



ALBERTA BEEKEEPERS COMMISSION  
**TECHTRANSFER**  
PROGRAM

# **2024 Alberta Beekeepers Varroa Management Survey Results**

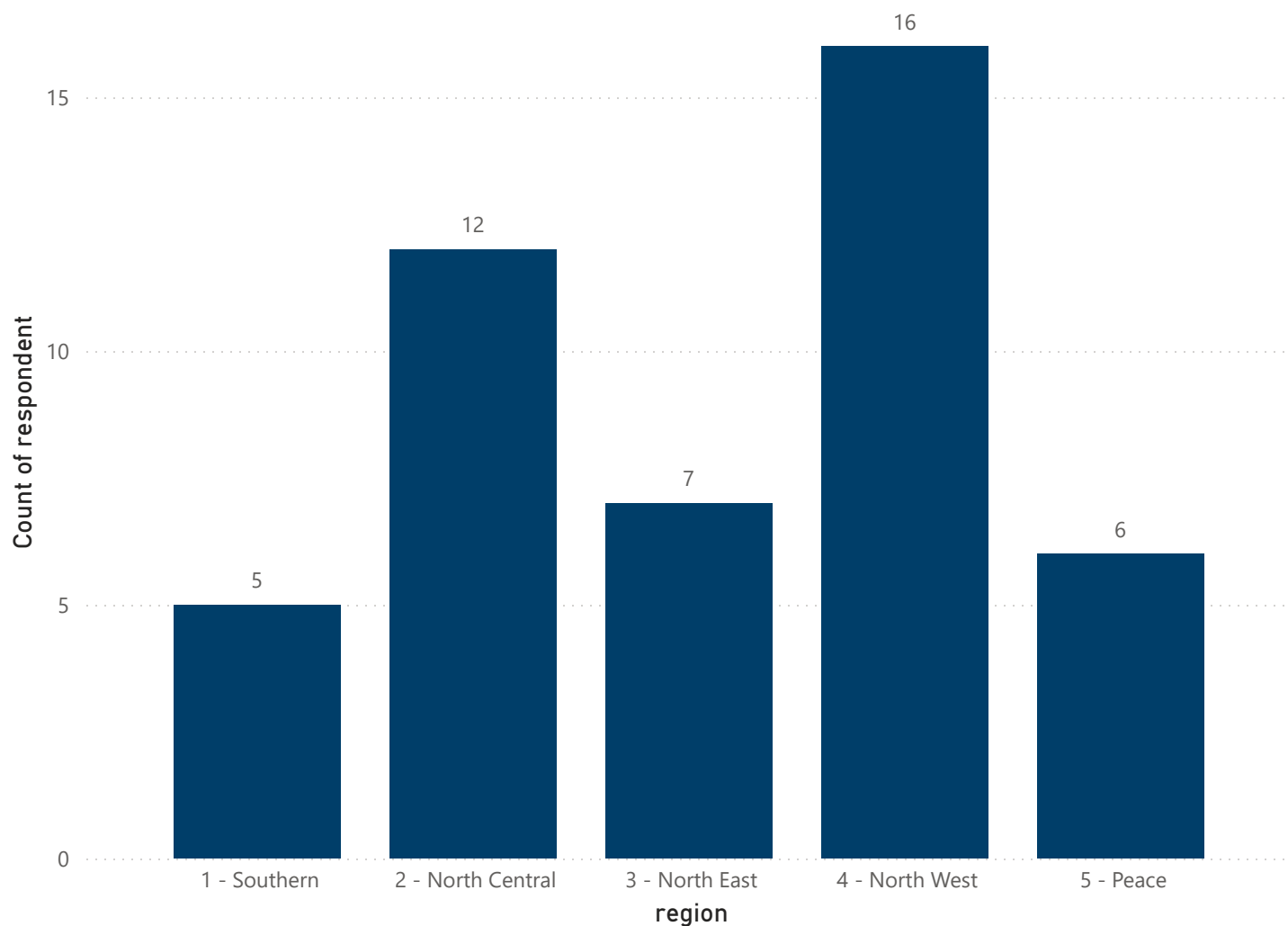
In 2025 the Alberta Beekeepers Commission Tech Transfer Program sent out a survey to Alberta beekeepers to collect Varroa management data from the 2024 season. Producer insights will help identify effective strategies and challenges in managing Varroa mites. All responses have remained anonymous, data was compiled to identify trends and common management practices.

# Respondent Breakdown

## Respondent operation size:

operation size	Count of respondent
1,001–5,000 colonies	18
101–500 colonies	5
1–100 colonies	12
5,001+ colonies	6
501–1,000 colonies	5
<b>Total</b>	<b>46</b>

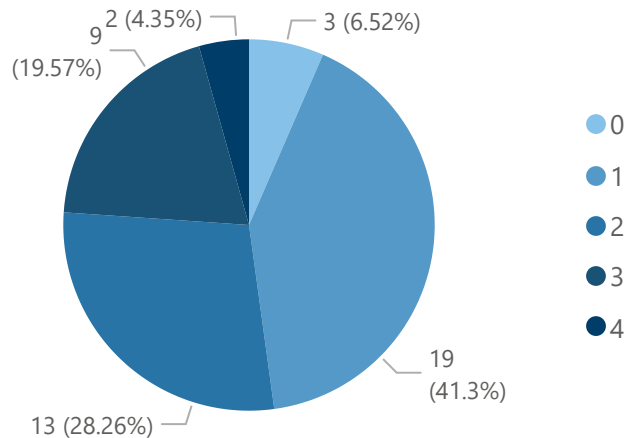
## Number of respondents from each region:



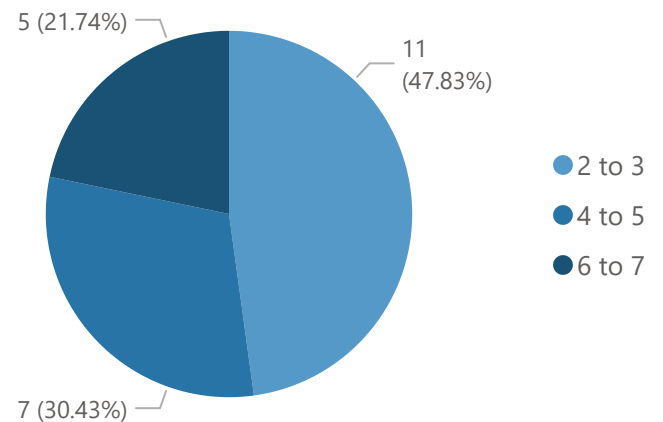


# Spring Treatment

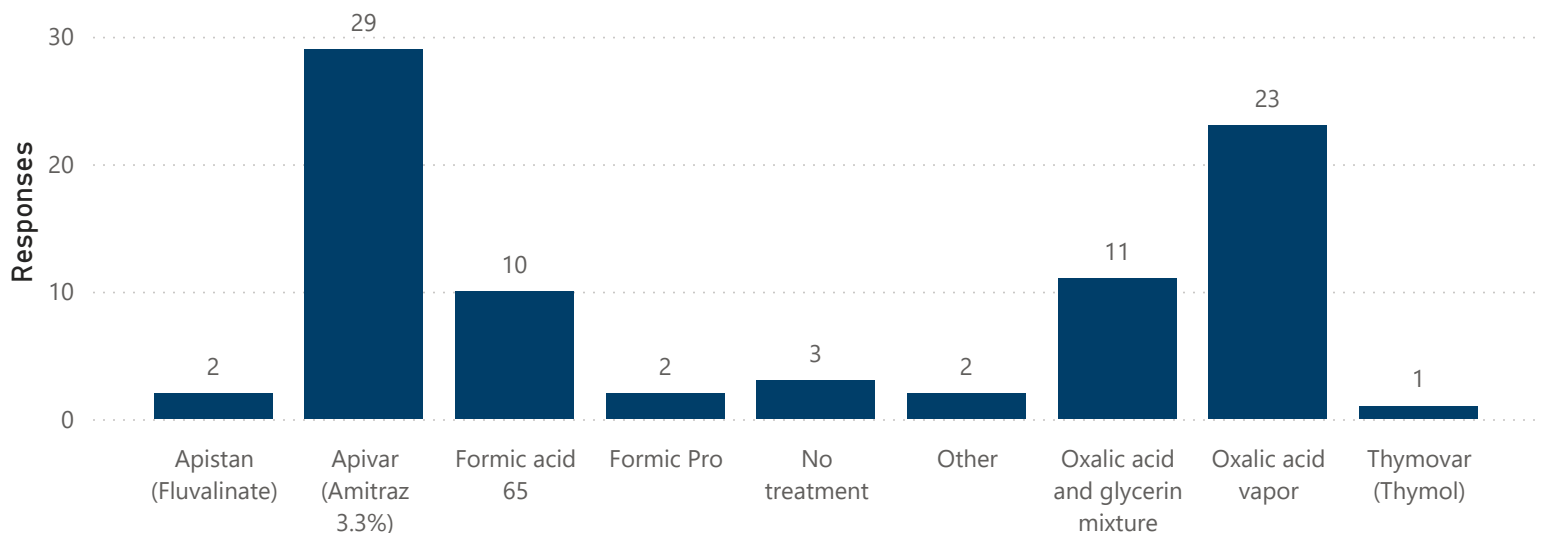
How many treatments did you use in SPRING 2024?



How many rounds of oxalic acid vaporization did you perform per apiary?



What Varroa treatments did you use in SPRING 2024?



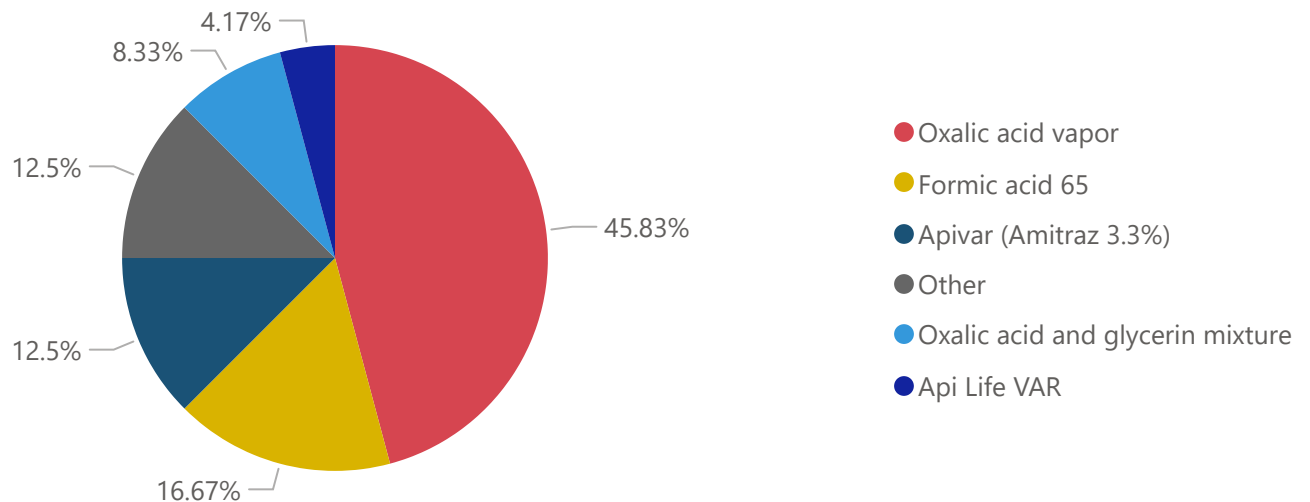
How effective was this SPRING treatment? (only 1 treatment used)

SPRING treatment 1	Very effective	Somewhat effective	Neutral	Somewhat ineffective	Ineffective	Not sure
Apistan (Fluvalinate)			1			
Apivar (Amitraz 3.3%)	6		3		1	1
Formic acid 65	1					
Formic Pro			1			
Oxalic acid and glycerin mixture	2					
Oxalic acid vapor	2					
Thymovar (Thymol)						1

