

Mapping Soil Variability to Inform Gypsum Application in a Commercial Tree Nut Setting – Challenges and Opportunities

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A 2016 Goldman Sachs survey of U.S. agriculture found that the majority of growers applied too much nutrition on up to 40% of their fields and too little in weaker areas. While soil mapping as a platform for zonal management is a well-established technology, its adoption has for the most part lagged in orchard crops as well as at Wonderful Orchards.

In our experience, the slow technology adoption of soil mapping in many orchard crops is not due to the lack of science validating the technology and its potential benefits. Adoption is however impeded by operational hurdles associated with changing cultural practices in a commercial setting. In 2017, Wonderful Orchards sought to leverage soil mapping techniques to inform bulk gypsum applications and develop a workflow that could be scaled across a large operation.

In this presentation, Wonderful Orchards will provide a high-level overview of their progress after their first year of a multi-year project to better incorporate soil mapping as part of their crop management strategy. Although the team has not finalized trial results, they will discuss the workflow, operational challenges encountered with soil mapping, actions taken based on soil mapping data and opportunities to streamline soil mapping practices for large commercial operations.