

Hydroponic Systems

for Home Gardeners and Educators

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WORKSHOP GOAL

In response to growing interest in home hydroponics, Alabama Extension's Home Horticulture Team expanded its training efforts in 2024. After a single hydroponics session in a 2021 webinar series and positive survey feedback, the team pursued specialized training with UF/IFAS Extension. This hands-on experience enabled them to develop three in-person hydroponic workshops for home gardeners, educators, and small farmers. These workshops focused on practical hydroponic techniques, emphasizing resource efficiency and year-round cultivation, to help participants confidently implement hydroponic systems in their own spaces.

WORKSHOP DESCRIPTION

The workshops were full-day, in-person events held at three locations across Alabama. Each Extension Agent specialized in a different hydroponic system, providing detailed insights into its functionality. Team members discussed the benefits, challenges, and potential outcomes of each system, offering participants a comprehensive understanding of hydroponic cultivation. Each participant received their own deep water culture hydroponic system to assemble and take home. All components were discussed in detail during the presentation, giving participants the knowledge to confidently operate their system.

SUMMARY

At the conclusion of each workshop, participants completed an optional evaluation to assess their knowledge gain and intentions for implementation. The training significantly improved understanding of hydroponic systems, with prior familiarity at only 28%. Following the course, 96% reported acquiring at least moderate knowledge of hydroponic basics. Participant satisfaction was high, with 76% rating the program 10 of 10 and the remaining 24% scoring it between 7 and 9.

"With your guidance and the information that you shared, we are educating others on the benefits of growing with hydroponics and we are expanding to aquaponics."
-Workshop Attendee

SYSTEMS COVERED



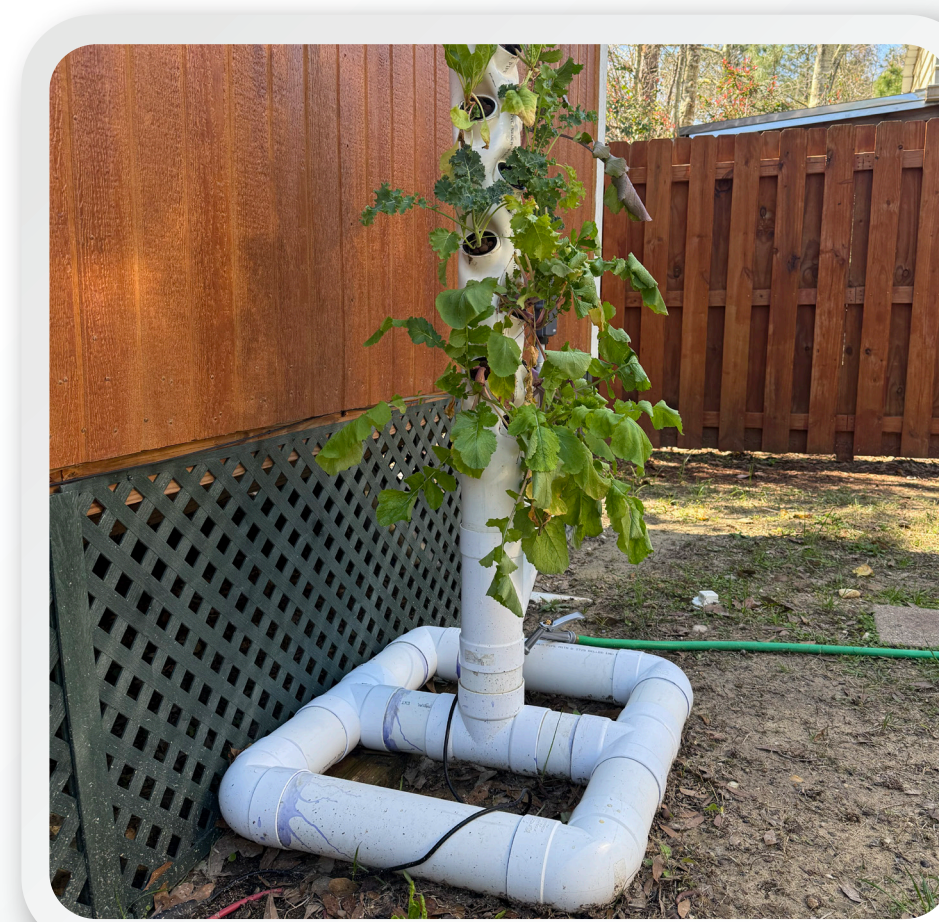
Deep Water Culture (DWC)