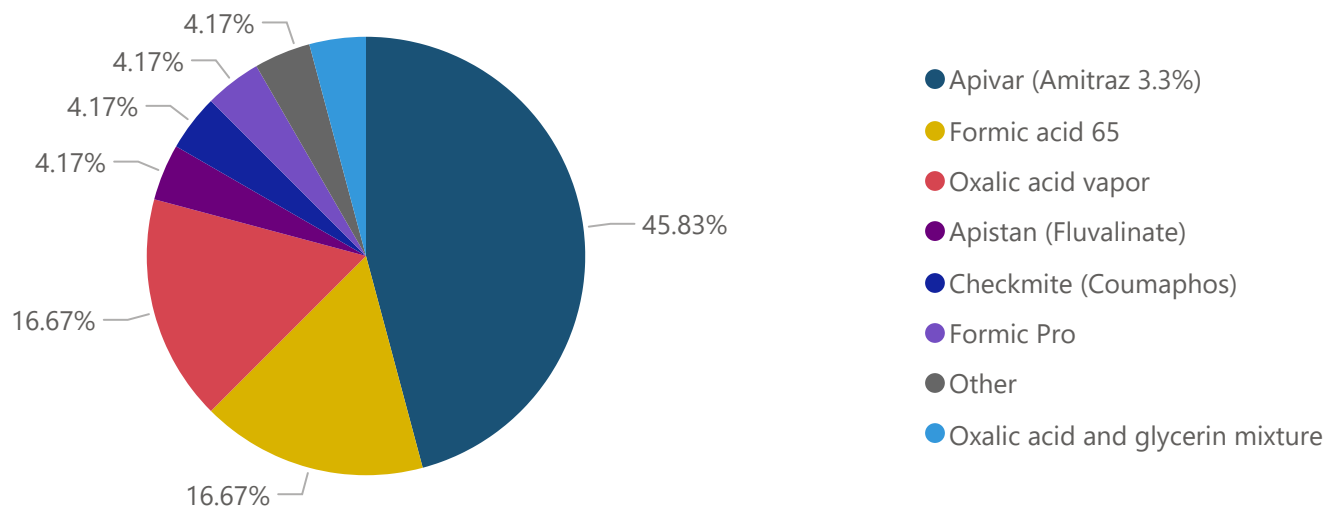


# Spring Treatment

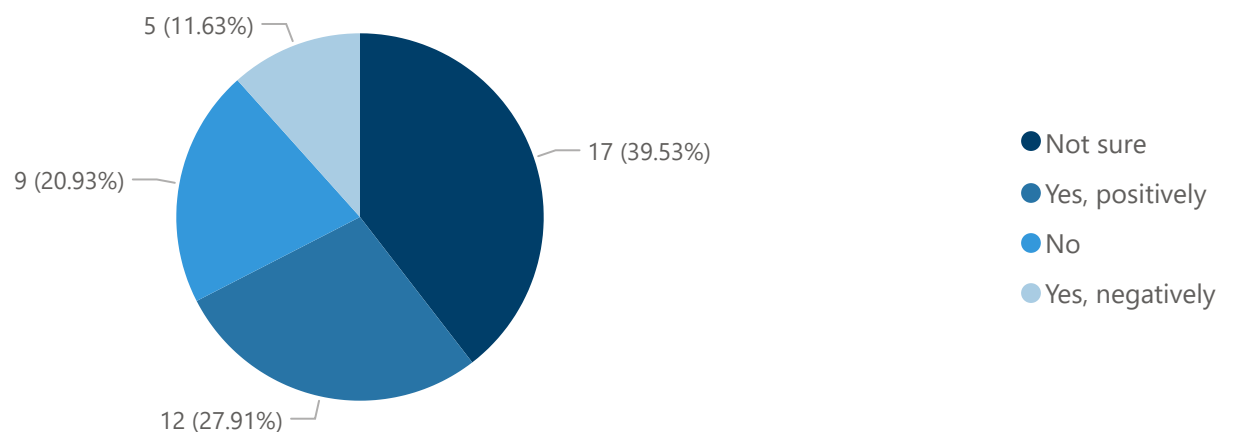
From your selection, which treatment was the MOST effective? (2 or more treatments)



From your selection, which treatment was the LEAST effective? (2 or more treatments)

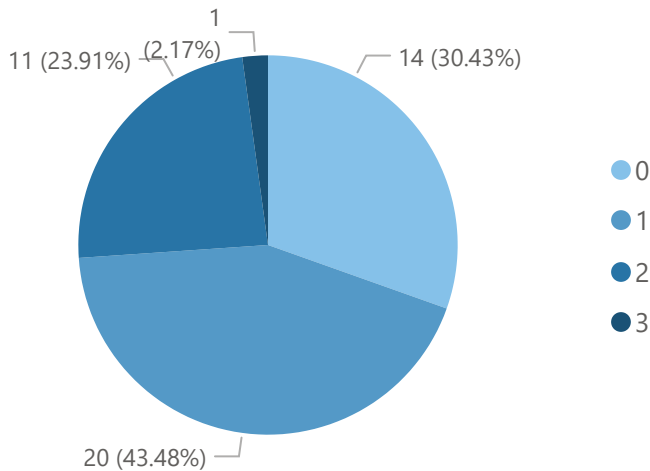


Do you think timing or environmental conditions influenced the efficacy of your treatments?

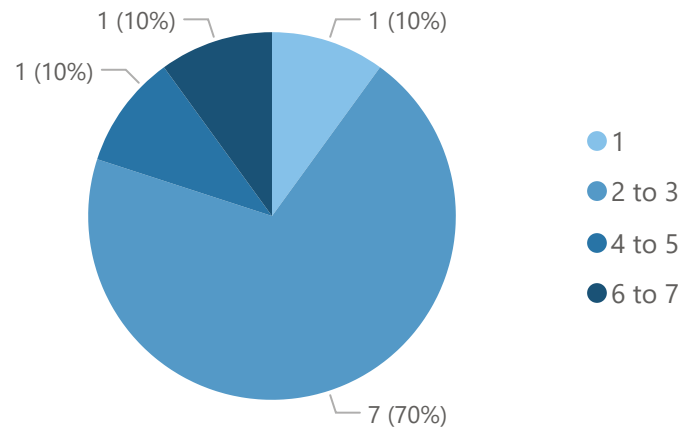


# Summer Treatment

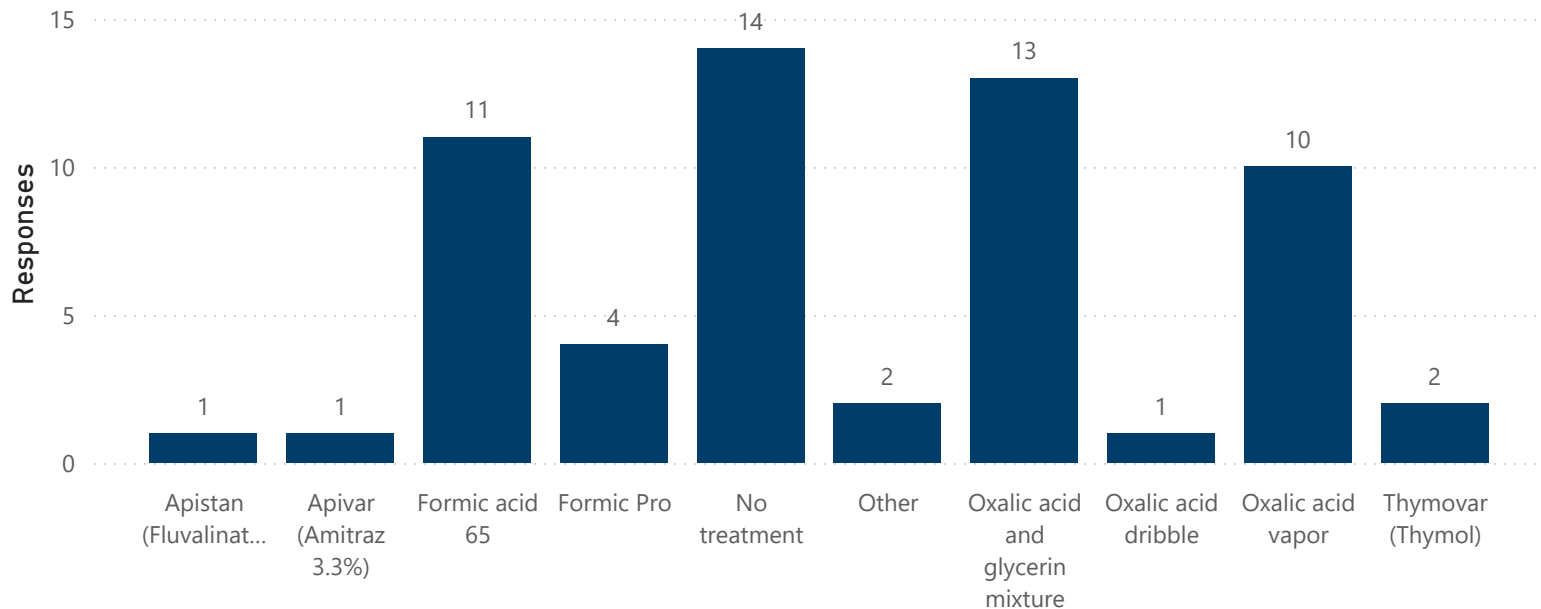
How many treatments did you use in SUMMER 2024?



How many rounds of oxalic acid vaporization did you perform per apiary?



What Varroa treatments did you use in SUMMER 2024?



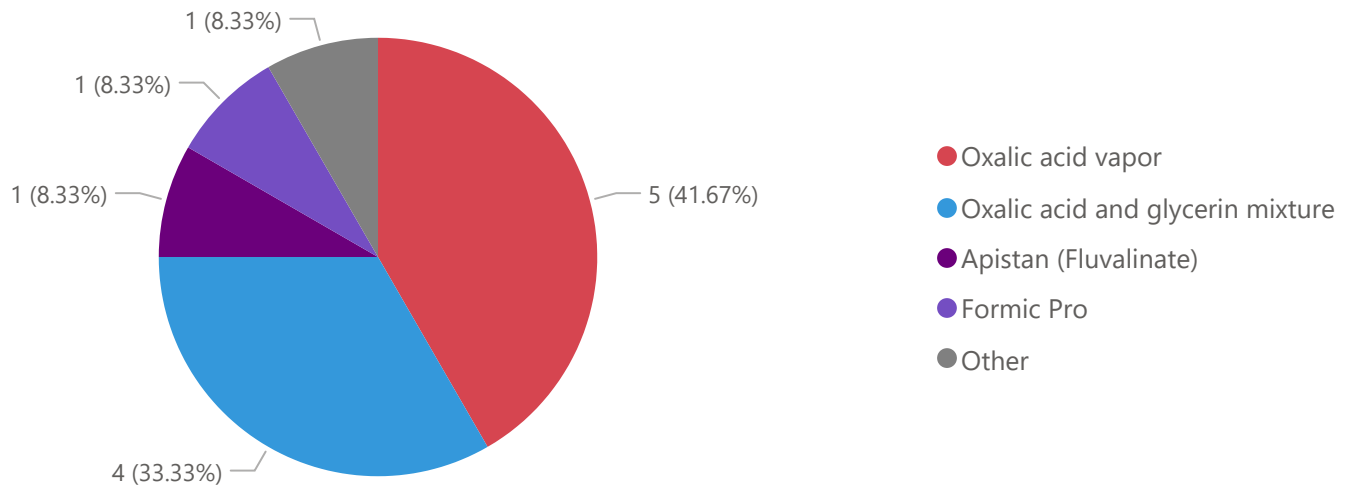
How effective was this SUMMER treatment? (only 1 treatment used)

