



# Building the ‘Grove of Dreams’

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Think of it as our “Grove of Dreams” question: If we build it, will they come? We can build — and we are building — fruit that tolerates HLB. They will come and buy it by the glass and gallon, but only if we also build great taste.

## FINDING FLAVOR ANSWERS

As a flavor chemist, Yu Wang works on figuring out why orange juice tastes so good. We pay her to discover the chemistry of deliciousness.

With her mass spectrometers, computers and taste lab, she’s isolating what substances in the fruit connect with the taste buds of consumers. Then we can give them more of whatever that is.

The beauty of it is that nature has already given us sweetness right on the

tree. We don’t need to manufacture that. Wang believes the answers to her questions are right inside an orange, a mandarin and even a mango.

She also believes that the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) is the place best equipped to find those answers. It’s not just the high-tech gadgetry of her lab in the Citrus Research and Education Center in Lake Alfred and the top-notch graduate students drawn to UF/IFAS who assist her research.

It’s also what she calls the “gold mine.” UF/IFAS has hundreds of unreleased citrus varieties that either don’t perform well in the grove or that we just don’t know enough about yet. It’s a vast flavor library. To Wang, that means a vast variety of chemistries. Only she

and other UF/IFAS scientists have direct access to this library. Wang can check out any variety to see if it can help her develop insights into flavor.

## SOLID SUPPORT

It’s an example of the solid support UF/IFAS offers to world-class citrus scientists. Another is support for pursuing research funding, such as the U.S. Department of Agriculture grant Wang received to explore the health benefits of compounds found in citrus rinds.

Another form that support takes is that Wang is surrounded by other great scientists. To test taste on consumers, she’s working with a food scientist in Gainesville who runs our largest taste lab.

Of course, she’s also surrounded by great biological scientists working on nutrition, root health and irrigation response to HLB. She’s coordinating with them to investigate the flavor implications of a change in the way citrus is grown. After all, if we build better citrus that does not taste the way consumers want it to, they will not come. That could spell the end of the Grove of Dreams.

Because we have such a talented and committed team, we don’t work on problems serially. We work on them all at once. That makes it less likely that the solution to one challenge presents an unanticipated new problem.

It was instructive to hear Wang credit her success so far to all the support she gets. She talked about this in accepting the UF/IFAS Richard Jones Outstanding New Faculty Research Award last year. Support also takes the form of recognition.

We also help her carry out the Extension mandate. Wang organized the highly successful inaugural Flavor Summit in Orlando last year, and she’s already planning a second summit for next year.

The citrus story starts in your grove. Wang is among those who help us remember that it ends with someone coming to the juice case and pulling a gallon off the shelf. 🍊

*Jack Payne is the University of Florida’s senior vice president for agriculture and natural resources and head of the UF Institute of Food and Agricultural Sciences.*



Yu Wang uses a mass spectrometer in her research on flavor chemistry.