



Thinking like a grower

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dward James of J&R Groves says what makes Juanita Popenoe an insightful citrus agent is that she *hasn't* been at it her whole life. She still has an outsider's perspective. He paid Popenoe the ultimate compliment: "She thinks like a grower."

James and Popenoe think a lot alike. Although James has been in citrus his whole life, he's a first-generation grower. As he grappled with HLB, he wasn't bound by practices inherited from his grandfather.

A BROAD PERSPECTIVE

Popenoe is not, strictly speaking, a citrus agent. She's a University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) Extension multicounty (Marion, Lake and Orange) fruit agent. She's worked with apples in Washington, pawpaws in Maryland, kiwis in New Zealand, and toured farms in the Netherlands that fascinated her with their unconventional approaches to fruit horticulture.

She's done technical writing for an IT company. She took time off to raise kids. She's run an Extension county office as director. In short, she's worn a whole lot of hats, and the thinking that went on under each one of them has helped her develop into a scientist who considers many perspectives — including a grower's perspective.

INTUITION TO INVESTIGATION

A few years back, James anxiously summoned Popenoe for a look at what was going on in his grove. His fear was that since he had no empirical data to explain what was going on, Popenoe might nod her head in approval — and



Popenoe and James

never come back.

James had been cover-cropping to build soil health in preparation to plant an alternative crop, but then something unexpected happened. His Hamlin and Navel oranges revived, so he kept the trees.

What James is doing immediately made intuitive sense to Popenoe. Although she believes it's a misperception, she's sensitive to growers' wariness that academia offers too many solutions that work in theory but do not make economic sense.

Popenoe came back for repeated visits to J&R Groves, and in November she visited with researchers and dozens of other people for a field day demonstration of what's going on there. Popenoe sees the wisdom in James' observations and believes other growers can benefit from them. After all, she thinks like a grower — what James was doing was turning trees profitable again.

She also thinks like a scientist. Popenoe believes growers will benefit even more if there's empirical data to complement what they can see with their own eyes.

Popenoe is setting up science in the grove. She has installed soil probes to gauge electrical conductivity, which can be a measure of fertility.

It's still not yet formal research. She's still laying the groundwork to convert intuition into investigation. If she can explain what's going on at J&R, other growers can benefit from that discovery.

Popenoe said she is getting UF/ IFAS researchers interested in what's going on at J&R. She hopes that eventually these scientists will provide insights about why what James is doing is working and advance what we already know about cover cropping and tree health. That could give other growers a better idea of how to make it work in their groves.

James has high praise for all the citrus agents he's worked with over the years. In this case, he said he believes it took a scientist with Popenoe's wide range of worldwide experience to think creatively about what she was seeing in his grove.

She spends most of her leave time in Maryland, helping her 90-year-old father with an orchard of pawpaws and other fruit. This may be part of what makes her so open to what James and other growers are trying in their groves.

When she retires to her dad's Maryland orchard, she'll have a stake in its profitability. That future informs her work now. After all, she'll need to think like a grower.

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