SUMMER treatment 1	Very effective	Somewhat effective	Neutral	Somewhat ineffective	Ineffective	Not sure
Formic acid 65	2				1	1
Formic Pro					2	
Other						1
Oxalic acid and glycerin mixture	2	3	1			
Oxalic acid dribble	1					
Oxalic acid vapor	2	2				
Thymovar (Thymol)	1					

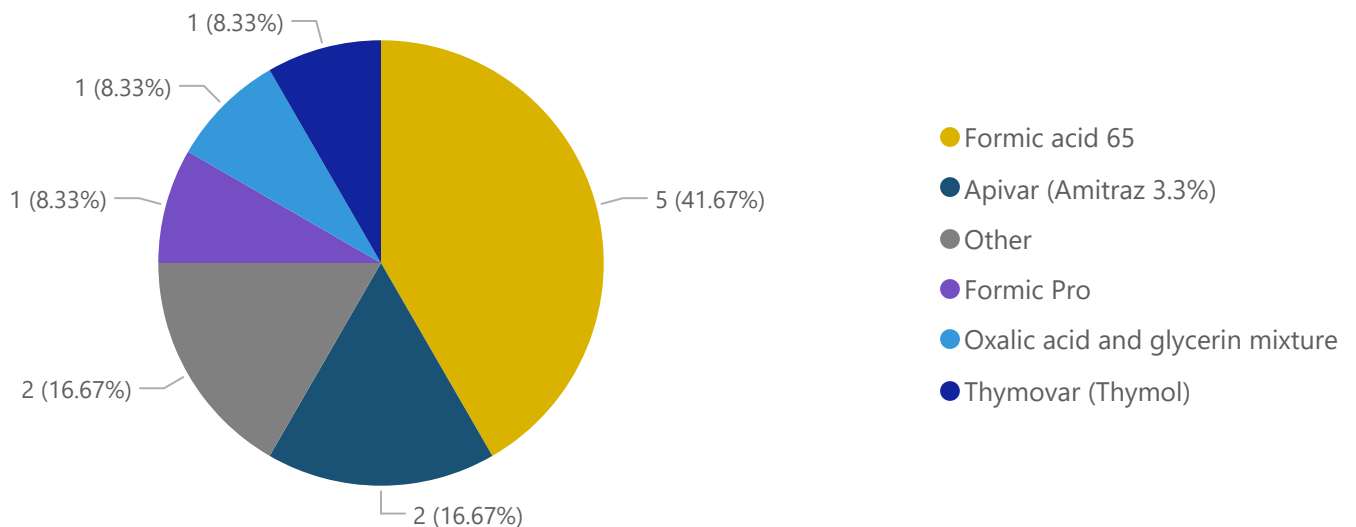


# Summer Treatment

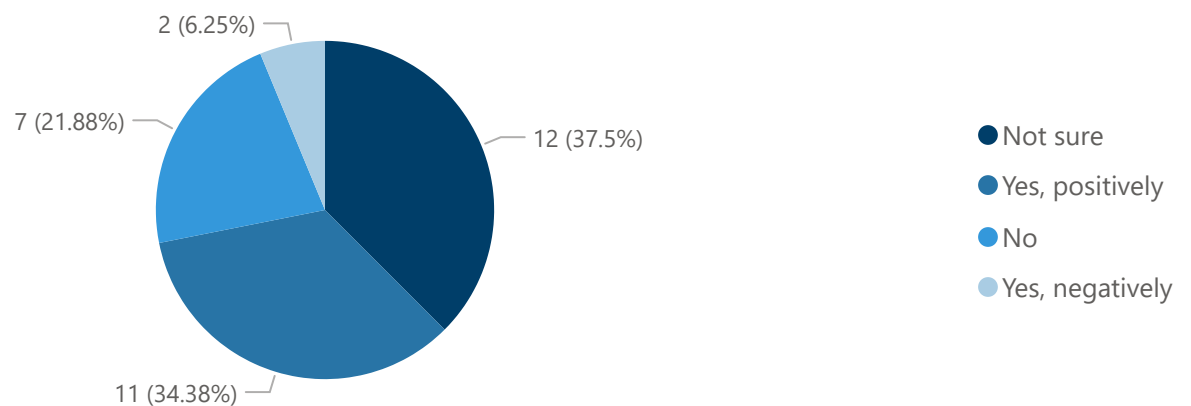
From your selection, which treatment was the MOST effective? (2 or more treatments)



From your selection, which treatment was the LEAST effective? (2 or more treatments)

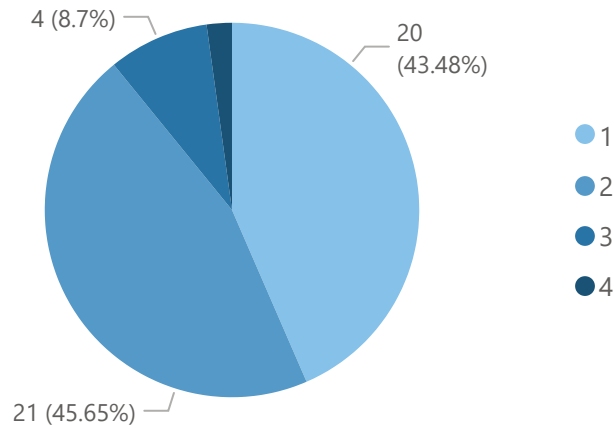


Do you think timing or environmental conditions influenced the efficacy of your treatments?

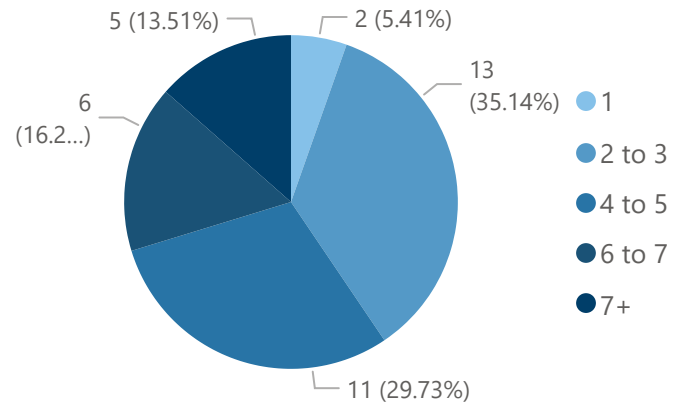


# Fall Treatment

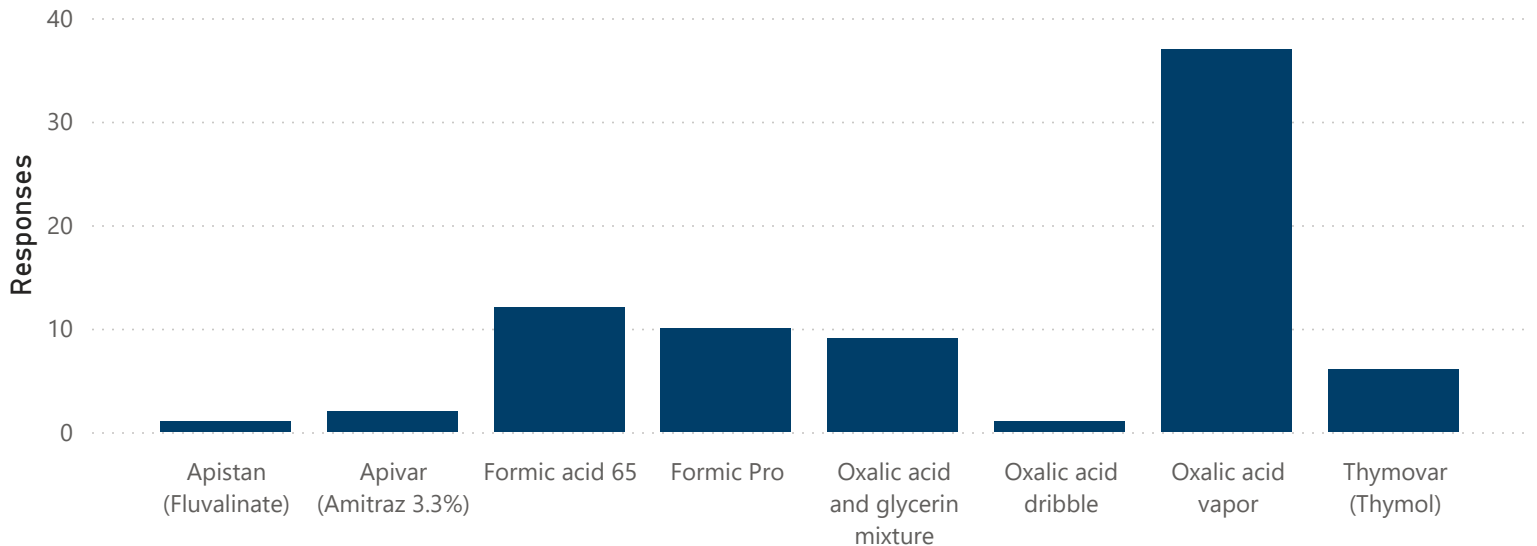
How many treatments did you use in FALL 2024?



How many rounds of oxalic acid vaporization did you perform per apiary?



What Varroa treatments did you use in FALL 2024?



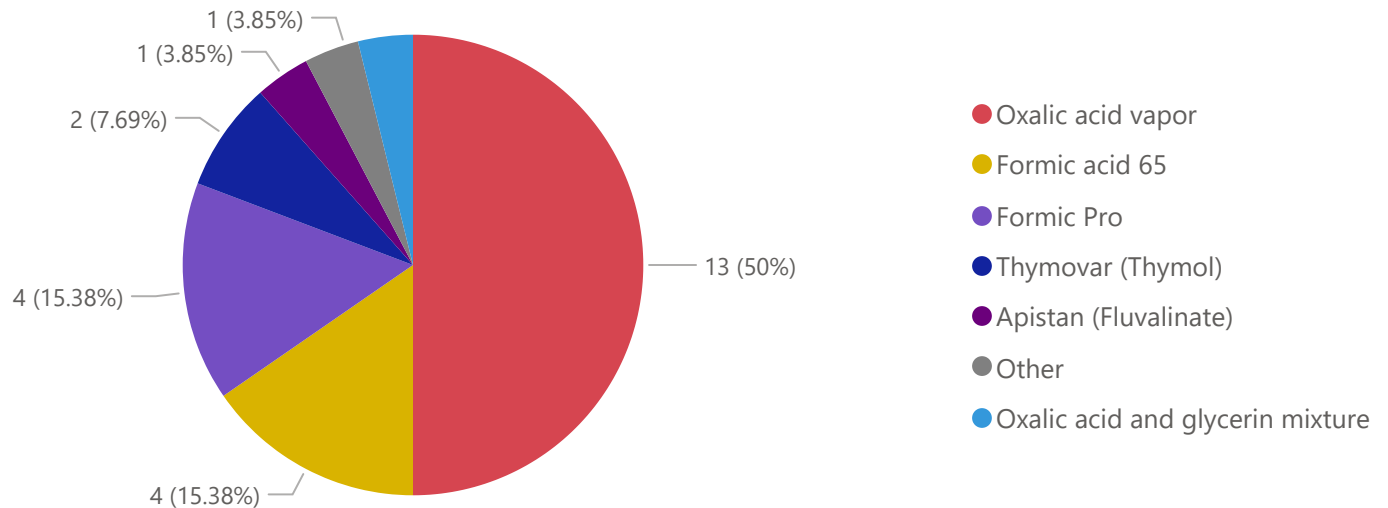
How effective was this FALL treatment? (only 1 treatment used)

FALL treatment 1	Very effective	Somewhat effective	Neutral	Somewhat ineffective	Ineffective	Not sure
Apivar (Amitraz 3.3%)	1	1				
Formic Pro	1					
Oxalic acid and glycerin mixture	2					
Oxalic acid vapor	3	6				5
Thymovar (Thymol)						1

