

# **THE GROWER STUDY II:**

## **Innovations, Viability, and the Future of the Massachusetts Cranberry Bogs**



### **Presented By:**

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Center for Marketing Research

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## Executive Summary

- Eighty-six percent of those interviewed are members of the Cape Cod Cranberry Growers' Association and 14% are non-members.
- Forty-two percent of growers own 1-9 acres of cranberry bogs, 20% own 10-19 acres, 10% own 20-29 acres, 11% own 30-49 acres, 6% own 50-74 acres, 4% own 75-99 acres, 4% own 100-249 acres, 3% own 250-499 acres and 2% own 500 or more acres of cranberry bogs.
- Thirty-two percent of the growers have an average yield of under 100 barrels per acre, 16% have an average yield of 101-125 barrels per acre, 20% have an average yield of 126-150 barrels per acre, 18% have an average yield of 151-200 barrels per acre, 4% have an average yield of above 200 barrels per acre, 9% did not know their average yield and 1% had no response.
- Fifty-six percent of the growers farm full time, 43% do not farm full time, and 1% had no response.
- Thirty-two percent of the growers are employed full time off the farm, 10% are employed part time off the farm, 57% are not employed off the farm, and 2% had no response.
- Eighty-five percent of the growers work on their farm, 52% have non-family members work on the farm, 44% have family members work on the farm, 28% have their spouse work on the farm, 21% have their children work on the farm, and none have someone other than those listed work on the farm.
- Fifteen percent have farmed for less than 10 years, 22% have farmed for 11-20 years, 32% have farmed for 21-31 years, 10% have farmed for 32-40 years, 13% have farmed for 41-50 years and 9% have farmed for 51 or more years.
- Two percent of growers are between the ages of 21-35 years old, 22% are between the ages of 36-49 years old, 49% are between the ages of 50-64 years old, 26% are 65 and over and 1% had no response.
- Eighteen percent of the growers consider cranberry growing a hobby, 55% consider cranberry growing a business profession, 24% consider cranberry growing a part-time business, 2% consider cranberry growing something other than those listed and 1% did not know what to consider cranberry growing.
- Twenty-one percent of the growers have plans to transfer or sell their farm in the next 5 years, 71% do not have plans to transfer or sell in the next 5 years and 8% do not know if they will transfer or sell in the next 5 years.

- Thirty-one percent of the growers will sell their farm for cranberry farming, 10% will sell for development, 20% will continue in family growing cranberries, 0% will continue in family not growing cranberries, 9% will do something other with their farm than those listed, 22% do not know what will happen to their farm and 9% had no response.
- Twenty-six percent of the growers will have their child/children take over the farm, 0% will have their spouse take over the farm, 14% will have someone other than those listed take over the farm, 46% do not know who will take over the farm and 14% had no response.
- Nineteen percent of the growers have a preference to sell to a younger farmer, 36% do not have a preference, 28% do not know whether or not they have a preference and 17% had no response.
- Thirteen percent of the growers are very likely to engage in lease to buy to help a younger farmer, 10% are somewhat likely, 0% are somewhat unlikely, 10% are very unlikely, 40% do not know and 27% had no response.
- None of the growers are very likely to engage in combining forces with land trusts to help a younger farmer, 3% are somewhat likely, 3% are somewhat unlikely, 13% are very unlikely, 50% do not know and 30% had no response.
- None of the growers are very likely to engage in combining forces with a nature conservancy to help a younger farmer, 7% are somewhat likely, 7% are somewhat unlikely, 17% are very unlikely, 40% do not know and 30% had no response.
- Fourteen percent of the growers have added more temporary employees in the last 5 years, 33% have added more technology, 18% have added more contracting, 21% have changed something other than those listed, 34% have made no changes and 2% had no response.
- Twenty-five percent of the growers are very likely to renovate their producing acres in the next 2 years, 11% are somewhat likely, 6% are somewhat unlikely, 54% are very unlikely, 2% do not know and 1% had no response.
- Twenty-seven percent of the growers are very likely to renovate their producing acres in the next 5 years, 11% are somewhat likely, 9% are somewhat unlikely, 46% are very unlikely, 6% do not know and 1% had no response.
- Twenty-six percent of the respondents would consider renovating less than 3 acres, 27% would consider renovating 3-5.99 acres, 15% would consider renovating 12 or more acres, 13% would consider renovating 9-11.99 acres, 10% would consider renovating 6-8.99 acres and 10% would consider renovating all of their acres.

- Forty-eight percent of the growers are very likely to use low or no interest loan programs, 7% are somewhat likely, 9% are somewhat unlikely, 25% are very unlikely, 6% do not know and 6% had no response.
- Forty-nine percent of the growers would be influenced to consider renovating their bogs due to poor yield, 40% would consider renovating due to an increase in price per barrel, 12% would consider renovating due to water conservation, 10% would not consider renovating their bog for any reason, 10% would consider renovating due to something other than those listed, 8% would consider renovating due to access to labor and equipment, 5% do not know what would influence them to consider renovating, 4% would consider renovating due to a decrease in price per barrel and 2% had no response.
- Twenty-six percent of the growers estimate the average cost per acre to renovate bogs on their farm to be under \$10,000/acre, 22% estimate between \$10,000-\$15,000/acre, 29% estimate over \$15,000/acre, 22% do not know the average cost per acre to renovate and 2% had no response.
- Five percent of the growers are planning to abandon cranberry acres in the next 2 years, 93% are not planning to abandon cranberry acres, 2% do not know if they will abandon any cranberry acres and 1% had no response.
- Twenty-three percent of the growers are very interested in diversifying into value added products, 25% are somewhat interested, 10% are somewhat uninterested, 36% are very uninterested, 3% do not know and 2% had no response.
- Nine percent of the growers are very interested in diversifying into agro-tourism, 20% are somewhat interested, 12% are somewhat uninterested, 57% are very uninterested, 1% do not know and 2% had no response.
- Eleven percent of the growers are very interested in diversifying into other crops, 21% are somewhat interested, 10% are somewhat uninterested, 55% are very uninterested, 2% do not know and 1% had no response.
- Five percent of the growers are very interested in diversifying into organic, 15% are somewhat interested, 10% are somewhat uninterested, 68% are very uninterested, 1% do not know and 1% had no response.
- Five percent of the growers are very interested in diversifying into pick your own, 5% are somewhat interested, 6% are somewhat uninterested, 82% are very uninterested, 1% do not know and 1% had no response.
- Twenty-four percent of the growers would definitely support a mandatory “check off”, 26% would probably support it, 18% would probably not support it, 22% would definitely not support it, 6% do know if they would support it and 3% had no response.

- Forty-seven percent of the growers who would support a “check off” feel horticultural/environmental research is very important to support from such a fund, 34% feel it is somewhat important, 3% feel it is somewhat unimportant, 2% feel it is very unimportant, 2% do not know and 14% had no response.
- Fifty-nine percent of the growers who would support a “check off” feel market research and development is very important to support from such a fund, 20% feel it is somewhat important, 4% feel it is somewhat unimportant, 3% feel it is very unimportant and 14% had no response.
- Fifty-six percent of the growers who would support a mandatory “check off” feel promotion and advertising is very important to support from such a fund, 24% feel it is somewhat important, 4% feel it is somewhat unimportant, 3% feel it is very unimportant and 14% had no response.
- Sixty-three percent of the growers who would support a mandatory “check off” feel health benefit research is very important, 21% feel it is somewhat important, 1% feel it is somewhat unimportant, 2% feel it is very unimportant and 14% had no response.
- Sixty-three percent of the growers feel that government affairs at the local level is a very important activity for the CCCGA, 25% feel it is somewhat important, 5% feel it is somewhat unimportant, 3% feel it is very unimportant, 2% do not know and 1% had no response.
- Seventy-two percent of the growers feel that government affairs at the state level is a very important activity for the CCCGA, 20% feel it is somewhat important, 3% feel it is somewhat unimportant, 2% feel it is very unimportant, 3% do not know and 1% had no response.
- Sixty-four percent of the growers feel that government affairs at the federal level is a very important activity for the CCCGA, 23% feel it is somewhat important, 6% feel it is somewhat unimportant, 2% feel it is very unimportant, 3% do not know and 1% had no response.
- Seventy-six percent of the growers feel that frost warnings are a very important activity for the CCCGA, 19% feel they are somewhat important, 2% feel they are somewhat unimportant, 2% feel they are very unimportant, 2% do not know and 2% had no response.
- Fifty-nine percent of the growers feel that environmental activities are a very important activity for the CCCGA, 33% feel they are somewhat important, 3% feel they are somewhat unimportant, 1% feel they are very unimportant, 2% do not know and 2% had no response.

- Fifty percent of the growers feel that public relations is a very important activity for the CCCGA, 39% feel it is somewhat important, 5% feel it is somewhat unimportant, 3% feel it is very unimportant, 2% do not know and 1% had no response.
- Forty-nine percent of the growers feel that general promotion is a very important activity for the CCCGA, 37% feel it is somewhat important, 8% feel it is somewhat unimportant, 2% feel it is very unimportant, 2% do not know and 2% had no response.
- Sixty percent of the growers feel that research is a very important activity for the CCCGA, 31% feel it is somewhat important, 3% feel it is somewhat unimportant, 3% feel it is very unimportant, 2% do not know and 1% had no response.
- Thirty-five percent of the growers feel that business/economics is a very important activity for the CCCGA, 45% feel it is somewhat important, 11% feel it is somewhat unimportant, 5% feel it is very unimportant, 3% do not know and 1% had no response.
- Seventy-two percent of the growers think the CCCGA should diversify its operating income in order to maintain its services without increasing dues through seeking grants, 39% think they should diversify income through creating an agro tourism branch, 28% think they should diversify income through representing other agricultural commodities, 13% do not know, 8% think something other than those listed and 4% had no response.
- Thirteen percent of the growers feel business/economic assistance is very important to them, 46% feel it is somewhat important, 18% feel it somewhat unimportant, 20% feel it is very unimportant, 2% do not know and 2% had no response.
- Forty-one percent of the growers feel horticultural research is very important to them, 44% feel it is somewhat important, 8% feel it is somewhat unimportant, 4% feel it is very unimportant, 1% do not know and 2% had no response.
- Eighty-one percent of the growers feel that pesticide development is very important to them, 15% feel it is somewhat important, 2% feel it is somewhat unimportant, 1% feel it is very unimportant, 1% do not know and 2% had no response.
- Forty-eight percent of the growers feel that environmental research is very important to them, 39% feel it is somewhat important, 6% feel it is somewhat unimportant, 3% feel it is very unimportant, 2% do not know and 2% had no response.

- Twenty-five percent of the growers feel that equipment development is very important to them, 48% feel it is somewhat important, 17% feel it is somewhat unimportant, 6% feel it is very unimportant, 1% do not know and 2% had no response.
- Thirteen percent of the growers feel that organic production is very important to them, 29% feel it is somewhat important, 19% feel it is somewhat unimportant, 36% feel it is very unimportant, 2% do not know and 2% had no response.
- Twenty percent of the growers feel that alternative crop/land use is very important to them, 35% feel it is somewhat important, 20% feel it is somewhat unimportant, 23% feel it is very unimportant, 1% do not know and 2% had no response.

## Introduction

The Cape Cod Cranberry Growers' Association (CCCGA) is one of the oldest farmers organizations in the country. Established in 1888 to standardize the measure with which cranberries are sold (the 100 lb. barrel), it has become one of the leading agricultural organizations in the state. In 1888 the Association's mission was "to promote the interest of its members in whatever pertains to the growth, cultivation and sale of cranberries."

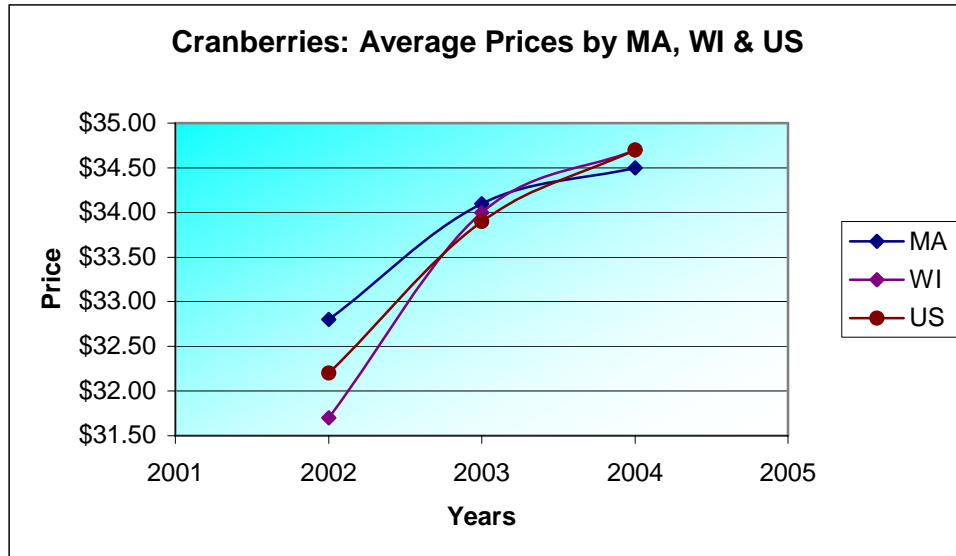
Although a great deal has changed in cranberry farming since the Association began, today's cranberry growers still face many challenges. With a unified voice, the CCCGA works to promote the cranberry industry through active grower volunteer committees in Public Relations and Promotions, Government Affairs, Research and Environmental Affairs.