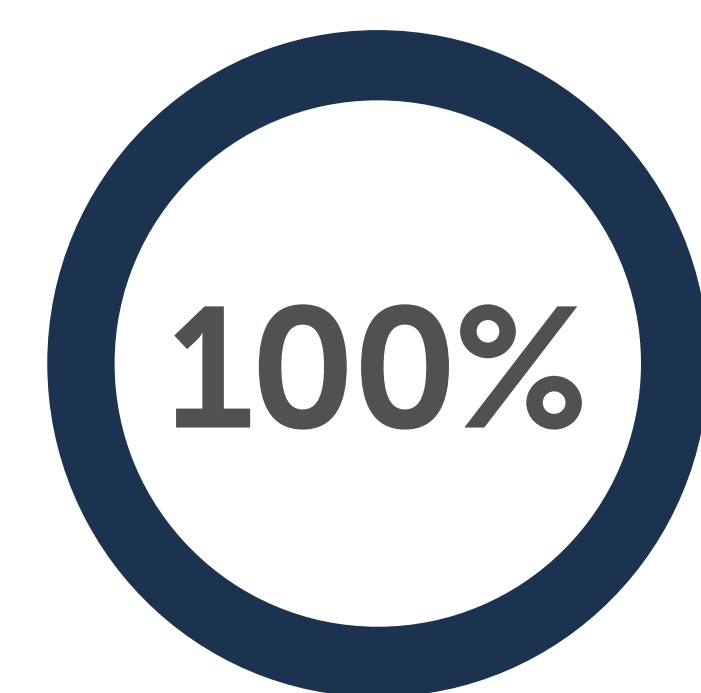
Dutch Bucket System (Drip)



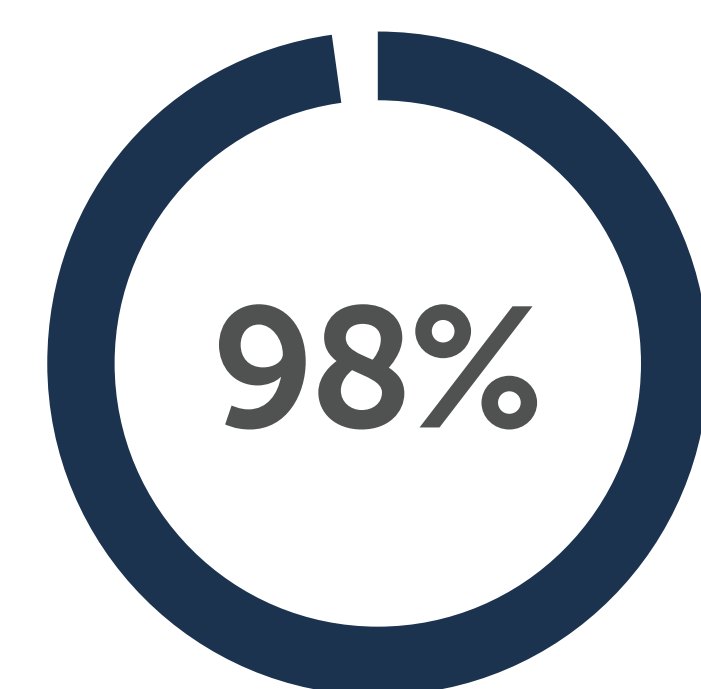
Nutrient Film Technique (NFT)