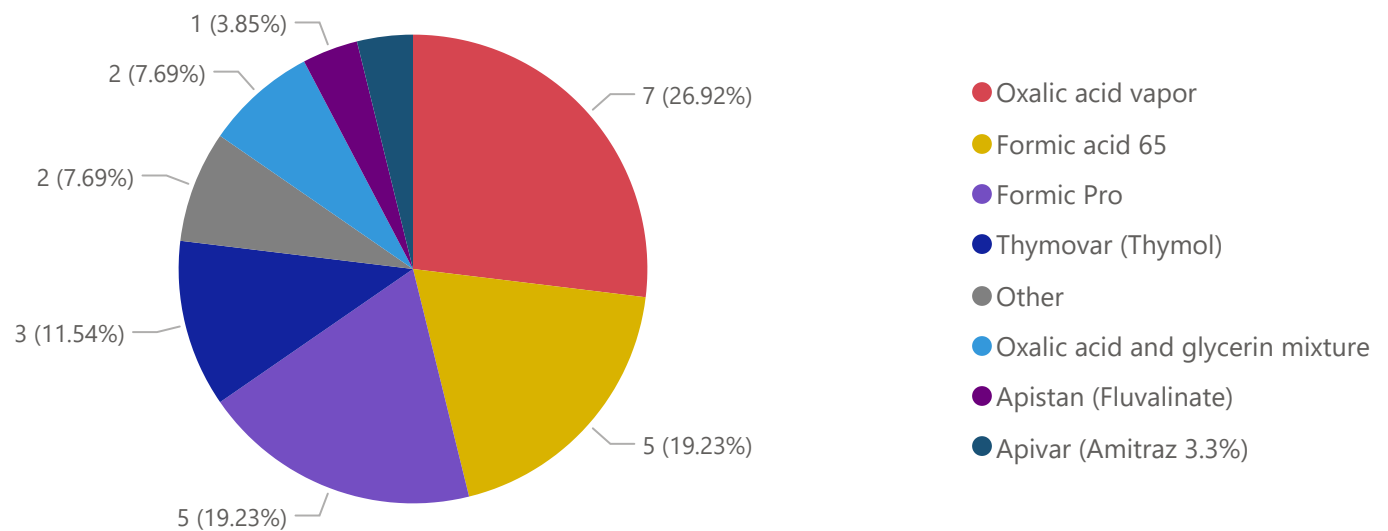


# Fall Treatment

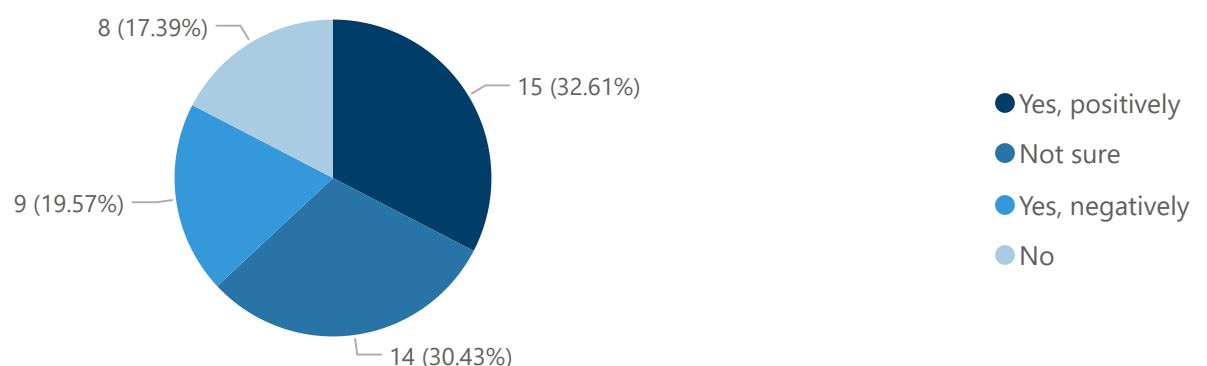
From your selection, which treatment was the MOST effective? (2 or more treatments)



From your selection, which treatment was the LEAST effective? (2 or more treatments)



Do you think timing or environmental conditions influenced the efficacy of your treatments?

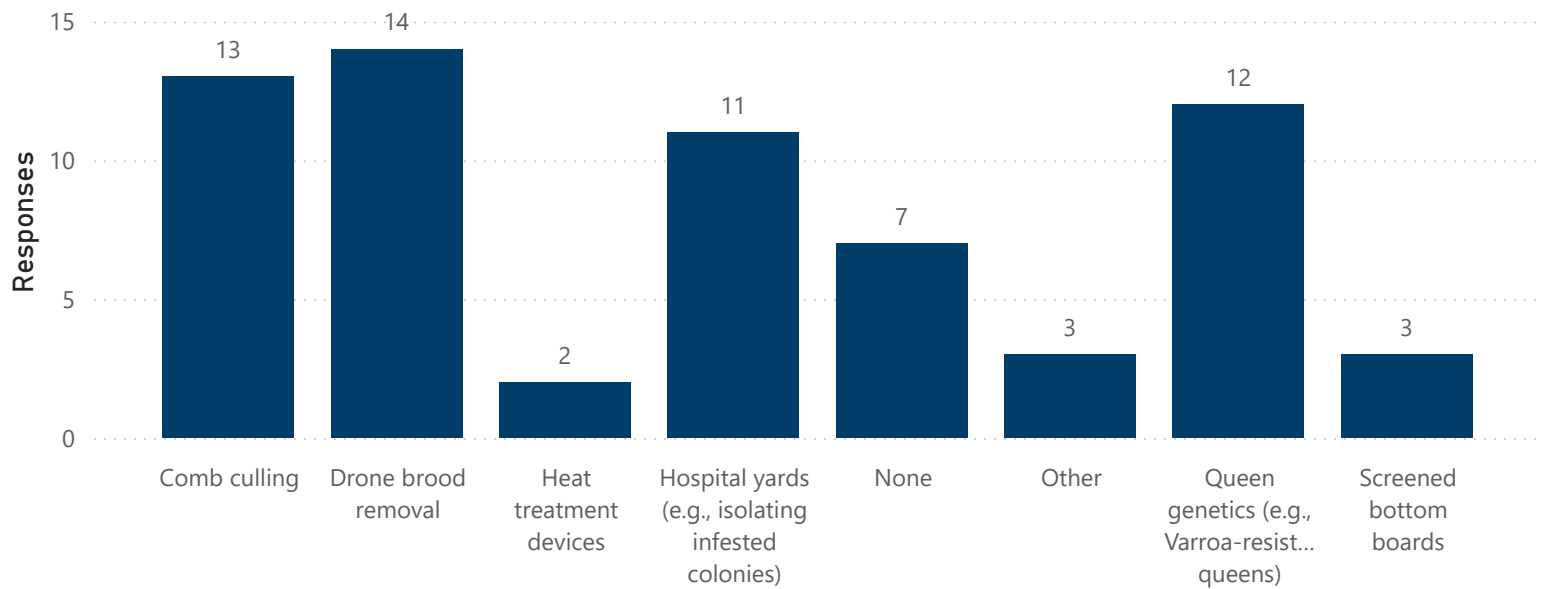




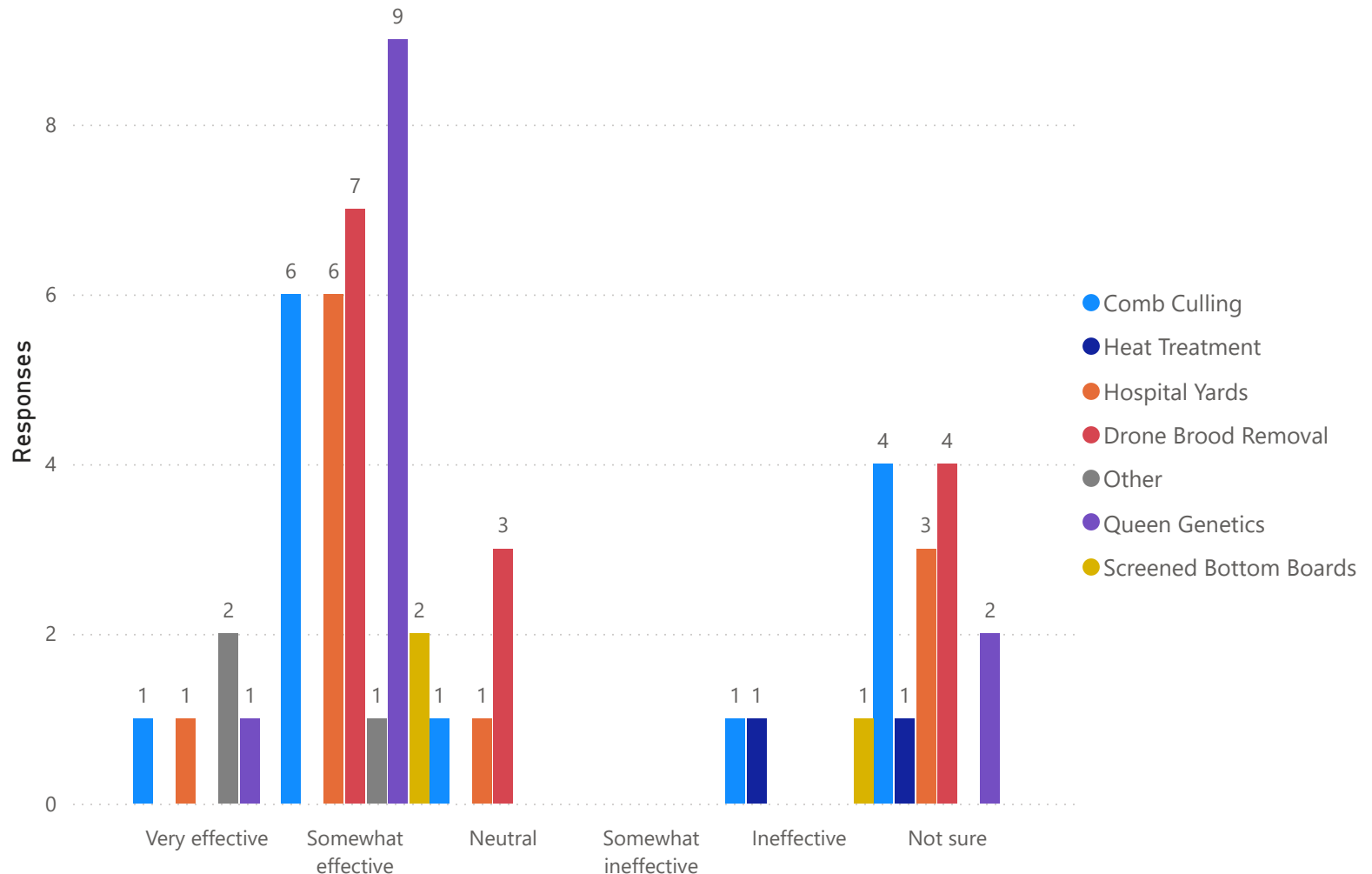


# Non-chemical Practices

Which non-chemical practices did you use in 2024 for Varroa control?



How effective were these methods?

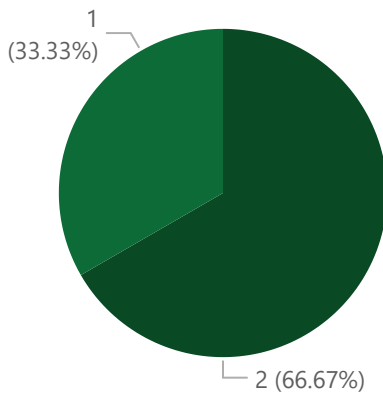




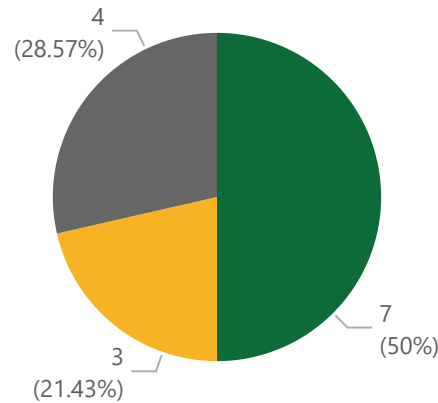
# Non-chemical Practices

How effective were these methods?