The CCCGA has a professional staff that assists growers in solving everyday problems, regulatory compliance, sponsoring professional development seminars and organizing association activities such as the Massachusetts Cranberry Harvest Festival every Columbus Day weekend.

Massachusetts is one of the leading producers of cranberries, with a crop of approximately 1.8 million barrels in 2004; this represents almost 30% of the nation's production. Of the approximately 1,000 cranberry growers in North America, almost half are in Massachusetts. Approximately 70 percent of these growers are small family farms with less than 20 acres of bog. The cranberry crop contributes more than \$200 million in payroll to Massachusetts's workers and employs about 5,500 people\*.

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\* US Department of Agriculture, NASS, August 16, 2005



Although US selling prices per 100 pounds barrel have gone up in the past three years (from 2002-2004 prices increased from \$32.20 to \$34.70\*), production costs have also substantially increased. Labor costs, land values and regulatory restrictions all make Massachusetts an expensive place to grow cranberries.

Recent research is showing that cranberry exports are growing at record rates. The growth of foreign markets in recent years is attributed to awareness of cranberry health benefits, and the logistics to provide cranberry products that foreign consumers demand. Massachusetts' fresh cranberries are of particular interest in foreign markets. Foreign consumers demand Massachusetts' cranberries because of their superior color and quality.

This survey assesses Massachusetts' growers needs for renovating, willingness to adopt new technologies, and to gather information on how they feel the CCCGA should evolve. This information will assist the CCCGA in a number of operational/financial situations now and in the future.

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\* US Department of Agriculture, NASS, August 16, 2005

## Methodology

In the summer of 2005, Dr. Nora Ganim Barnes (Director, UMD Center for Marketing Research) spoke with representatives of the CCCGA to determine the focus for a new industry study. It was decided that the second Grower's Study would look at the future of the Massachusetts cranberry bogs. While the first study (2002) detailed grower attitudes and opinions about farming, the second study will focus on renovations, innovations and the future of the growers' bogs.

A list of 313 CCCGA members and 118 non-members was provided by the CCCGA. Two hundred and five Massachusetts cranberry growers were randomly selected and interviewed by telephone in November 2005. All contacts were made through telephone interviews that were conducted at the Center for Marketing Research at UMass Dartmouth. Calls were made at various times throughout the survey weeks as well as during evening hours. Both lists were completely exhausted and at least five callbacks were made to any contact not available.

All respondents were asked demographic questions as well as specific questions regarding the future of their bogs. Some questions were repeated from the first study, however additional questions were asked pertaining to plans to transfer or sell farms within the next five years. Other questions included who specifically will take over farms and the likelihood of renovating bogs.

The response rate for this study was approximately 50%. The high response rate and statistically valid sample size make the findings of this study generalizable. The final sample of 205 respondents is statistically valid. All findings presented in the report are valid within a range of  $\pm 2.5$ .

A Chi-square test was run on the data. A Chi-square ( $X^2$ ) significance test is a statistical test that yields a significance level for the survey data. A significance level equal to or less than .10 is generally accepted to mean the data is valid and reliable. A value greater than .10 indicates that the findings cannot be relied on. The significance level for this study was equivalent to .000, which indicates that the data is reflective of the total population it was taken from and it is valid at the highest level.

**Test Statistics**

	What is your total acreage of cranberry bogs?	Would you support a mandatory "check-off" in which an assessment of every barrel from all growers was used to create a fund with the purpose of conducting research and development in the cranberry industry?
Chi-Square <sup>a,b</sup>	235.473	58.620
df	8	5
Asymp. Sig.	.000	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.8.

b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 34.2.

A Chi-Square test was performed on this data. The data in this study test significant at .000, which indicates the findings are statistically valid.

<b>Profile of Sample</b>
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	#	%	% (2002)
<b>MEMBER OF CCCGA:</b>			
Yes	(176)	85.9	72.8
No	(29)	14.1	27.2
<b>ACREAGE OF BOGS:</b>			
1-9	(85)	41.5	38.5
10-19	(40)	19.5	26.7
20-29	(20)	9.8	8.7
30-49	(22)	10.7	13.3
50-74	(12)	5.9	4.1
75-99	(8)	3.9	3.6
100-249	(8)	3.9	4.1
250-499	(6)	2.9	.5
500 or more	(4)	2.0	.5
<b>AGE:</b>			
21-35	(4)	2.0	2.1
36-49	(45)	22.0	22.8
50-64	(101)	49.3	48.7
65 and over	(54)	26.3	26.4
No response	(1)	.5	
<b>FULL TIME FARMER:</b>			
Yes	(115)	56.1	51.8
No	(89)	43.4	48.2
No response	(1)	.5	
<b>YEARS OF FARMING</b>			
<b>CRANBERRIES:</b>			
Less than 10	(30)	14.6	16.1
11-20	(45)	22.0	24.4
21-31	(65)	31.7	31.1
32-40	(20)	9.8	10.9
41-50	(27)	13.2	9.2
51 or more	(18)	8.8	8.3
<b>EMPLOYED OFF THE FARM:</b>			
Yes, full time	(65)	31.7	29.7
Yes, part time	(21)	10.2	14.4
No	(116)	56.6	55.9
No response	(3)	1.5	
<b>YIELD PER ACRE:</b>			
Under 100	(66)	32.2	
101-125	(33)	16.1	
126-150	(40)	19.5	
151-200	(36)	17.6	
Above 200	(9)	4.4	
Don't know	(19)	9.3	
No response	(2)	1.0	

**Cranberry Grower Study II: Innovation, Viability, and the Future of the  
Massachusetts Cranberry Bogs**

*A study conducted by the Center for Marketing Research at the University of  
Massachusetts Dartmouth*

Member list \_\_\_\_\_ Name and phone \_\_\_\_\_  
Non-Member list \_\_\_\_\_ Name and Phone \_\_\_\_\_  
Comments \_\_\_\_\_

Introduction: Hello, my name is \_\_\_\_\_. I am a student at UMass Dartmouth doing a study to help provide better services to farmers. You may have received a letter from CCCGA notifying you about our survey. Do you have a few minutes to answer some questions for me?

1. What is your total acreage of cranberry bogs?

1-9 \_\_\_\_\_ 75-99 \_\_\_\_\_  
10-19 \_\_\_\_\_ 100-249 \_\_\_\_\_  
20-29 \_\_\_\_\_ 250-499 \_\_\_\_\_  
30-49 \_\_\_\_\_ 500 or more \_\_\_\_\_  
50-74 \_\_\_\_\_ Don't know \_\_\_\_\_  
No response \_\_\_\_\_

2. What is the average yield per acre for your farm?

Under 100 barrels/acre \_\_\_\_\_ Above 200 \_\_\_\_\_  
101-125 \_\_\_\_\_ Don't know \_\_\_\_\_  
126-150 \_\_\_\_\_ No response \_\_\_\_\_  
151-200 \_\_\_\_\_

3. Do you farm full time? Yes \_\_\_\_\_ No \_\_\_\_\_ No response \_\_\_\_\_

4. Are you employed off the farm? Yes, full time \_\_\_\_\_ Yes, part time \_\_\_\_\_ No \_\_\_\_\_  
No response \_\_\_\_\_

5. Who works on your farm? (Check all that apply)

Yourself \_\_\_\_\_ Family members \_\_\_\_\_  
Spouse \_\_\_\_\_ Non-family members \_\_\_\_\_  
Children \_\_\_\_\_ Other (please specify) \_\_\_\_\_  
Don't know \_\_\_\_\_ No response \_\_\_\_\_

6. How many years have you farmed cranberries?

Less than 10 \_\_\_\_\_ 40-50 \_\_\_\_\_  
11-20 \_\_\_\_\_ 50 or more \_\_\_\_\_  
21-31 \_\_\_\_\_ Don't know \_\_\_\_\_  
32-40 \_\_\_\_\_ No response \_\_\_\_\_

7. What is your age?  
 21-35 \_\_\_\_\_ 50-64 \_\_\_\_\_ No response \_\_\_\_\_  
 36-49 \_\_\_\_\_ 65 and over \_\_\_\_\_

8. Do you consider cranberry growing a hobby or business profession?  
 Hobby \_\_\_\_\_ Business profession \_\_\_\_\_  
 Part-time business \_\_\_\_\_  
 Other (please specify) \_\_\_\_\_  
 Don't know \_\_\_\_\_ No response \_\_\_\_\_

9. Do you have plans to transfer or sell your farm in the next 5 years?  
 Yes \_\_\_\_\_ No \_\_\_\_\_ (**Skip to question 14**)  
 Don't know \_\_\_\_\_ No response \_\_\_\_\_

10. If yes, what will happen to your farm?  
 Sell for cranberry farming \_\_\_\_\_  
 Sell for development \_\_\_\_\_  
 (**If selling**, skip to 12)  
 Will continue in family growing cranberries \_\_\_\_\_  
 Will continue in family not growing cranberries \_\_\_\_\_  
 (**If continuing in family**, continue to 11)  
 Other (please specify) \_\_\_\_\_

11. Who specifically will take over the farm?  
 Child/Children \_\_\_\_\_ Don't know \_\_\_\_\_  
 Spouse \_\_\_\_\_ No response \_\_\_\_\_  
 Other (Please specify) \_\_\_\_\_  
 (**Skip to question 14**)

12. Do you have a preference to sell to a younger farmer?  
 Yes \_\_\_\_\_ No \_\_\_\_\_ Don't know \_\_\_\_\_ No response \_\_\_\_\_  
 (**If yes, continue to question 13**) (**If no, skip to question 14**)

13. How likely would you be to engage in the following transactions to help a younger farmer?

	Very likely	Somewhat likely	Somewhat unlikely	Very unlikely	Don't know	No response
Lease to buy						
Combining forces with land trusts						
Combining forces with nature conservancy						

14. What changes have been made in how the farm work is accomplished on your bog in the last 5 years? (Check all that apply)

More temporary employees \_\_\_\_\_ Other (please specify) \_\_\_\_\_  
 More technology \_\_\_\_\_ No response \_\_\_\_\_  
 More contracting \_\_\_\_\_

15. What is the likelihood that you will renovate your producing acres in the next:

	Very Likely	Somewhat Likely	Somewhat Unlikely	Very Unlikely	Don't know	No response
2 years						
5 years						

**(If somewhat unlikely or very unlikely skip to question 18)**

16. How many acres would you consider renovating? \_\_\_\_\_

17. How likely would you be to use low or no interest loan programs?

Very likely \_\_\_\_\_ Somewhat likely \_\_\_\_\_ Somewhat unlikely \_\_\_\_\_ Very unlikely \_\_\_\_\_  
 Don't know \_\_\_\_\_ No response \_\_\_\_\_

18. What would influence you to consider renovating your bogs: (Check all that apply)

Increase in price per barrel \_\_\_\_\_  
 Decrease in price per barrel \_\_\_\_\_  
 Access to labor and equipment \_\_\_\_\_  
 Poor yield due to weeds, varieties, and pest damage \_\_\_\_\_  
 Water conservation \_\_\_\_\_  
 Other (please specify) \_\_\_\_\_  
 Don't know \_\_\_\_\_ No response \_\_\_\_\_

19. What would you estimate the average cost per acre to renovate bogs on your farm?

Under \$10,000/acre \_\_\_\_\_ Don't know \_\_\_\_\_  
 \$10,000-\$15,000/acre \_\_\_\_\_ No response \_\_\_\_\_  
 Over \$15,000/acre \_\_\_\_\_

20. Are you planning to abandon any cranberry acres in the next 2 years?

Yes \_\_\_\_\_ (**Continue to question 21**) No \_\_\_\_\_ (**Skip to question 22**)  
 Don't know \_\_\_\_\_ No response \_\_\_\_\_

21. If Yes, how many? \_\_\_\_\_

22. How interested are you in diversifying into:

	Very Interested	Somewhat Interested	Somewhat Uninterested	Very Uninterested	Don't know	No response
Value added products						
Agro-tourism						
Other crops; i.e. aquaculture, horticultural crops, other small fruits						

	Very Interested	Somewhat Interested	Somewhat Uninterested	Very Uninterested	Don't know	No response
Organic						
Pick your own						
Other _____						

23. Would you support a mandatory “check-off” in which an assessment of every barrel from all growers was used to create a fund with the purpose of conducting research and development in the cranberry industry?

