

Citrus Growers' Willingness to Pay and Perceptions of Cover Crops

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State-wise distribution of cover crop benefits that were ranked 1 by growers/respondents of the survey. Percentages given in brackets.

Cover crop benefits	California	Florida	Texas	Total responses
Nutrient retention in soil	12 (43%)	21 (36%)	6 (30%)	39 (36%)
Soil Erosion - prevention	3 (11%)	8 (14%)	1 (5%)	12 (11%)
Maintain Moisture	5 (18%)	5 (8%)	5 (25%)	15 (14%)
Pest control	3 (11%)	12 (20%)	0	15 (14%)
Weed Management	1 (4%)	7 (12%)	4 (20%)	12 (11%)
Increase SOM	4 (14%)	6 (10%)	4 (20%)	14 (13%)
Total	28	59	20	107

Cover crops are widely adopted in row crop agriculture but are relatively new in citrus. Some benefits of cover crops use are increasing soil organic matter, nitrogen, and water holding capacity. These can be particularly beneficial for Florida's sandy soils. Adoption of cover crops in citrus production is low due to growers' uncertainty about the costs and benefits associated with the practice and the lack of information available on management and cover crop choice. In this study, we developed a survey of citrus growers to

understand their perceptions on cover crops and to estimate their willingness to pay (WTP) for cover crops in citrus production. The survey asked growers about citrus production practices, types of citrus grown, cover crop adoption, and perceived benefits of adopting cover crops. We found that nutrient retention is the most important reason for potentially adopting cover crops across respondents from three states. Moreover, around 20% of respondents from Florida ranked pest control as the biggest benefit of using cover crops.

For estimating WTP for cover crops, we used a double bounded dichotomous choice model, which elicits a grower's choice in dollar-value in three steps based on their responses. Considering demographic, production, and farm-level factors, we found that the median WTP for cover crops for an average respondent from Florida is \$400.57 per acre and the mean WTP is \$509.51 per acre per year. We also found that owning a no-till planter was the biggest determinant of cover crop adoption by a citrus grower.

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