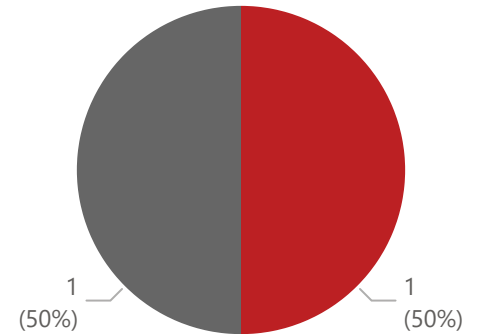
Other



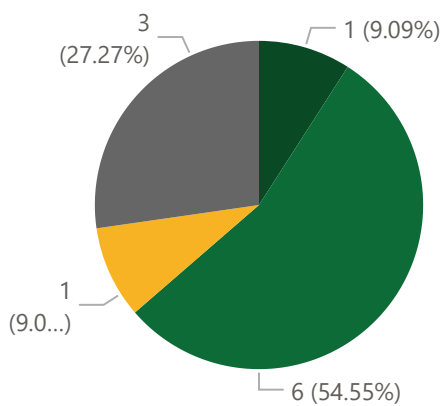
Drone Brood Removal



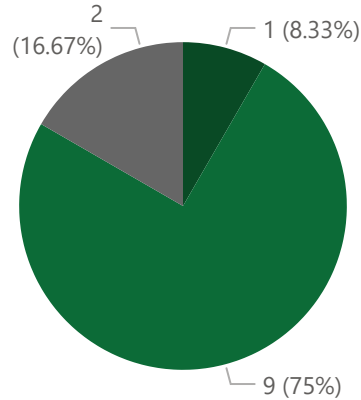
Heat Treatment



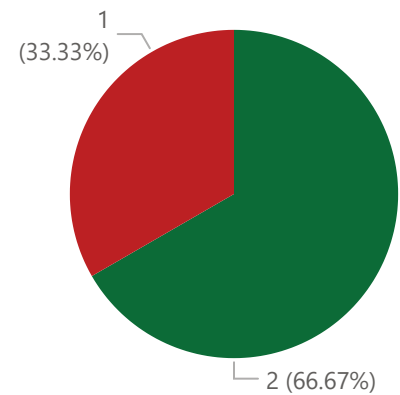
Hospital Yards



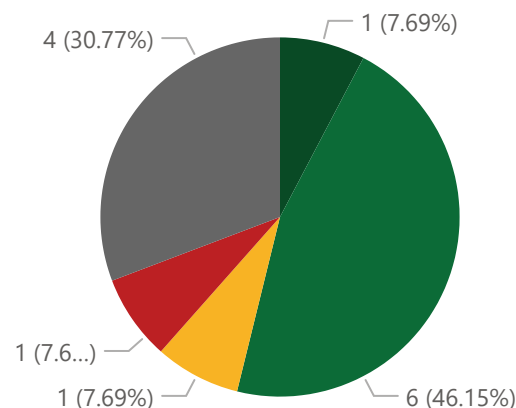
Queen Genetics



Screened Bottom Boards



Comb Culling

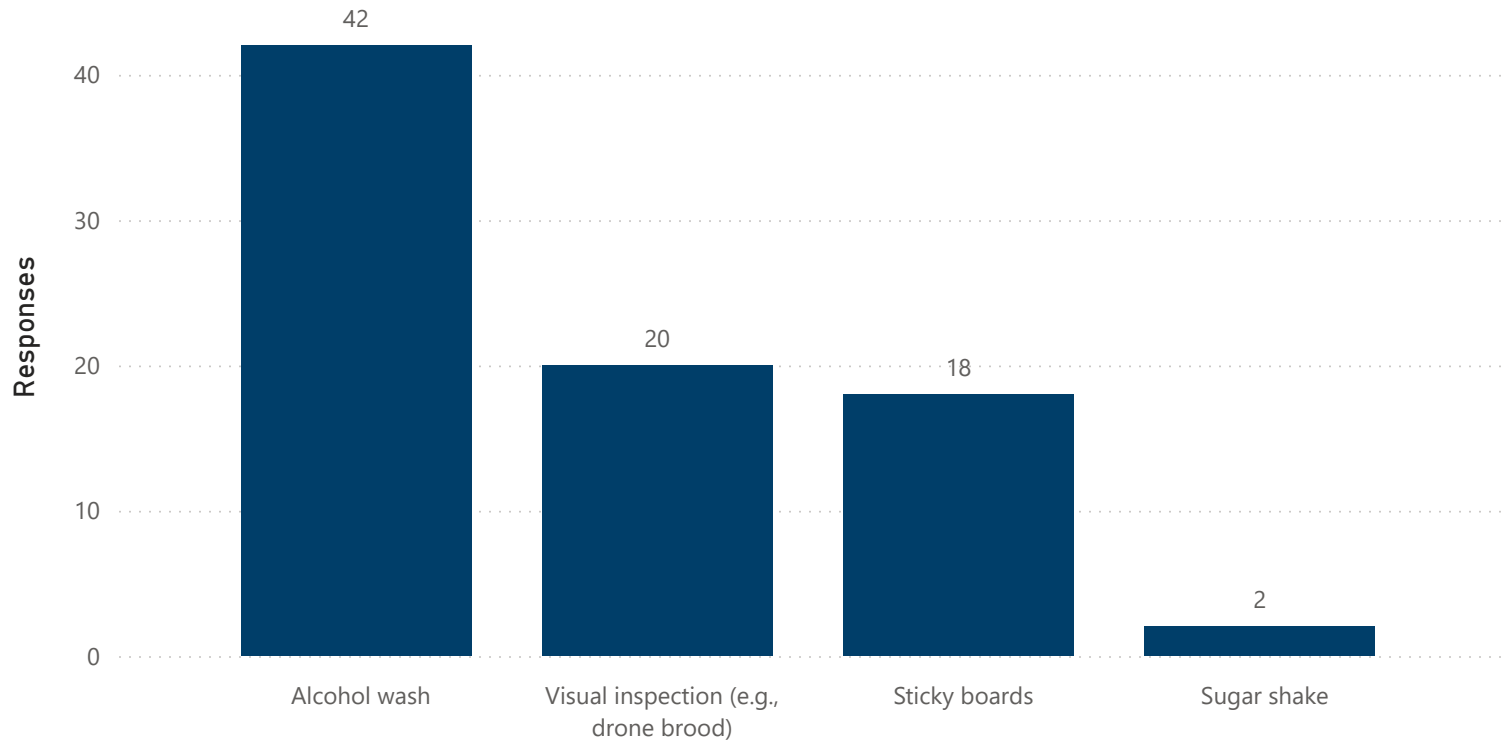


- Very effective
- Somewhat effective
- Neutral
- Somewhat ineffect...
- Ineffective
- Not sure

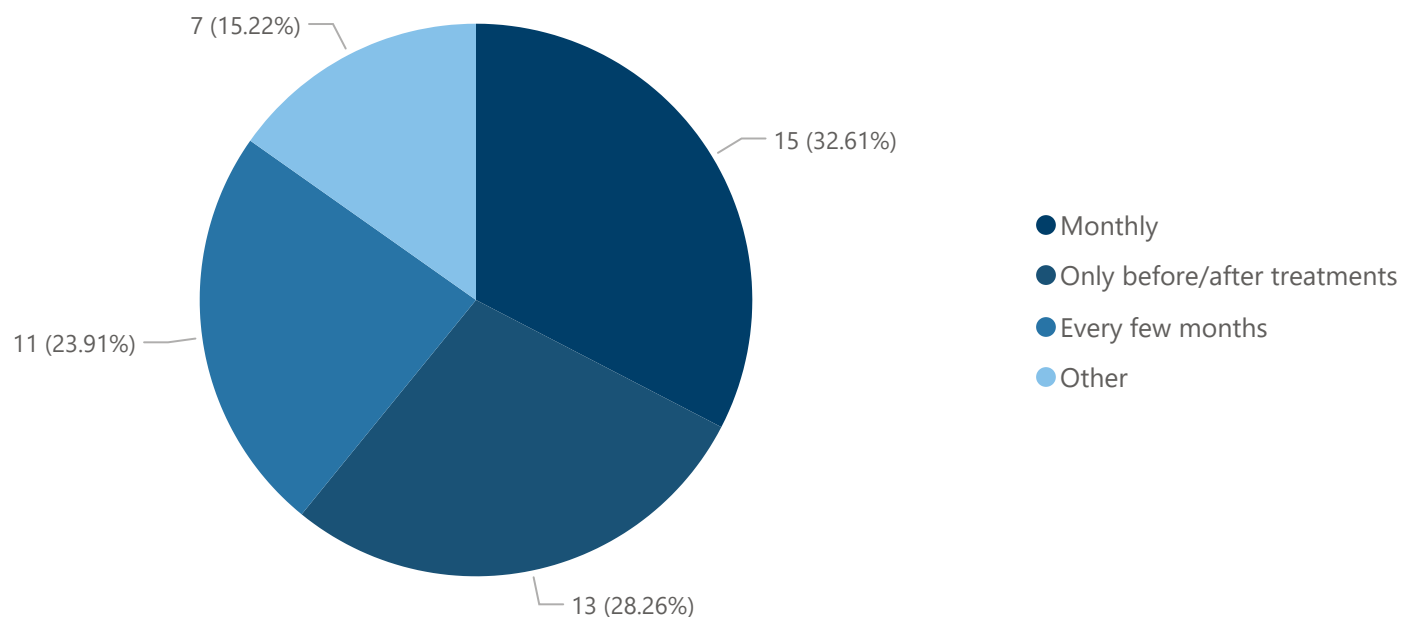


# Monitoring

How do you monitor Varroa mite levels in your colonies?