Definitely \_\_\_\_ Probably \_\_\_\_ Probably not \_\_\_\_ Definitely not \_\_\_\_  
 (if def. or prob., go to #25) (if prob.not or def.not, go to #24)  
 Don't know \_\_\_\_\_ No response \_\_\_\_\_

24. If not, why? \_\_\_\_\_  
 (Please skip to question 26)

25. How important do you think the following activities are to support from such a fund?

	Very Important	Somewhat Important	Somewhat Unimportant	Very Unimportant	Don't know	No response
Horticultural/environmental research						
Market research and development						
Promotion and advertising						
Health benefit research						
Other						

26. How important do you think the following activities are for the CCCGA?

	Very Important	Somewhat Important	Somewhat Unimportant	Very Unimportant	Don't know	No response
Government affairs at the local level						
Government affairs at the state level						
Government affairs at the federal level						
Frost warnings						
Environmental activities						
Public relations						
General Promotion						
Research						
Business/economics						

27. How do you think CCCGA should diversify its operating income in order to maintain its services without increasing dues?

Seek grants \_\_\_\_\_

Create an agro tourism branch \_\_\_\_\_

Represent other agricultural commodities (i.e. blueberry growers, aquaculture producers, other small fruit producers) \_\_\_\_\_

Other (please specify) \_\_\_\_\_

Don't know \_\_\_\_\_

No response \_\_\_\_\_

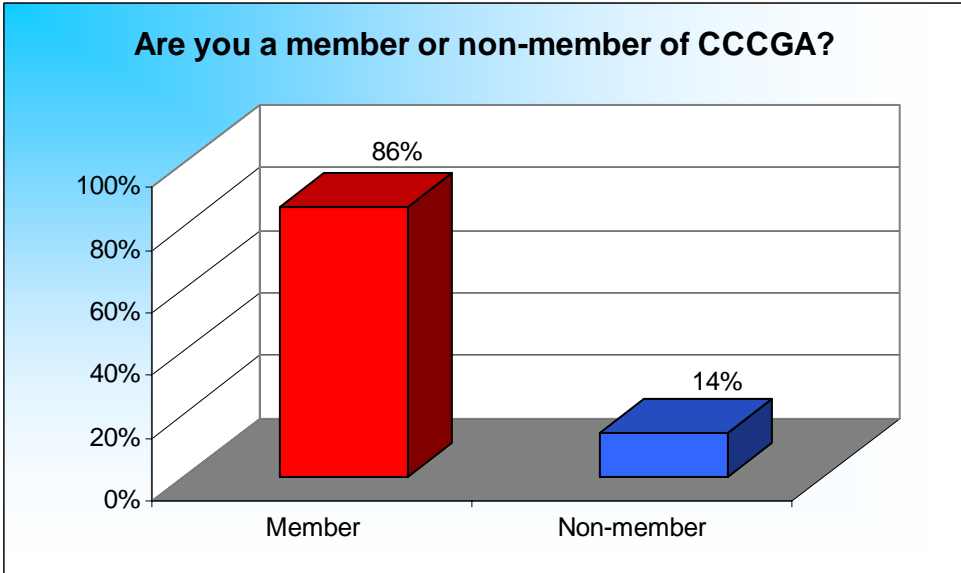
28. How important are the following types of technical assistance and research support to you:

	Very Important	Somewhat Important	Somewhat Unimportant	Very Unimportant	Don't know	No response
Business/Economic Assistance						
Horticultural Research						
Pesticide Development						
Environmental Research						
Equipment Development						
Organic Production						
Alternative Crops /Land Use						
Other						

**Are you a member or non-member of CCCGA?**

**Are you a member or non-member of CCCGA?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Member	176	85.9	85.9	85.9
	Non-member	29	14.1	14.1	100.0
Total		205	100.0	100.0	

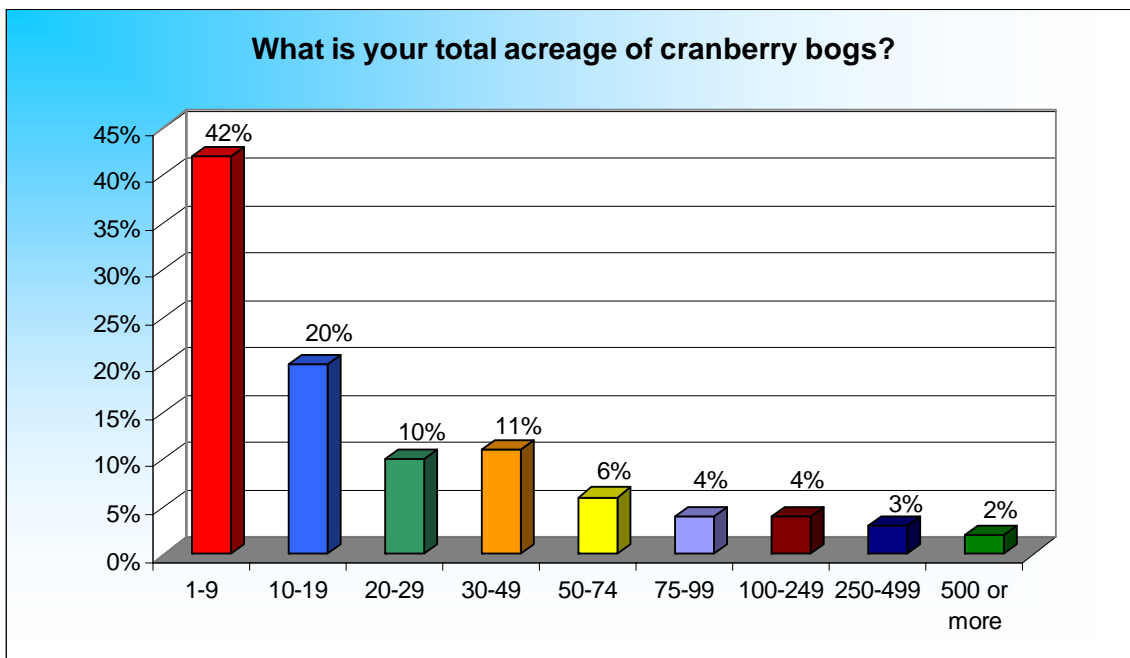


Eighty-six percent of those interviewed are members of the Cape Cod Cranberry Growers' Association and 14% are non-members.

**Question 1: What is your total acreage of cranberry bogs?**

**What is your total acreage of cranberry bogs?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-9	85	41.5	41.5	41.5
	10-19	40	19.5	19.5	61.0
	20-29	20	9.8	9.8	70.7
	30-49	22	10.7	10.7	81.5
	50-74	12	5.9	5.9	87.3
	75-99	8	3.9	3.9	91.2
	100-249	8	3.9	3.9	95.1
	250-499	6	2.9	2.9	98.0
	500 or more	4	2.0	2.0	100.0
	Total	205	100.0	100.0	

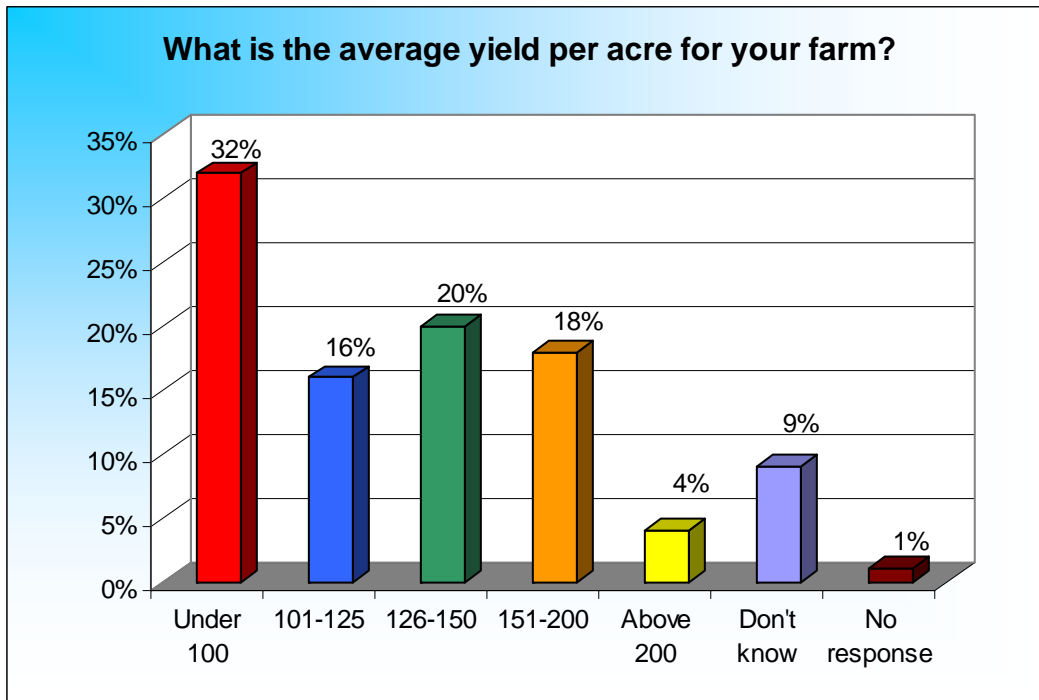


Forty-two percent of growers own 1-9 acres of cranberry bogs, 20% own 10-19 acres, 10% own 20-29 acres, 11% own 30-49 acres, 6% own 50-74 acres, 4% own 75-99 acres, 4% own 100-249 acres, 3% own 250-499 acres and 2% own 500 or more acres of cranberry bogs.

**Question 2: What is the average yield per acre for your farm?**

**What is the average yield per acre for your farm?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 100 barrels/acre	66	32.2	32.2	32.2
	101-125	33	16.1	16.1	48.3
	126-150	40	19.5	19.5	67.8
	151-200	36	17.6	17.6	85.4
	Above 200	9	4.4	4.4	89.8
	Don't know	19	9.3	9.3	99.0
	No response	2	1.0	1.0	100.0
	Total	205	100.0	100.0	

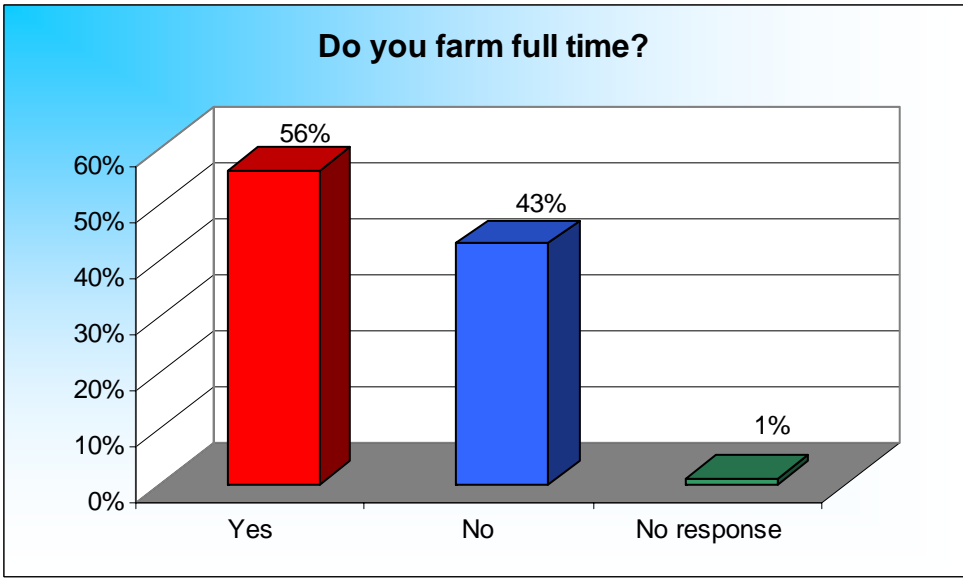


Thirty-two percent of the growers have an average yield of under 100 barrels per acre, 16% have an average yield of 101-125 barrels per acre, 20% have an average yield of 126-150 barrels per acre, 18% have an average yield of 151-200 barrels per acre, 4% have an average yield of above 200 barrels per acre, 9% did not know their average yield and 1% had no response.