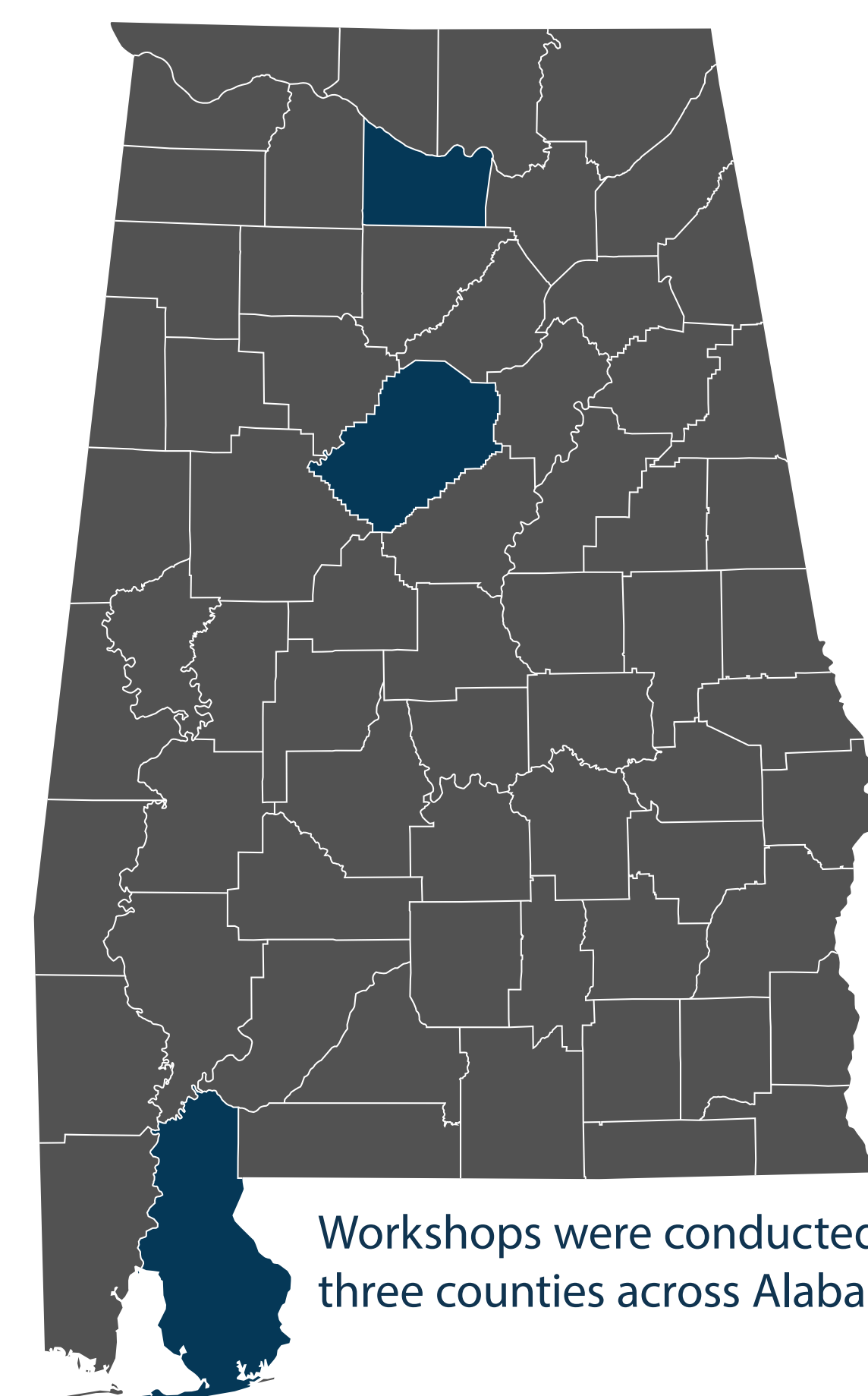
Grow Tower (NFT)