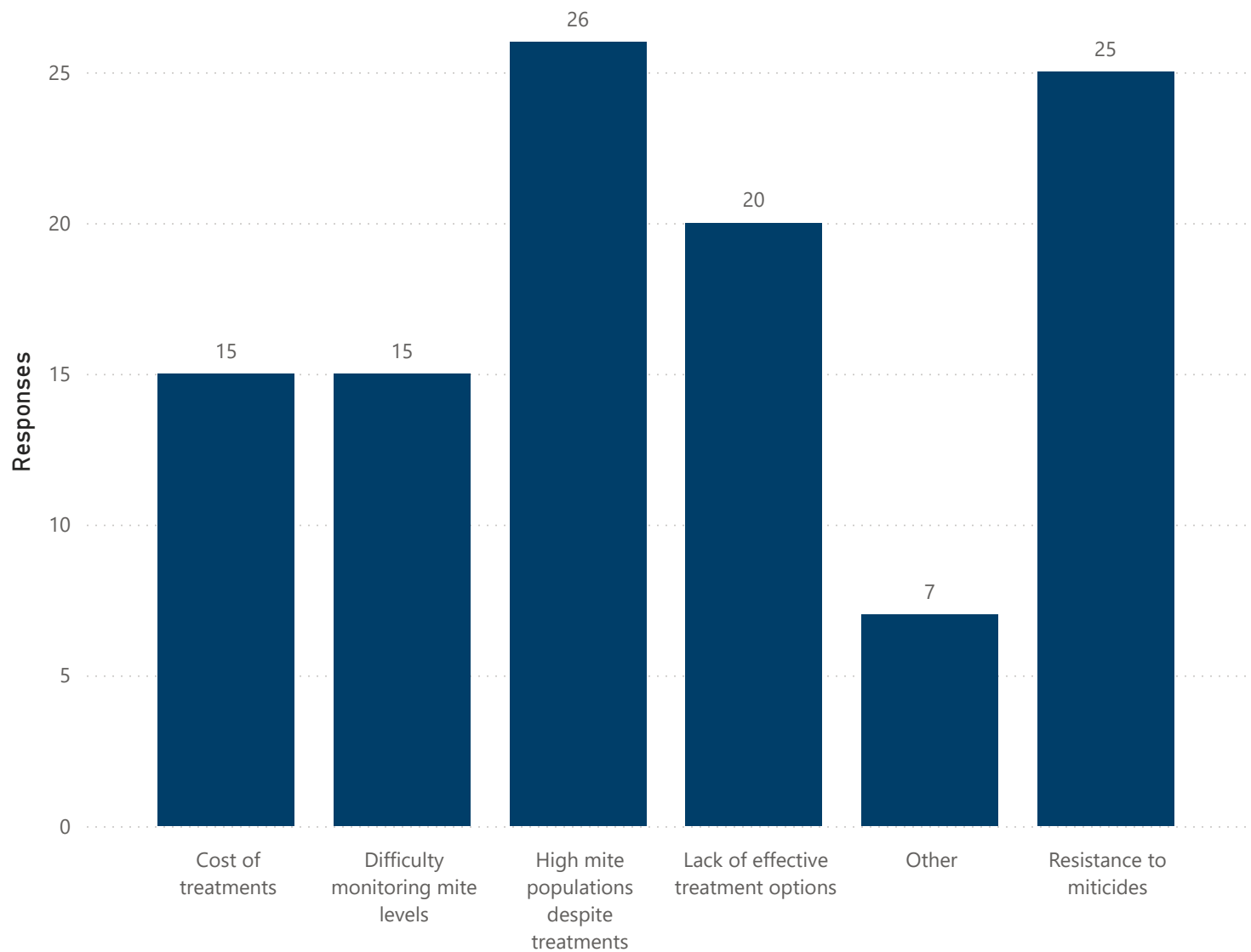


How often do you monitor Varroa mite levels?



# Management Challenges

What challenges have you faced in managing Varroa mites?

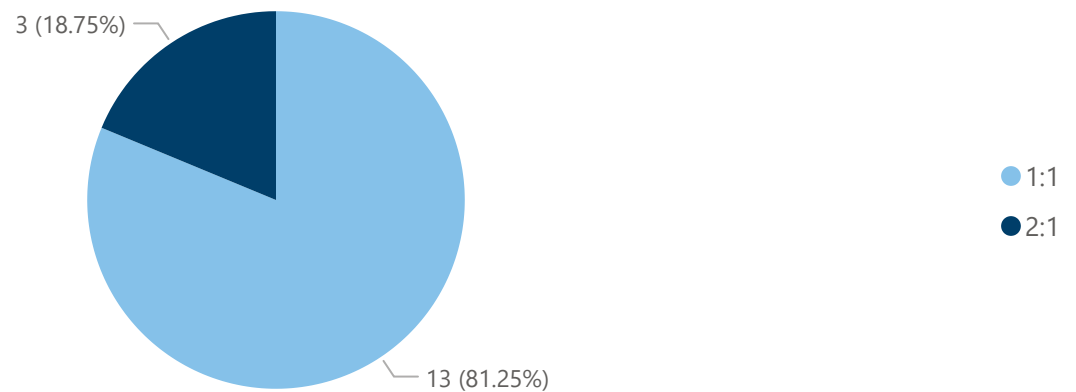




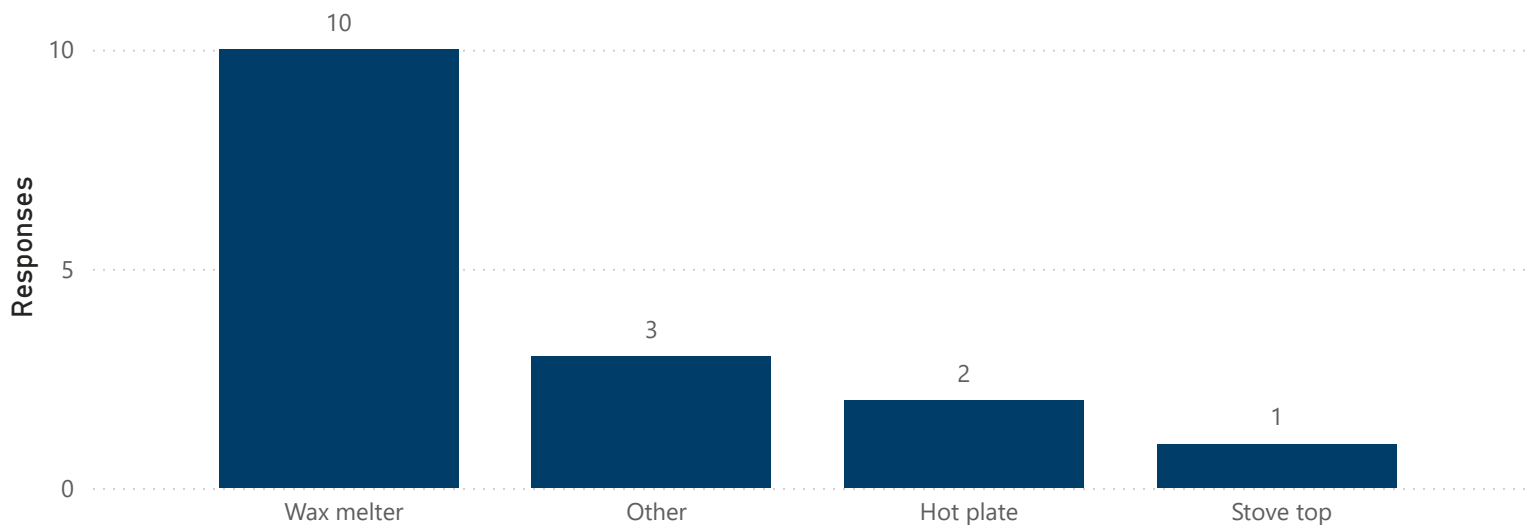
# OA & Glycerin Information

## Mixing Proportions and Methods

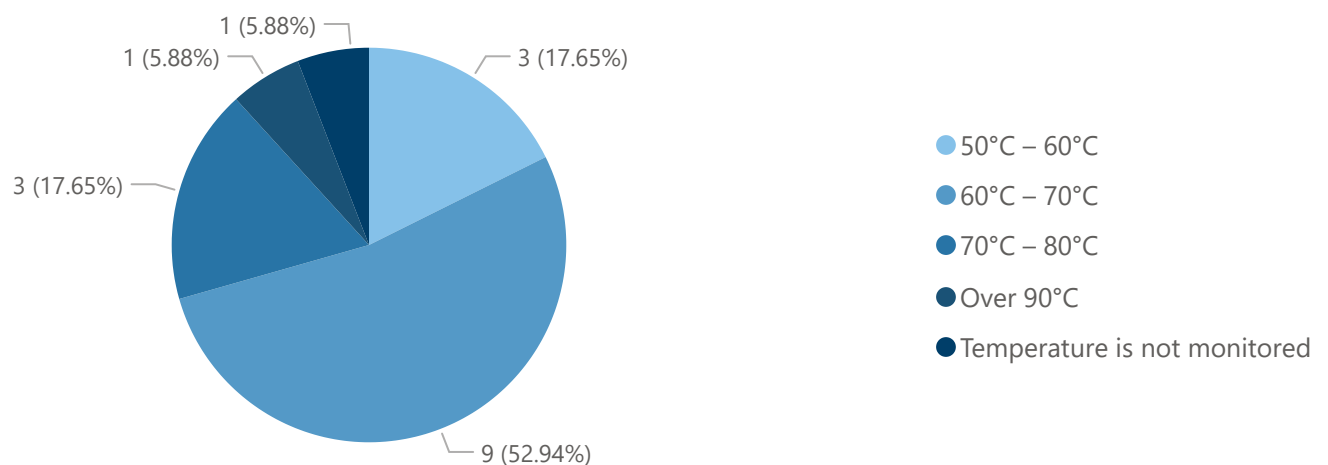
What ratio of oxalic acid to glycerin do you typically use when preparing the solution (oxalic acid:glycerin)?



What type of equipment do you use to mix the oxalic acid and glycerin solution?



What temperature do you heat the solution to?