**Question 3: Do you farm full time?**

**Do you farm full time?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	115	56.1	56.1	56.1
	No	89	43.4	43.4	99.5
	No response	1	.5	.5	100.0
Total		205	100.0	100.0	

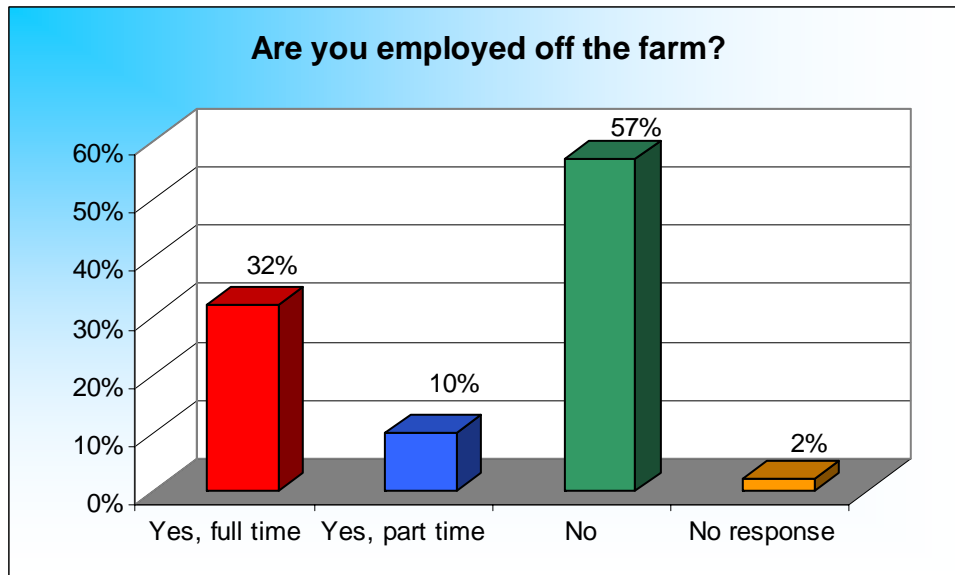


Fifty-six percent of the growers farm full time, 43% do not farm full time, and 1% had no response.

**Question 4: Are you employed off the farm?**

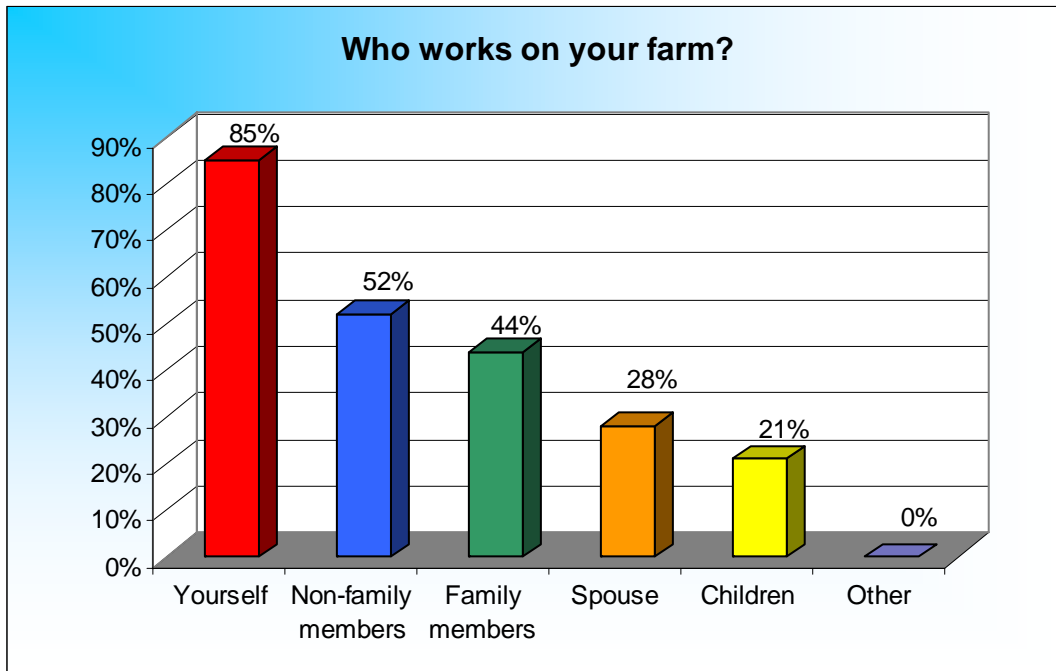
**Are you employed off the farm?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, full time	65	31.7	31.7	31.7
	Yes, part time	21	10.2	10.2	42.0
	No	116	56.6	56.6	98.5
	No response	3	1.5	1.5	100.0
Total		205	100.0	100.0	



Thirty-two percent of the growers are employed full time off the farm, 10% are employed part time off the farm, 57% are not employed off the farm, and 2% had no response.

**Question 5: Who works on your farm? (Check all that apply)**

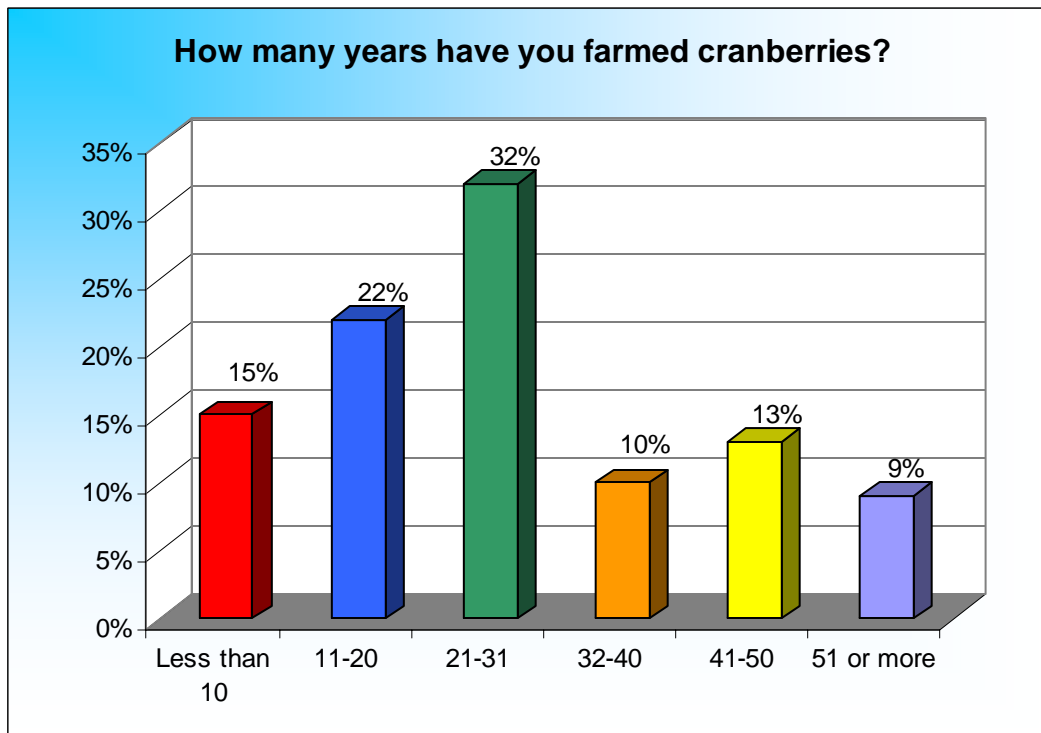


Eighty-five percent of the growers work on their farm, 52% have non-family members work on the farm, 44% have family members work on the farm, 28% have their spouse work on the farm, 21% have their children work on the farm, and none have someone other than those listed work on the farm.

**Question 6: How many years have you farmed cranberries?**

**How many years have you farmed cranberries?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 10	30	14.6	14.6	14.6
	11-20	45	22.0	22.0	36.6
	21-31	65	31.7	31.7	68.3
	32-40	20	9.8	9.8	78.0
	41-50	27	13.2	13.2	91.2
	51 or more	18	8.8	8.8	100.0
	Total	205	100.0	100.0	

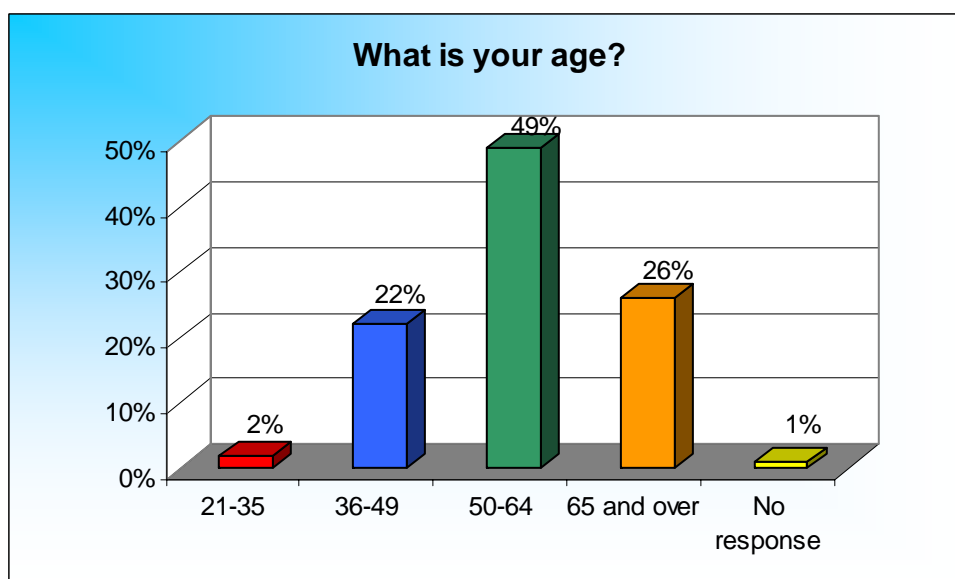


Fifteen percent have farmed for less than 10 years, 22% have farmed for 11-20 years, 32% have farmed for 21-31 years, 10% have farmed for 32-40 years, 13% have farmed for 41-50 years and 9% have farmed for 51 or more years.

**Question 7: What is your age?**

**What is your age?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-35	4	2.0	2.0	2.0
	36-49	45	22.0	22.0	23.9
	50-64	101	49.3	49.3	73.2
	65 and over	54	26.3	26.3	99.5
	No response	1	.5	.5	100.0
	Total	205	100.0	100.0	

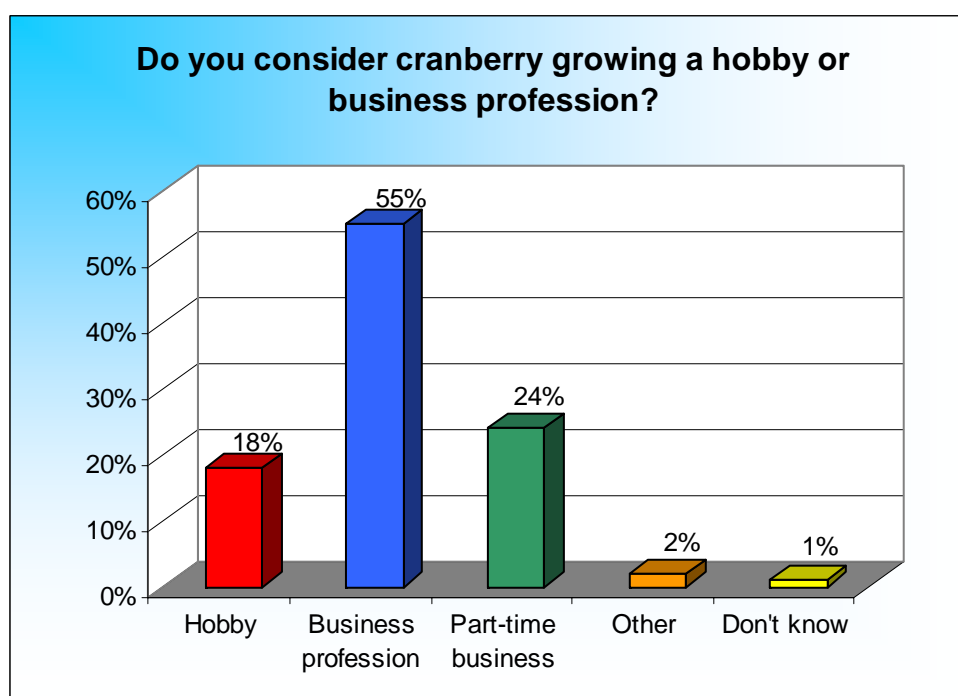


Two percent of growers are between the ages of 21-35 years old, 22% are between the ages of 36-49 years old, 49% are between the ages of 50-64 years old, 26% are 65 and over and 1% had no response.