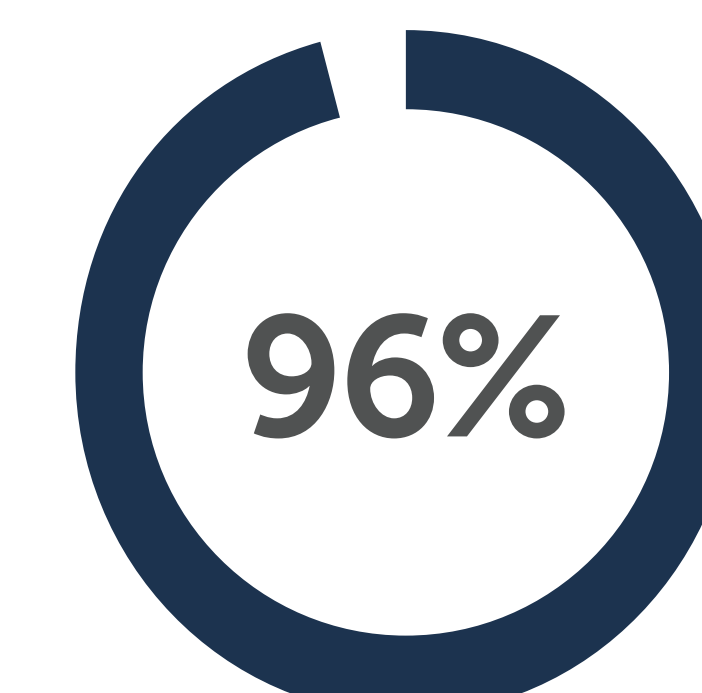
Percentage of respondents that would like to absolutely recommend the workshop to their friends and colleagues



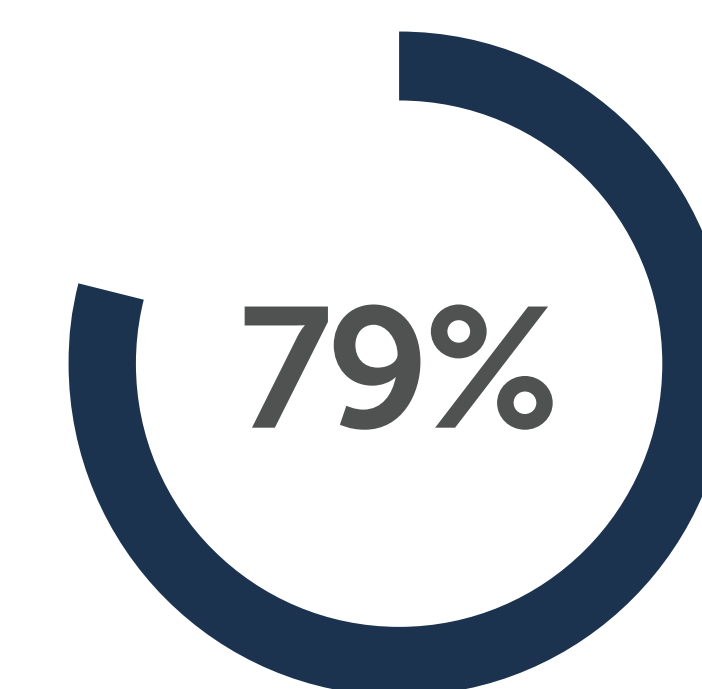
Percentage of respondents that were confident in home hydroponic systems after the workshop



Workshops were conducted in three counties across Alabama



Percentage of respondents that gained at least moderate knowledge of hydroponic basics, with 56% reaching very or extremely knowledgeable levels



Percentage of respondents that are still using their system four months after the workshop and will implement additional systems

WORKSHOP STRUCTURE



Collaborative teaching



Demonstrating different systems



Describing construction methods for each system



Scan for more information