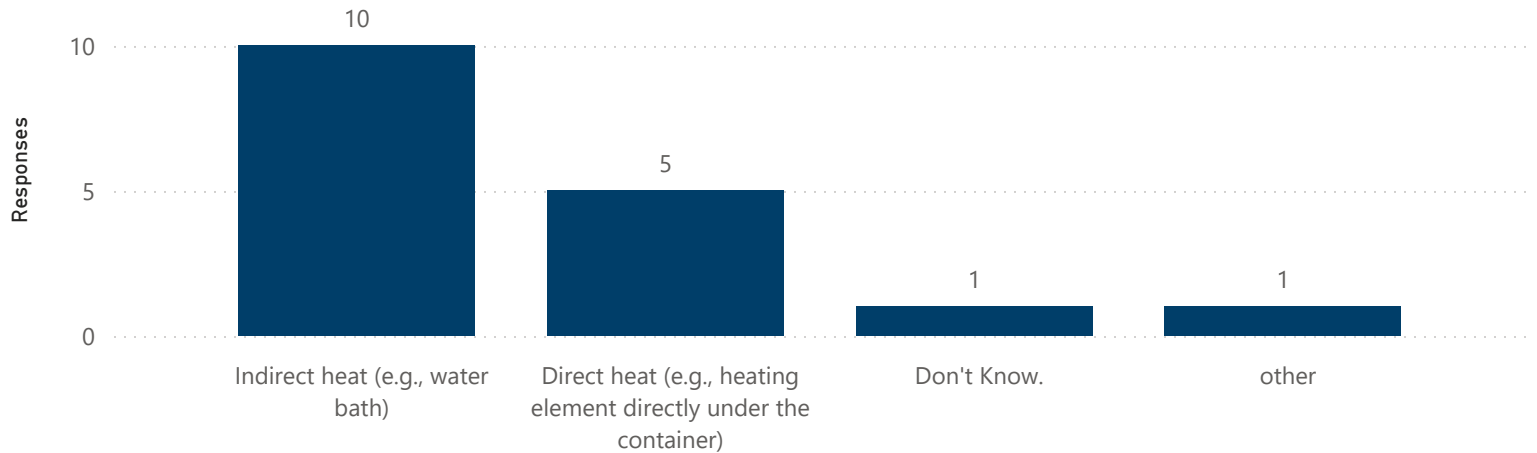




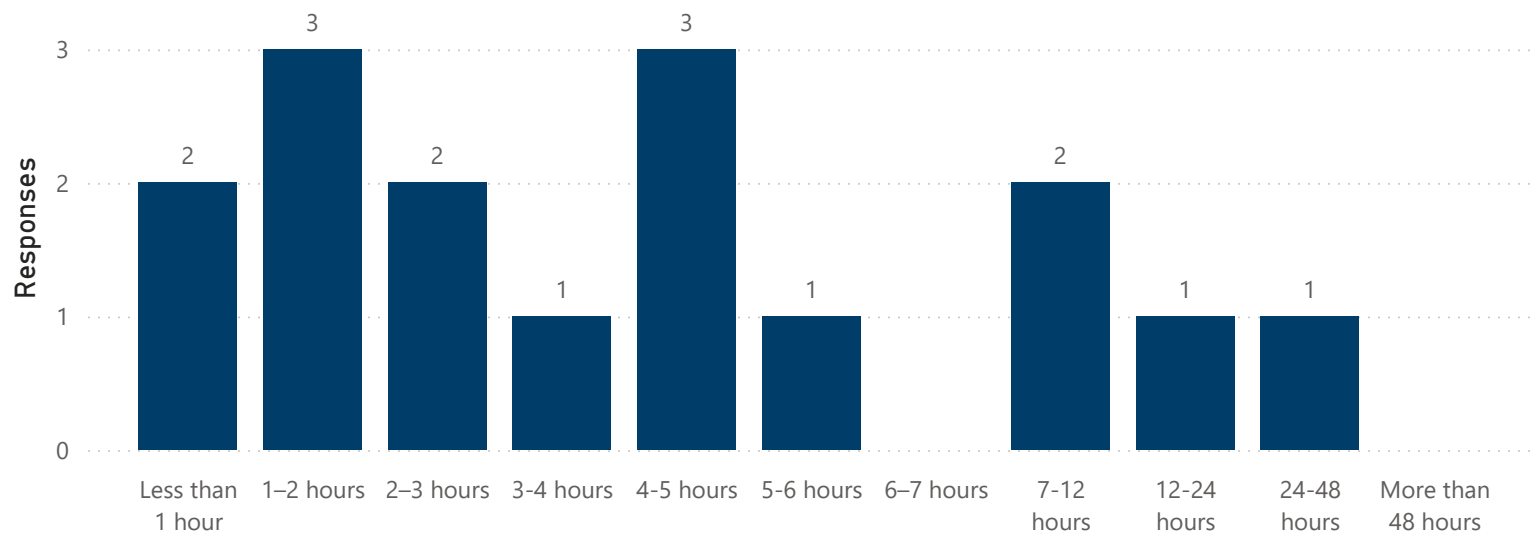
# OA & Glycerin Information

## Mixing Proportions and Methods

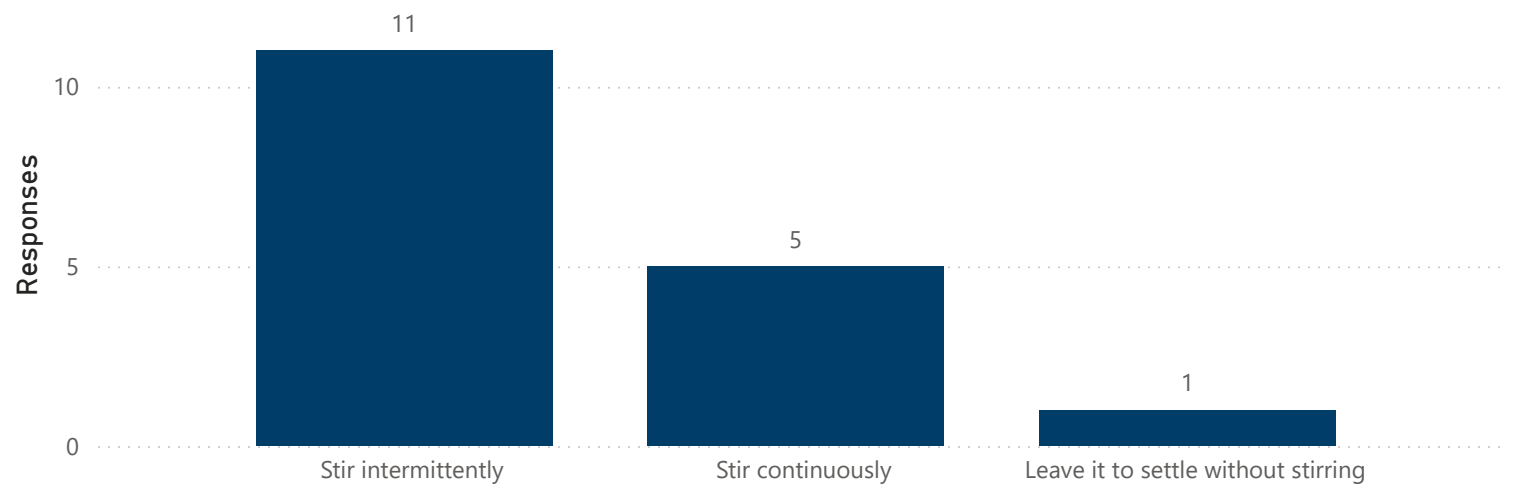
How is heat applied?



For how long do you heat the solution?



Do you continuously stir the solution while heating, or do you let it settle?

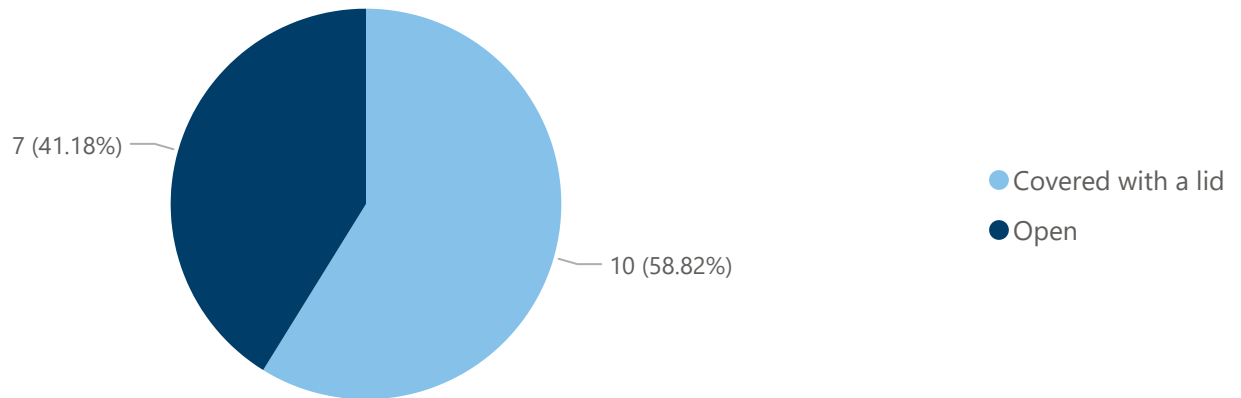




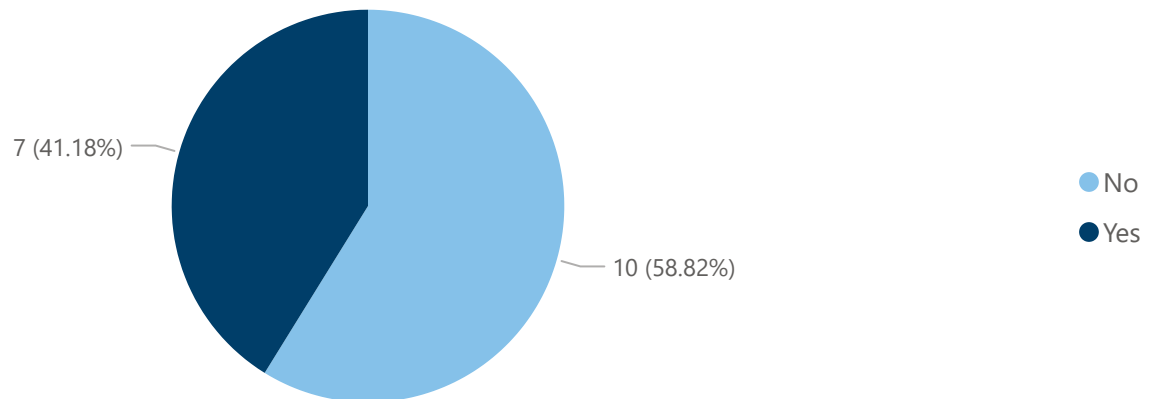
# OA & Glycerin Information

## Mixing Proportions and Methods

Is the mixing container open or covered during mixing/heating?

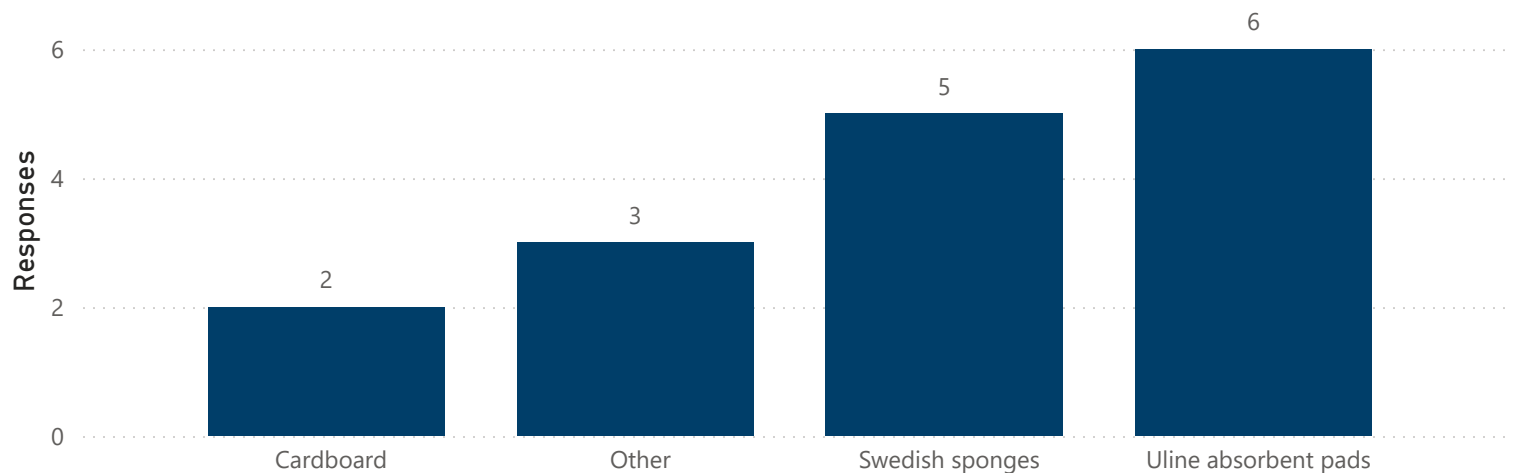


Do you observe any crystals in the solution after mixing is complete?



## Absorbent Material Preparation

What type of material do you use to absorb the oxalic acid and glycerin solution?