**Question 8: Do you consider cranberry growing a hobby or business profession?**

**Do you consider cranberry growing a hobby or business profession?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hobby	37	18.0	18.0	18.0
	Business profession	112	54.6	54.6	72.7
	Part-time business	50	24.4	24.4	97.1
	Other	4	2.0	2.0	99.0
	Don't know	2	1.0	1.0	100.0
	Total	205	100.0	100.0	



Eighteen percent of the growers consider cranberry growing a hobby, 55% consider cranberry growing a business profession, 24% consider cranberry growing a part-time business, 2% consider cranberry growing something other than those listed and 1% did not know what to consider cranberry growing.

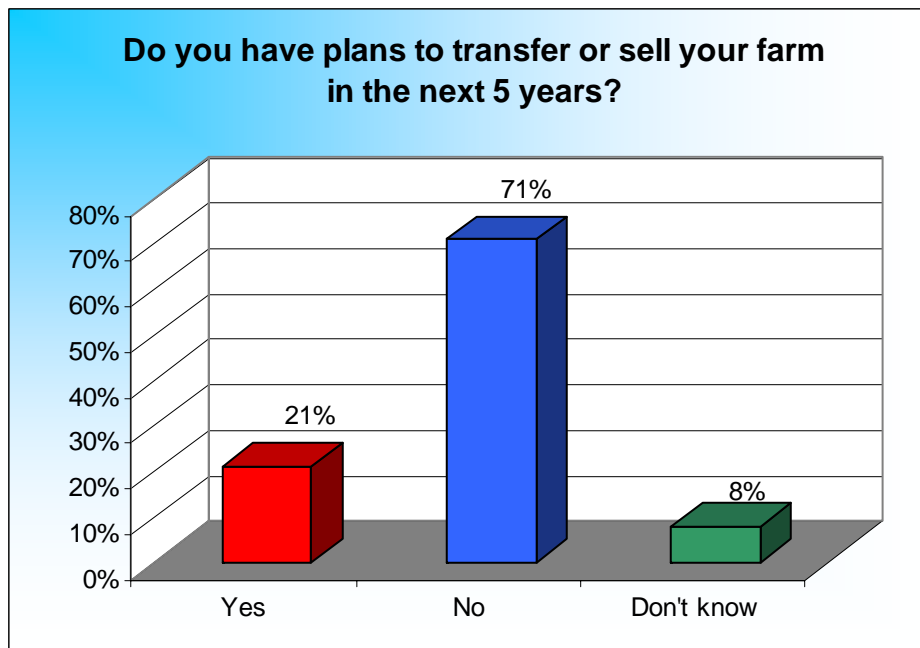
**Other Responses**

	<b>Frequency of Responses</b>
Hobby, business, and part-time business	2
Half hobby, half business	1
Business, but can't afford it to be full time	1
<b>Total Responses</b>	<b>4</b>

**Question 9: Do you have plans to transfer or sell your farm in the next 5 years?**

**Do you have plans to transfer or sell your farm in the next 5 years?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	42	20.5	20.5	20.5
	No	146	71.2	71.2	91.7
	Don't know	17	8.3	8.3	100.0
Total		205	100.0	100.0	



Twenty-one percent of the growers have plans to transfer or sell their farm in the next 5 years\*, 71% do not have plans to transfer or sell in the next 5 years\*\* and 8% do not know if they will transfer or sell in the next 5 years.

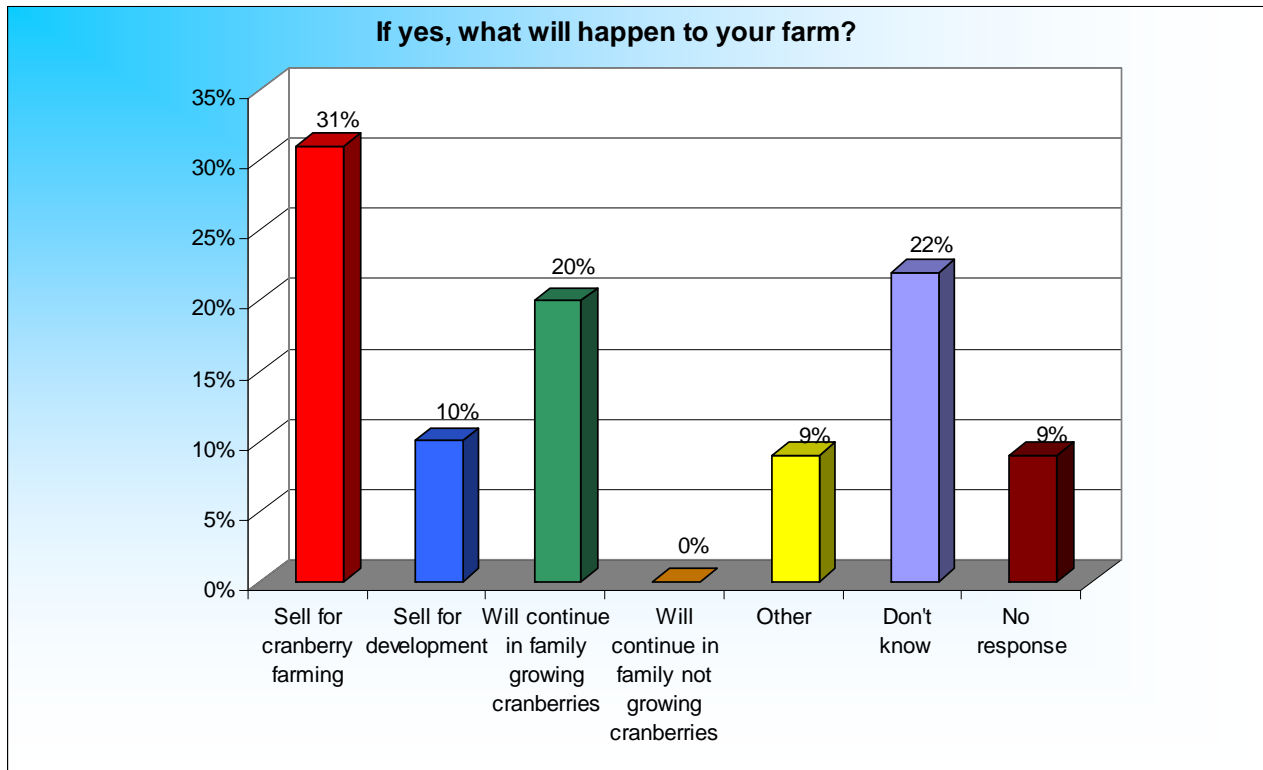
\* Of those who responded yes, 26% report yields of <100 barrels per acre, 21% 100-125 barrels per acre, 7% 126-150 barrels per acre, and 29% report yields of 151-200 barrels per acre.

\*\* Respondents who answered 'no' then proceeded to question 14 of the survey.

**Question 10: If yes, what will happen to your farm?**

**If yes, what will happen to your farm?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sell for cranberry farming	18	8.8	30.5	30.5
	Sell for development	6	2.9	10.2	40.7
	Will continue in family growing cranberries	12	5.9	20.3	61.0
	Other	5	2.4	8.5	69.5
	Don't know	13	6.3	22.0	91.5
	No response	5	2.4	8.5	100.0
	Total	59	28.8	100.0	
Not	Applicable	146	71.2		
Total		205	100.0		



Thirty-one percent of the growers will sell their farm for cranberry farming, 10% will sell for development\*, 20% will continue in family growing cranberries, 0% will continue in family not growing cranberries, 9% will do something other\*\* with their farm than those listed, 22% do not know what will happen to their farm and 9% had no response.

\* Respondents who answered 'sell for cranberry farming' or 'sell for development' then proceeded to question 12 of the survey.

\*\* Please refer to the next page for a list of other responses.

<b>Question 10: If yes, what will happen to your farm? (Other)</b>
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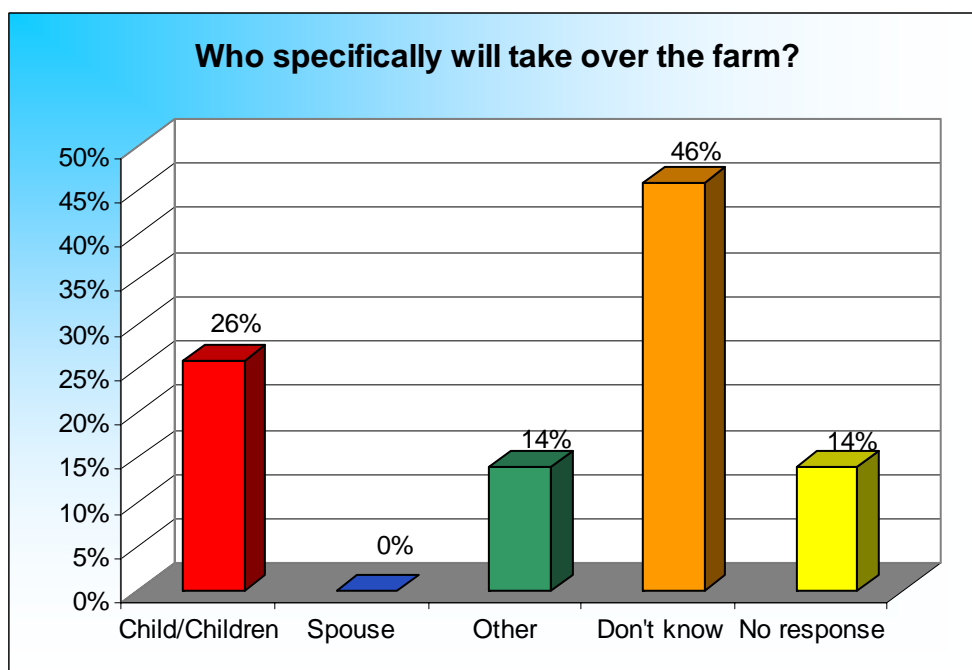
**Frequency of Responses**

Conservation	2
Part development/Part conservation	1
Part development/Part farming	1
Whichever produces the most money	1
<b>Total Responses</b>	<hr/> <b>5</b>

**Question 11: Who specifically will take over the farm?**

**Who specifically will take over the farm?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Child/Children	9	4.4	25.7	25.7
	Other	5	2.4	14.3	40.0
	Don't know	16	7.8	45.7	85.7
	No response	5	2.4	14.3	100.0
	Total	35	17.1	100.0	
Not	Applicable	170	82.9		
Total		205	100.0		



Twenty-six percent of the growers will have their child/children take over the farm, 0% will have their spouse take over the farm, 14% will have someone other than those listed take over the farm, 46% do not know who will take over the farm and 14% had no response.

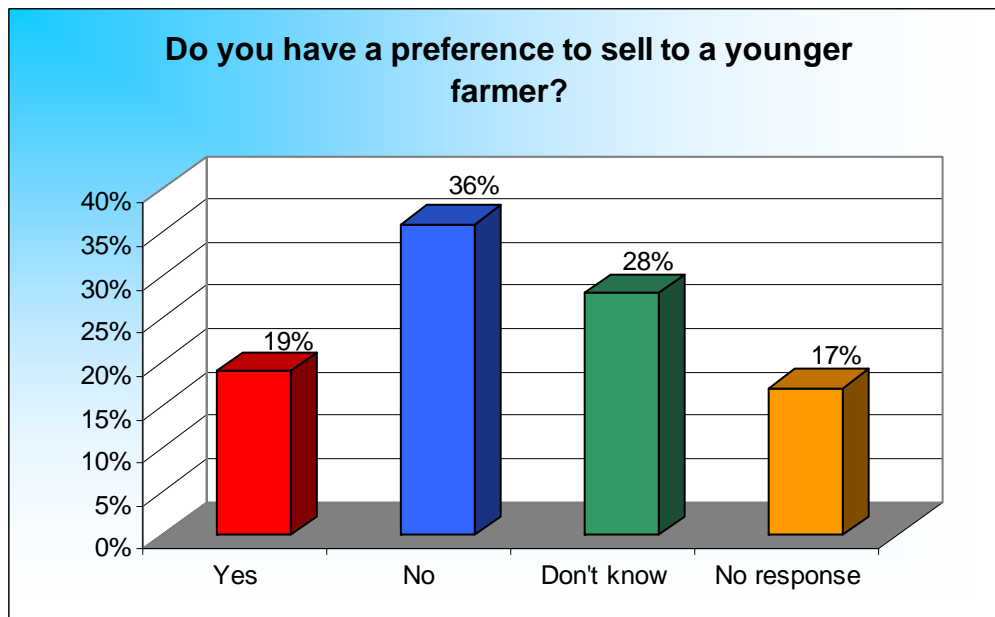
**Other Responses**

	<b>Frequency of Responses</b>
Relative	2
Conservation	1
Whichever produces the most money	1
<b>Total Responses</b>	<b>4</b>

