



## Stakeholder perceptions of the most frequently used agroecological method of weed control in Macaronesian Region (Madeira)

### PROBLEM

What are the most popular and effective agroecological methods for weed control in Macaronesian Region?

### STAKEHOLDER PERCEPTIONS

Manual weeding is the most frequently used method, with 83% of custard apple producers and 80% of vine growers relying on it. Crop rotation is also widely practiced, with 66% of custard apple and 60% of vine producers adopting it. Physical and mechanical methods, such as mulching and green coverages, are emphasized in workshops as effective strategies. However, flame weeding is not utilized by any respondents. Tillage (mechanical cultivation) is known by 66% of custard apple and 80% of vine growers but is less commonly applied. In past practices, high planting densities are no longer used by 50% of custard apple and 60% of vine producers. Inter-row cultivation and mixed cropping are known but not widely adopted. Methods like soil cover and flame weeding are familiar to 63% of respondents but are rarely used.



Figure 1: Uniforming the soil after tillage (Quinta das Vinhas)



Figure 2: Mechanical cutting of weeds (Raposeira)



## RECOMMENDATION

Manual weeding and crop rotation are the most reliable methods for weed control and should be prioritized. Integrating mulching and green coverages, along with promoting mechanical tillage, can enhance weed management. There is also a need to revisit and support the use of less common methods like soil cover and flame weeding through further research and farmer education to build a more comprehensive weed control strategy.



*Figure 3: Weed cutting  
(Raposeira)*



*Figure 4: Mobilizing the soil  
before sowing grasses and  
legumes (Quinta das Vinhas)*

### KEYWORDS

soil preparation, weeds, organic vineyards

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