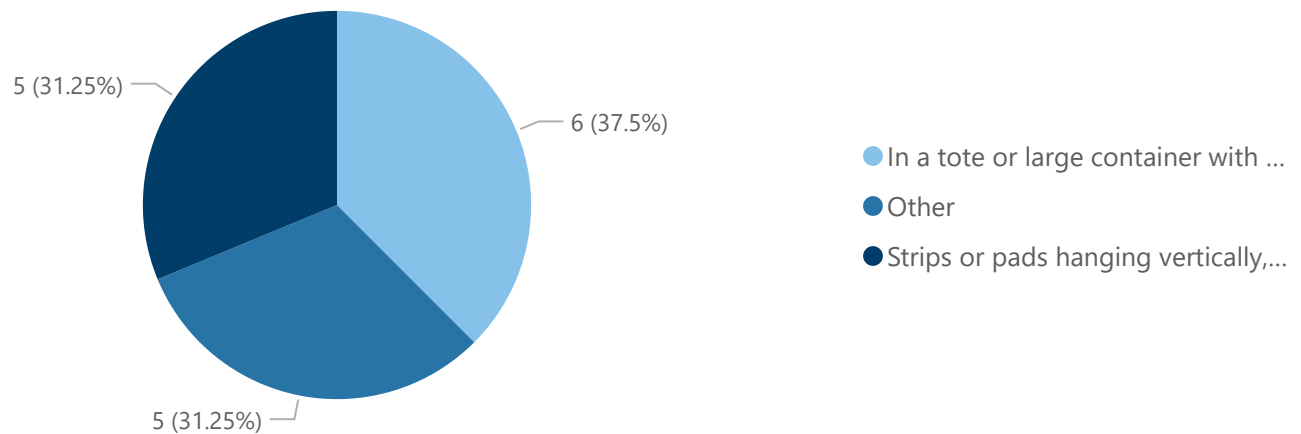




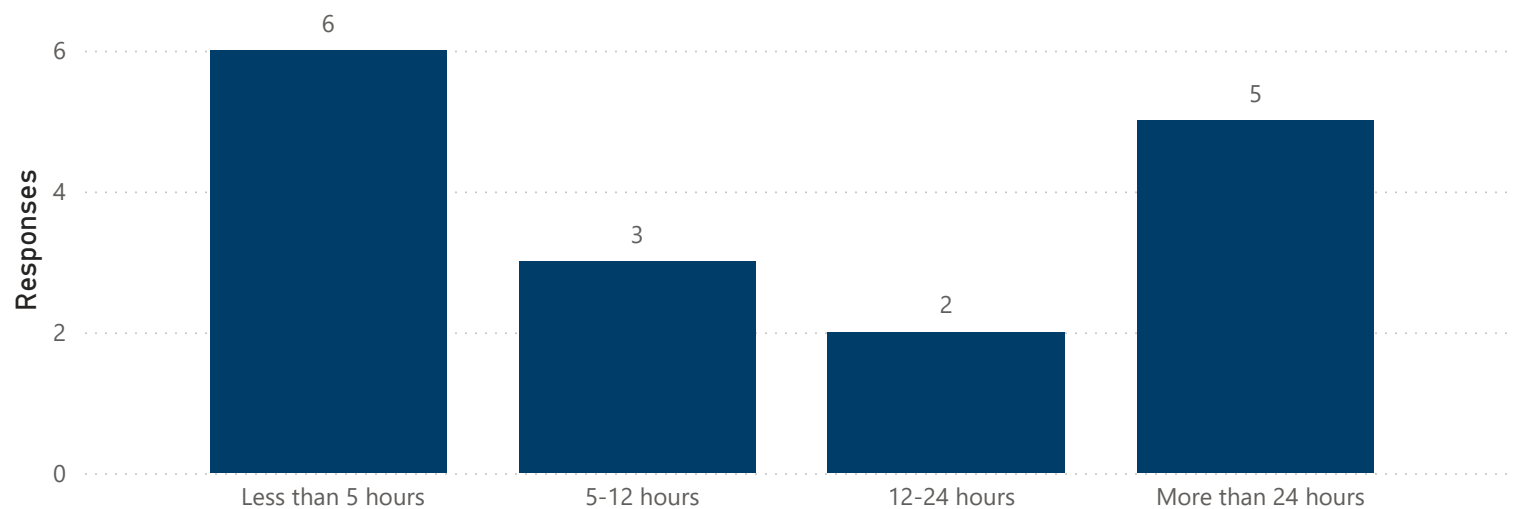
# OA & Glycerin Information

## Absorbent Material Preparation

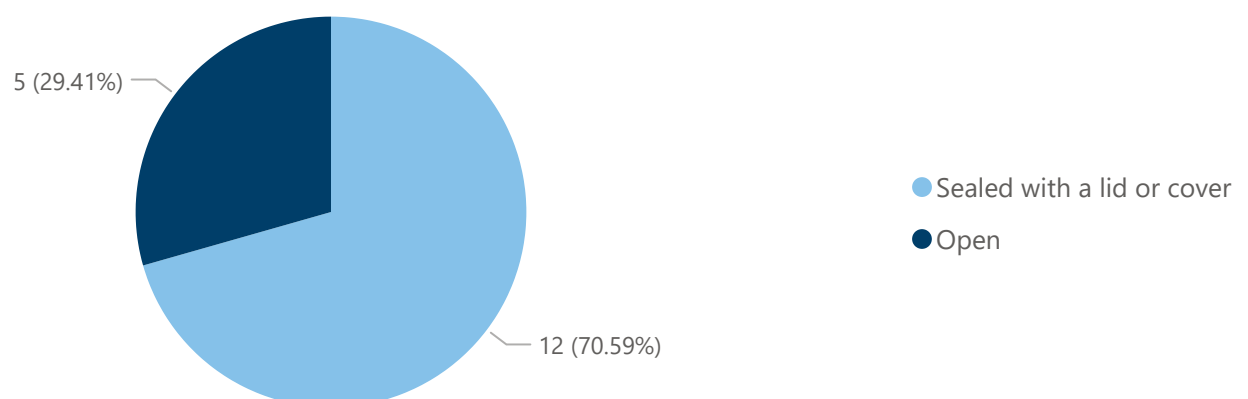
How do you pour the solution onto the absorbent material?



How long do the pads/strips stay in the solution to absorb it?



Is the container sealed or open while the pads/strips absorb the solution?



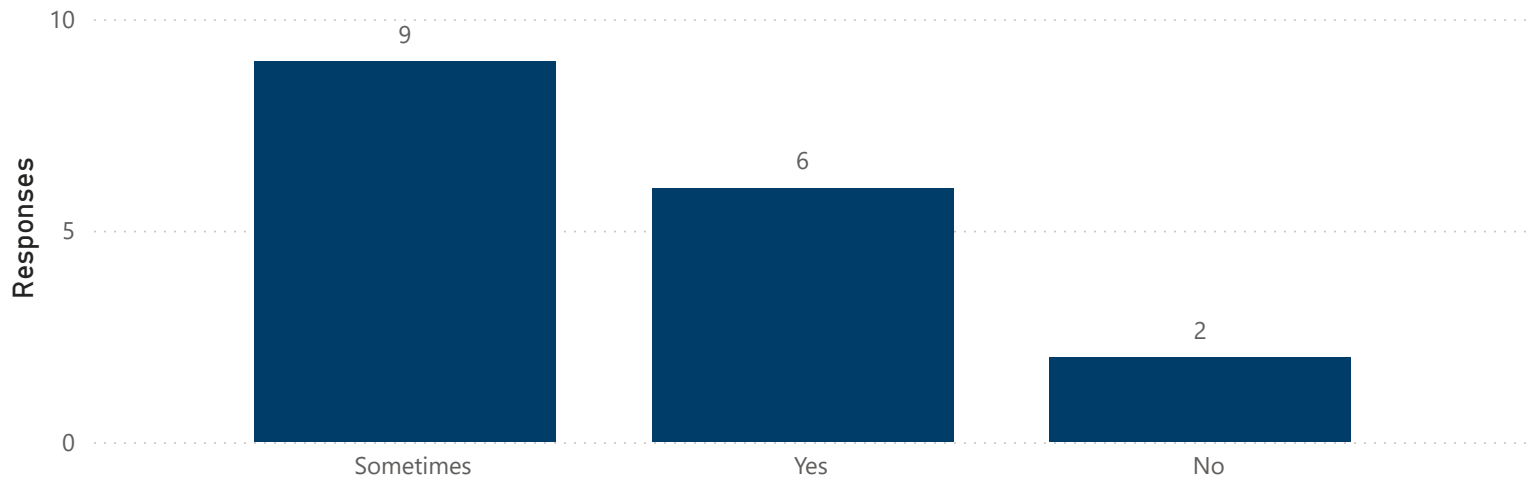




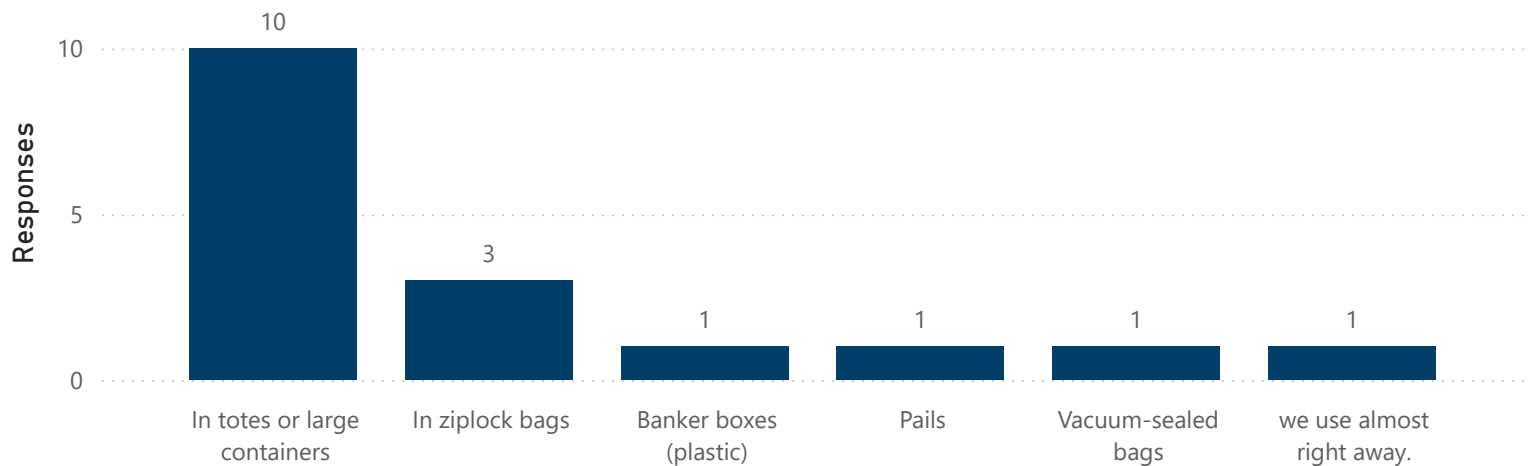
# OA & Glycerin Information

## Post-Preparation

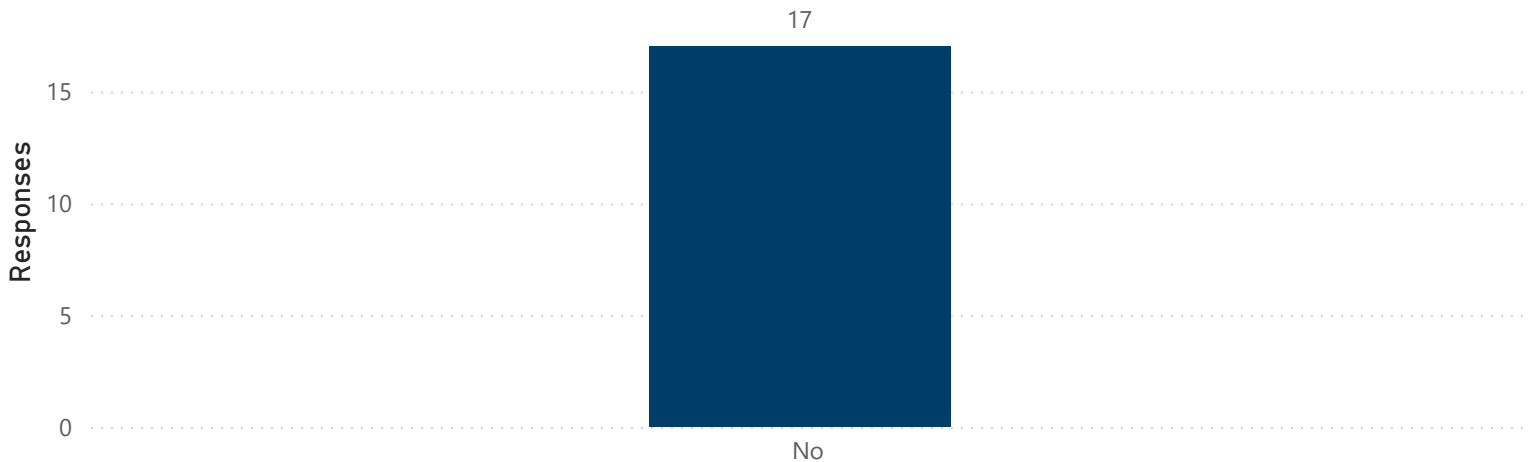
Do you observe any crystals on the pads/strips after the process?



How do you store the treated pads/strips?



Do you titrate the acidity of your prepared solution?



No responses for method of titration and frequency of acidity check