**Question 12: Do you have a preference to sell to a younger farmer?**

**Do you have a preference to sell to a younger farmer?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	9	4.4	19.1	19.1
	No	17	8.3	36.2	55.3
	Don't know	13	6.3	27.7	83.0
	No response	8	3.9	17.0	100.0
	Total	47	22.9	100.0	
Not	Applicable	158	77.1		
Total		205	100.0		

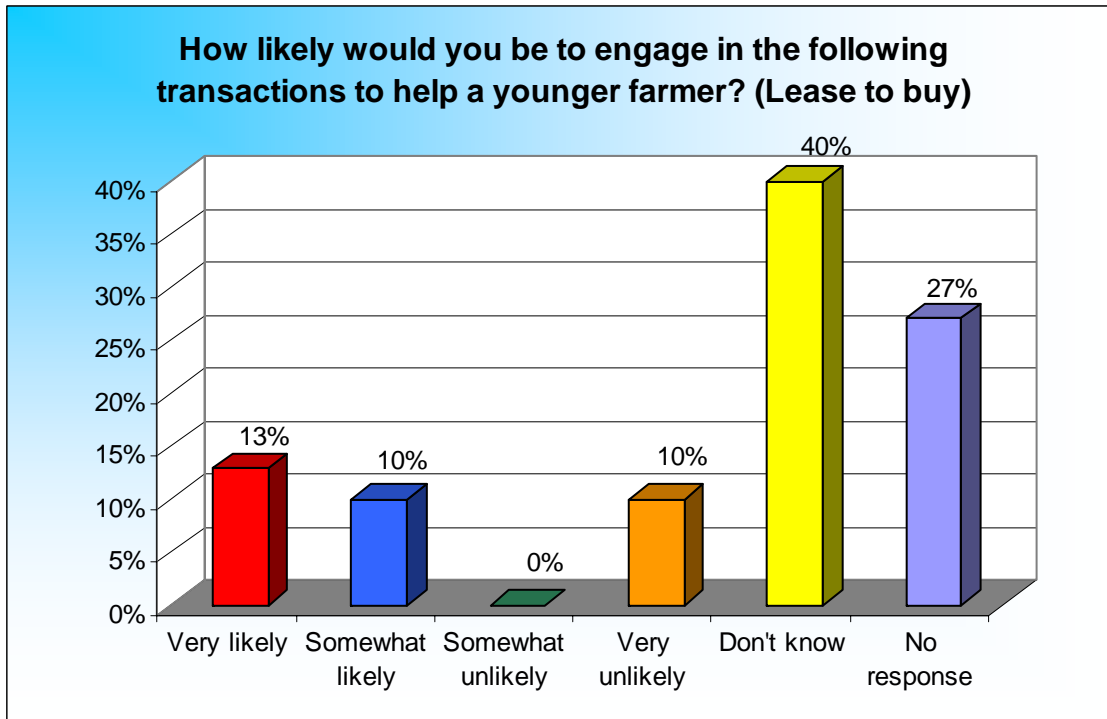


Nineteen percent of the growers have a preference to sell to a younger farmer, 36% do not have a preference, 28% do not know whether or not they have a preference and 17% had no response.

**Question 13:** How likely would you be to engage in the following transactions to help a younger farmer? (Lease to buy)

**How likely would you be to engage in the following transactions to help a younger farmer? (Lease to buy)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very likely	4	2.0	13.3	13.3
	Somewhat likely	3	1.5	10.0	23.3
	Very unlikely	3	1.5	10.0	33.3
	Don't know	12	5.9	40.0	73.3
	No response	8	3.9	26.7	100.0
	Total	30	14.6	100.0	
Not	Applicable	175	85.4		
Total		205	100.0		

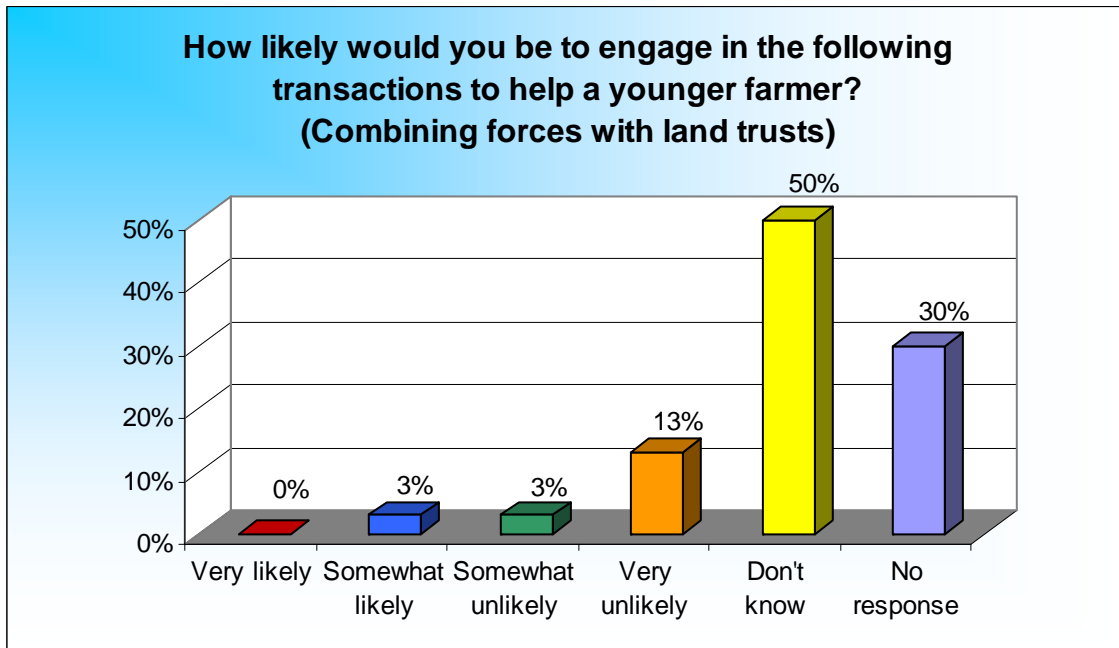


Thirteen percent of the growers are very likely to engage in lease to buy to help a younger farmer, 10% are somewhat likely, 0% are somewhat unlikely, 10% are very unlikely, 40% do not know and 27% had no response.

**Question 13:** How likely would you be to engage in the following transactions to help a younger farmer? (Combining forces with land trusts)

**How likely would you be to engage in the following transactions to help a younger farmer? (Combining forces with land trusts)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat likely	1	.5	3.3	3.3
	Somewhat unlikely	1	.5	3.3	6.7
	Very unlikely	4	2.0	13.3	20.0
	Don't know	15	7.3	50.0	70.0
	No response	9	4.4	30.0	100.0
	Total	30	14.6	100.0	
Not	Applicable	175	85.4		
Total		205	100.0		

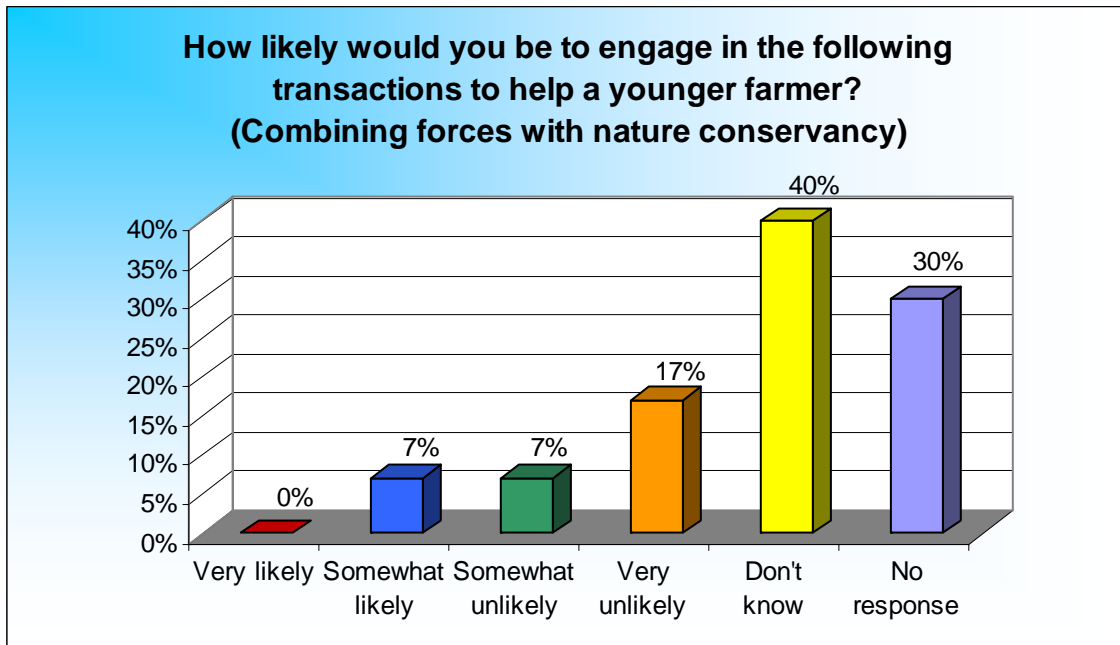


None of the growers are very likely to engage in combining forces with land trusts to help a younger farmer, 3% are somewhat likely, 3% are somewhat unlikely, 13% are very unlikely, 50% do not know and 30% had no response.

**Question 13:** How likely would you be to engage in the following transactions to help a younger farmer? (Combining forces with nature conservancy)

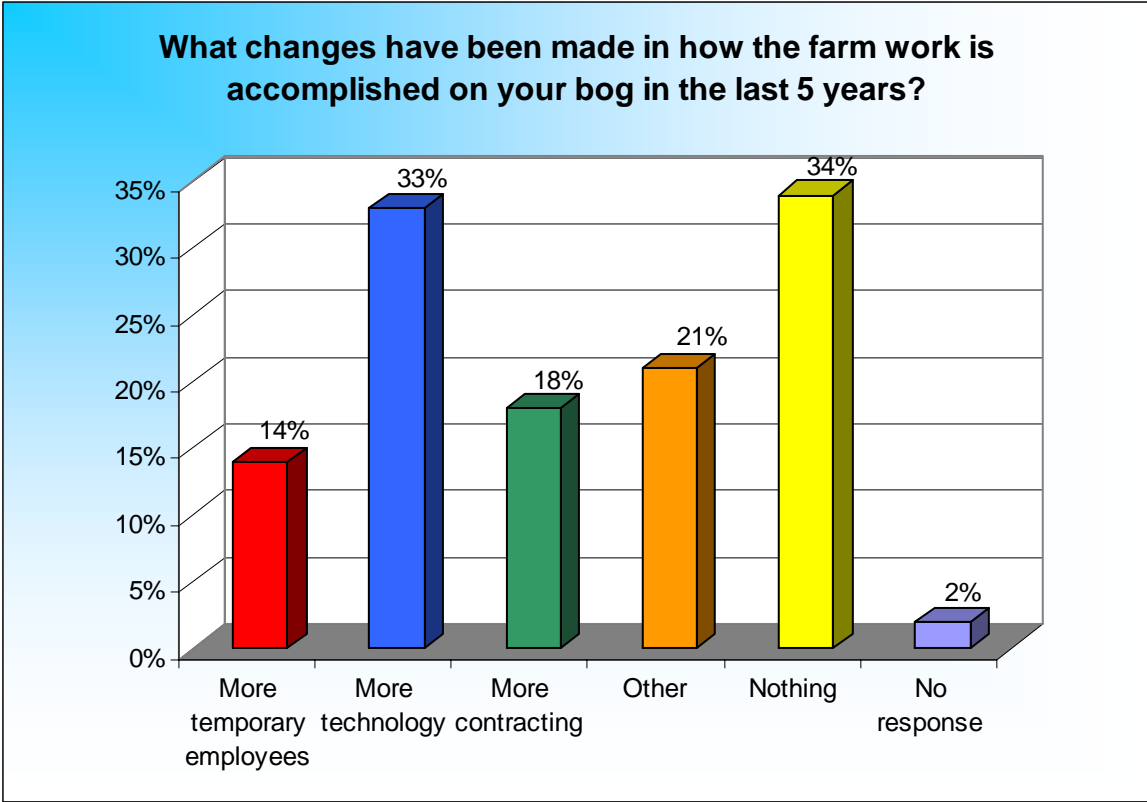
**How likely would you be to engage in the following transactions to help a younger farmer? (Combining forces with nature conservancy)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat likely	2	1.0	6.7	6.7
	Somewhat unlikely	2	1.0	6.7	13.3
	Very unlikely	5	2.4	16.7	30.0
	Don't know	12	5.9	40.0	70.0
	No response	9	4.4	30.0	100.0
	Total	30	14.6	100.0	
Not	Applicable	175	85.4		
Total		205	100.0		



None of the growers are very likely to engage in combining forces with a nature conservancy to help a younger farmer, 7% are somewhat likely, 7% are somewhat unlikely, 17% are very unlikely, 40% do not know and 30% had no response.

