:00 pm- 3:00 pm | Tomato greenhouse work <ul style="list-style-type: none">o Pruning and steeringo Clips and truss supporto Leaning and loweringo Fruit harvesting and grading |
| 3:00 pm- 3:15 pm | Break |
| 3:15 pm- 5:00 pm | Hands-on tomato pollination and beehive operation |



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