**Question 14:** What changes have been made in how the farm work is accomplished on your bog in the last 5 years? (Check all that apply)



Fourteen percent of the growers have added more temporary employees in the last 5 years, 33% have added more technology, 18% have added more contracting, 21% have changed something\* than those listed, 34% have made no changes and 2% had no response.

\* Please refer to the next page for a list of other responses.

**Question 14:** What changes have been made in how the farm work is accomplished on your bog in the last 5 years? (Other)

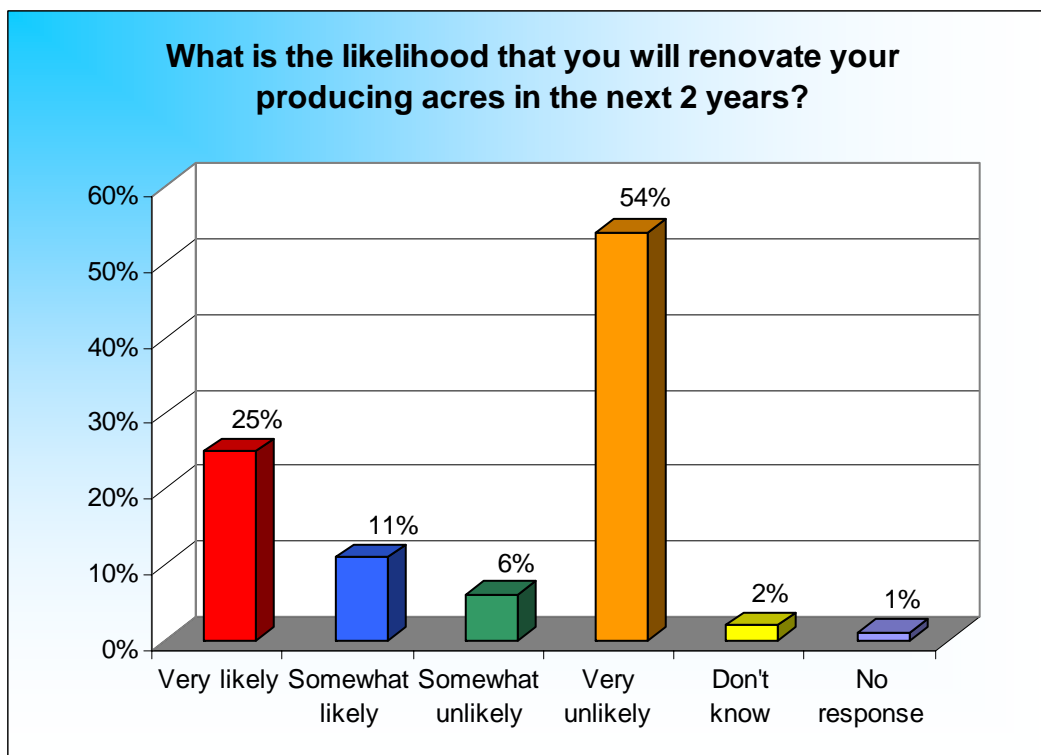
**Frequency of Responses**

Less employees	19
Wet picking	5
Changes to conserve water	4
More planting	2
Dry picking	1
Excavating work	1
Farm part time	1
Increased bogs	1
IPM	1
Less contracting	1
More family help	1
More hand work required	1
New acres put in	1
No hand weeding	1
Rebuilt acreage	1
Replanted 4 acres	1
Son handles all farm work	1
Use buglights	1
<b>Total Responses</b>	<hr/> <b>44</b>

**Question 15:** What is the likelihood that you will renovate your producing acres in the next 2 years?

**What is the likelihood that you will renovate your producing acres in the next 2 years?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very likely	52	25.4	25.4	25.4
	Somewhat likely	23	11.2	11.2	36.6
	Somewhat unlikely	13	6.3	6.3	42.9
	Very unlikely	111	54.1	54.1	97.1
	Don't know	5	2.4	2.4	99.5
	No response	1	.5	.5	100.0
	Total	205	100.0	100.0	



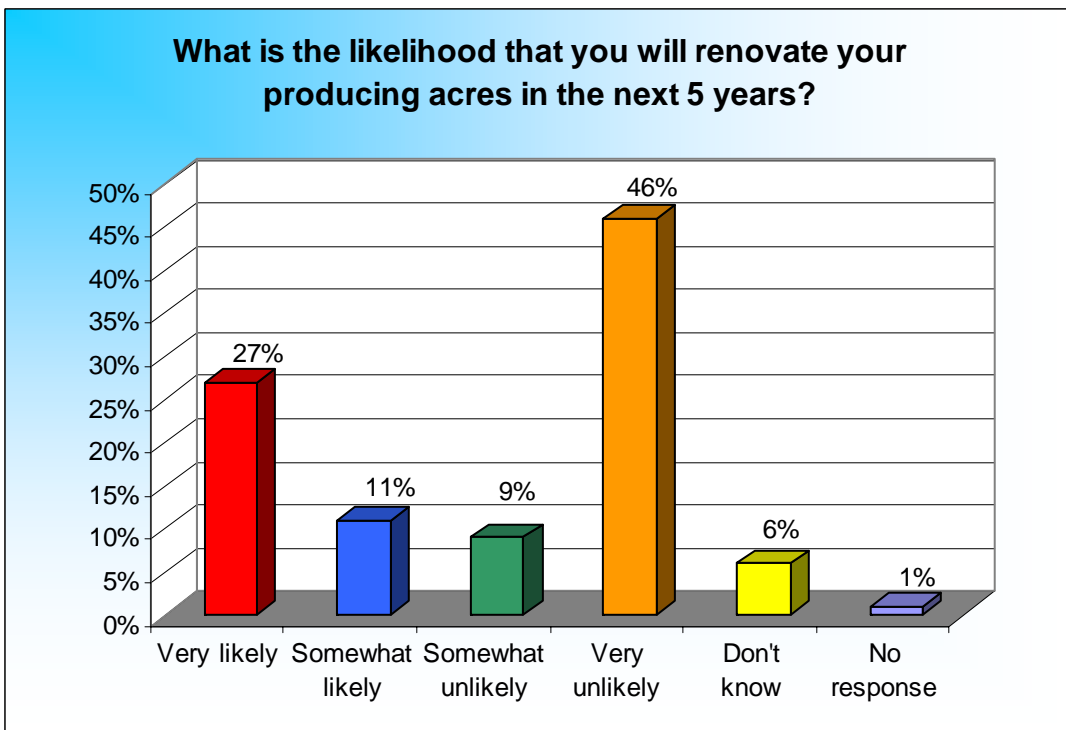
Twenty-five percent of the growers are very likely to renovate their producing acres in the next 2 years, 11% are somewhat likely, 6% are somewhat unlikely, 54% are very unlikely\*, 2% do not know and 1% had no response.

\* Of those respondents who answered they were very unlikely to renovate in the next two years, 33% report yields of <100 barrels per acre, 18% report yields of 101-125 barrels per acre, 18% report yields of 126-150 barrels per acre, 15% report yields of 151-200 barrels per acre and 7% report yields of over 200 barrels per acre.

**Question 15:** What is the likelihood that you will renovate your producing acres in the next 5 years?

**What is the likelihood that you will renovate your producing acres in the next 5 years?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very likely	56	27.3	27.3	27.3
	Somewhat likely	23	11.2	11.2	38.5
	Somewhat unlikely	19	9.3	9.3	47.8
	Very unlikely	94	45.9	45.9	93.7
	Don't know	12	5.9	5.9	99.5
	No response	1	.5	.5	100.0
Total		205	100.0	100.0	

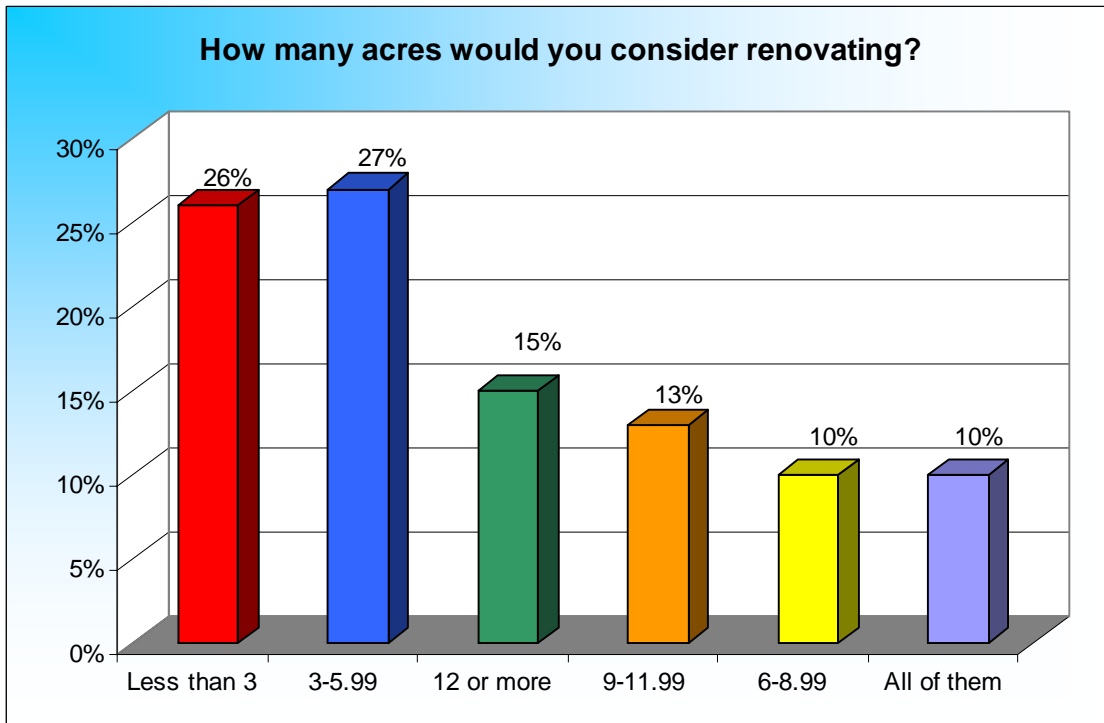


Twenty-seven percent of the growers are very likely to renovate their producing acres in the next 5 years, 11% are somewhat likely, 9% are somewhat unlikely, 46% are very unlikely, 6% do not know and 1% had no response.

**Question 16: How many acres would you consider renovating?**

**How many acres would you consider renovating?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 3	21	10.2	25.6	25.6
	3-5.99	22	10.7	26.8	52.4
	12 or more	12	5.9	14.6	67.1
	9-11.99	11	5.4	13.4	80.5
	6-8.99	8	3.9	9.8	90.2
	All of them	8	3.9	9.8	100.0
	Total	82	40.0	100.0	
Not Applicable		123	60.0		
Total		205	100.0		

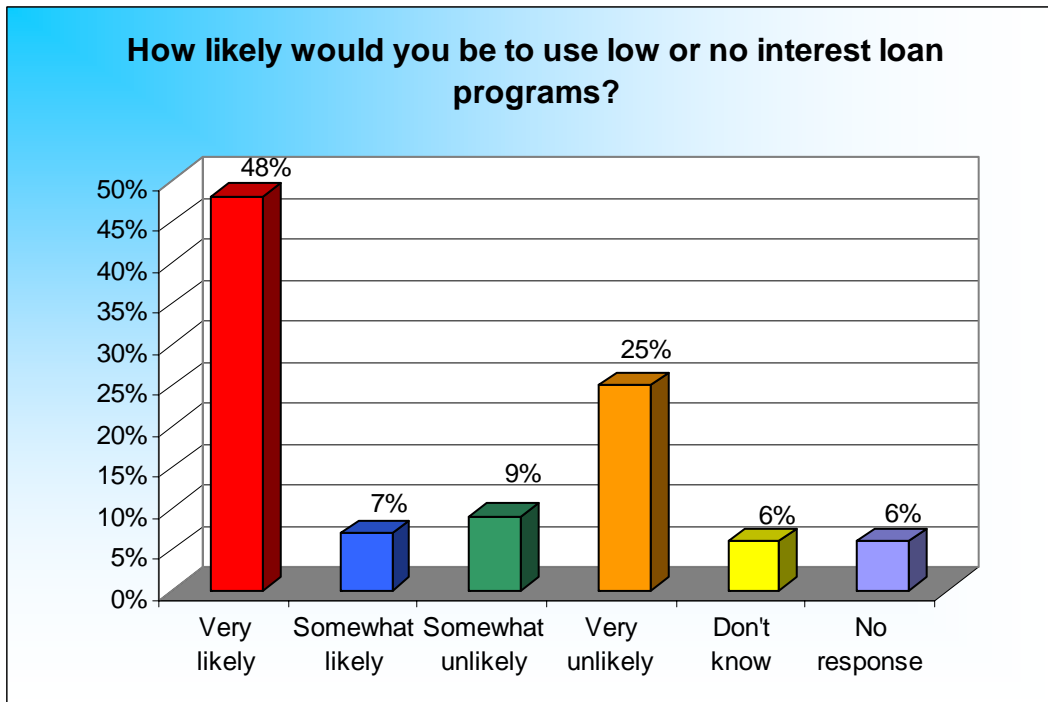


Twenty-six percent of the respondents would consider renovating less than 3 acres, 27% would consider renovating 3-5.99 acres, 15% would consider renovating 12 or more acres, 13% would consider renovating 9-11.99 acres, 10% would consider renovating 6-8.99 acres and 10% would consider renovating all of their acres.

**Question 17: How likely would you be to use low or no interest loan programs?**

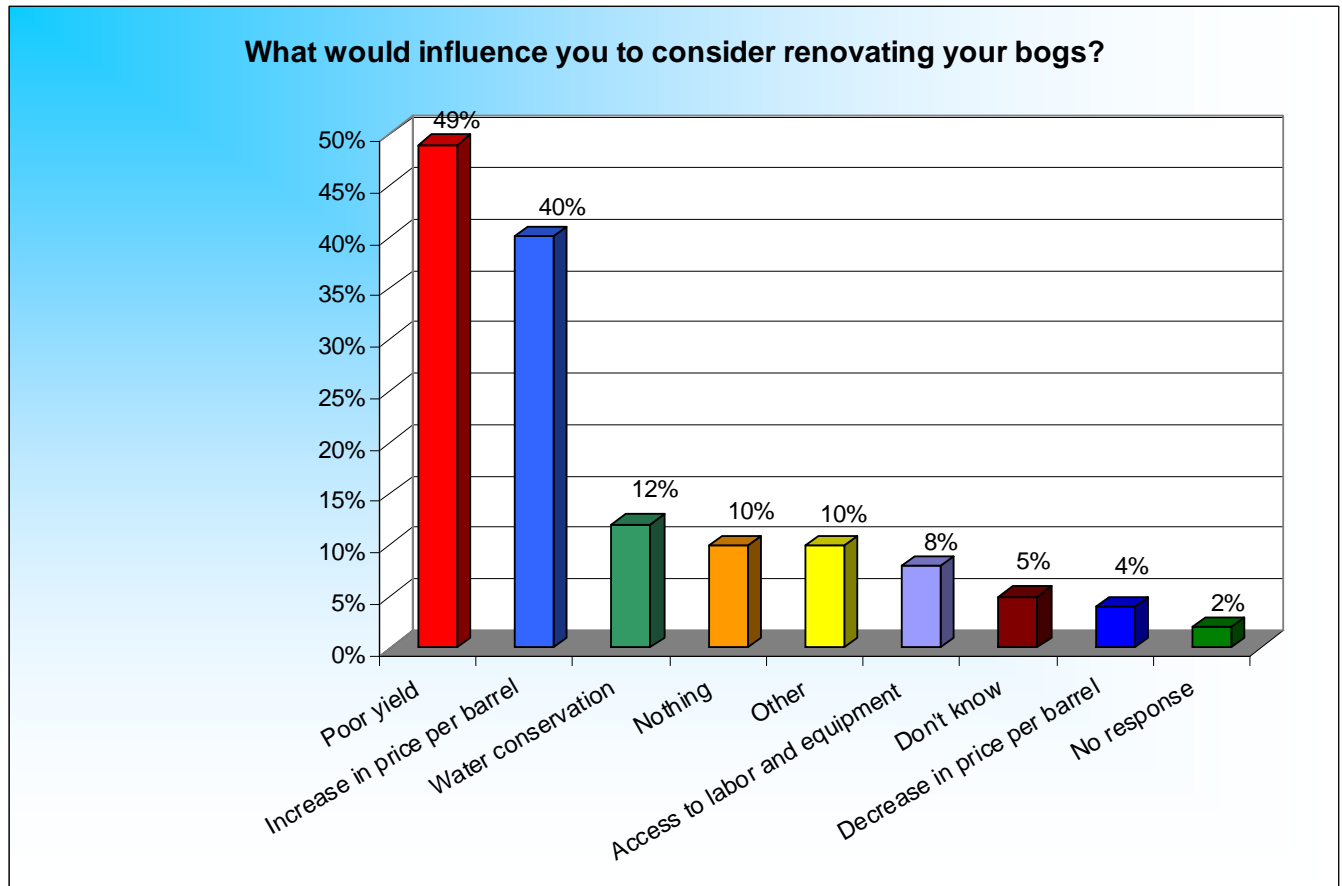
**How likely would you be to use low or no interest loan programs?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very likely	43	21.0	48.3	48.3
	Somewhat likely	6	2.9	6.7	55.1
	Somewhat unlikely	8	3.9	9.0	64.0
	Very unlikely	22	10.7	24.7	88.8
	Don't know	5	2.4	5.6	94.4
	No response	5	2.4	5.6	100.0
	Total	89	43.4	100.0	
Not	Applicable	116	56.6		
Total		205	100.0		



Forty-eight percent of the growers are very likely to use low or no interest loan programs, 7% are somewhat likely, 9% are somewhat unlikely, 25% are very unlikely, 6% do not know and 6% had no response.

**Question 18: What would influence you to consider renovating your bogs?**  
(Check all that apply)



Forty-nine percent of the growers would be influenced to consider renovating their bogs due to poor yield, 40% would consider renovating due to an increase in price per barrel, 12% would consider renovating due to water conservation, 10% would not consider renovating their bog for any reason, 10% would consider renovating due to something other than those listed\*, 8% would consider renovating due to access to labor and equipment, 5% do not know what would influence them to consider renovating, 4% would consider renovating due to a decrease in price per barrel and 2% had no response.

\* Please refer to the next page for a list of other responses.

**Question 18: What would influence you to consider renovating your bogs? (Other)**

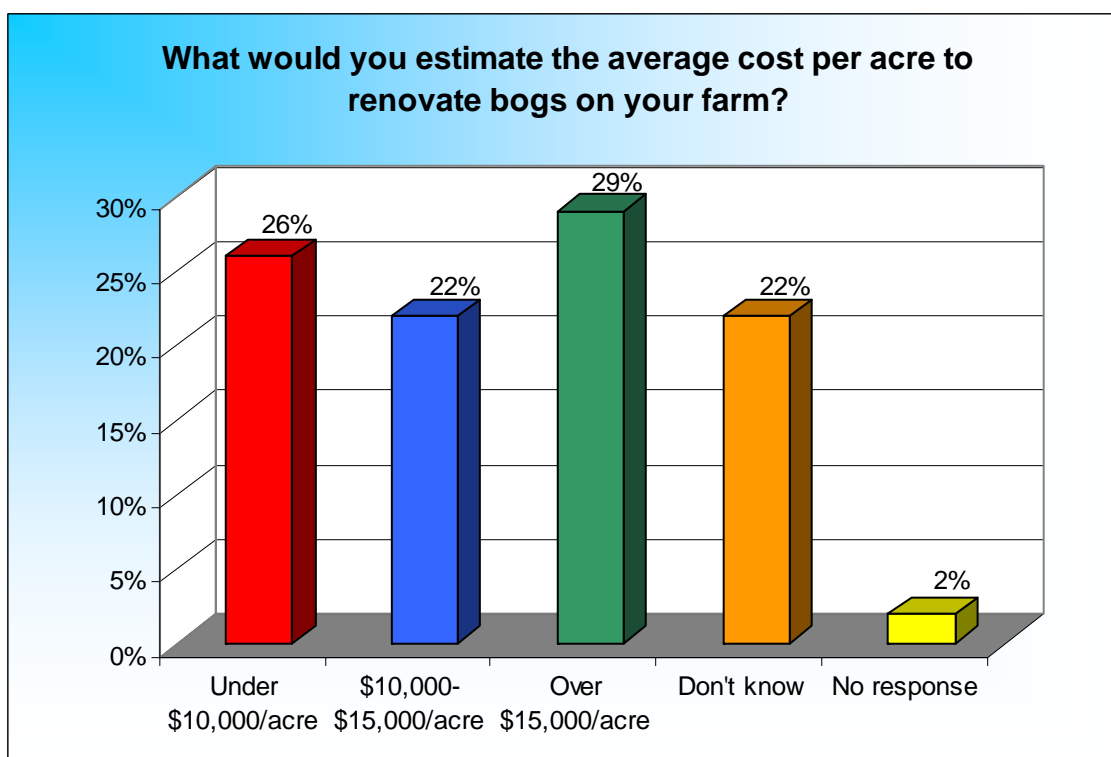
**Frequency of Responses**

Increase in yield	6
Change from wet to dry picking	2
Competition	2
Low interest loan rates	2
Economic liability	1
Frost	1
More available land	1
Need for new vines	1
Return on farm asset	1
Subsidies (government)	1
<b>Total Responses</b>	<hr/> <b>18</b>

**Question 19:** What would you estimate the average cost per acre to renovate bogs on your farm?

**What would you estimate the average cost per acre to renovate bogs on your farm?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under \$10,000/acre	53	25.9	25.9	25.9
	\$10,000-\$15,000/acre	44	21.5	21.5	47.3
	Over \$15,000/acre	59	28.8	28.8	76.1
	Don't know	45	22.0	22.0	98.0
	No response	4	2.0	2.0	100.0
	Total	205	100.0	100.0	

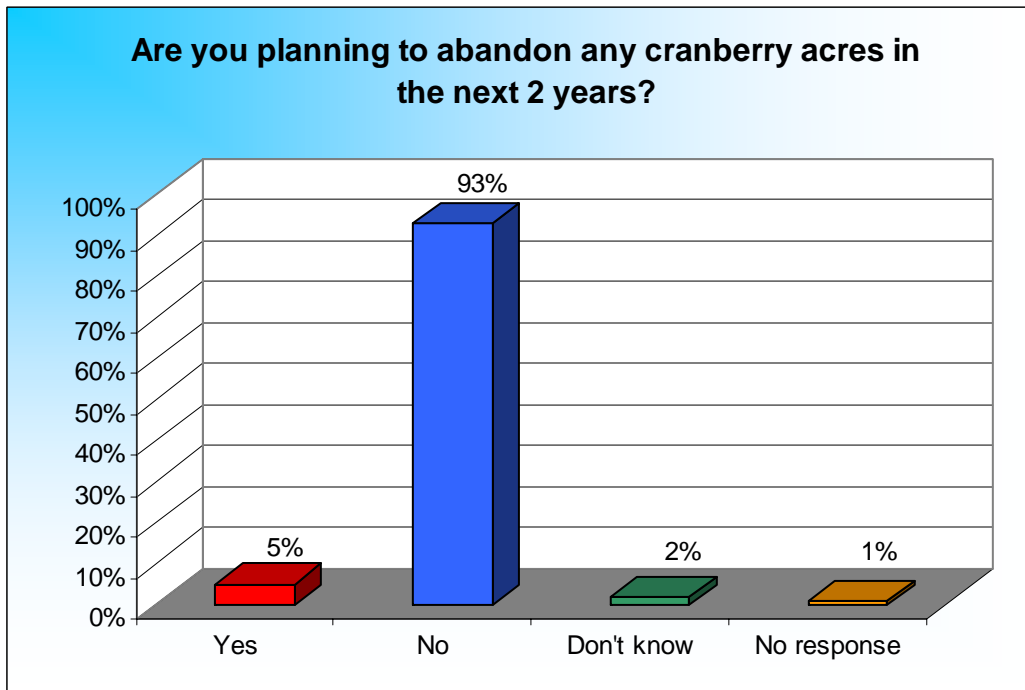


Twenty-six percent of the growers estimate the average cost per acre to renovate bogs on their farm to be under \$10,000/acre, 22% estimate between \$10,000-\$15,000/acre, 29% estimate over \$15,000/acre, 22% do not know the average cost per acre to renovate and 2% had no response.

**Question 20:** Are you planning to abandon any cranberry acres in the next 2 years?

**Are you planning to abandon any cranberry acres in the next 2 years?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	10	4.9	4.9	4.9
	No	190	92.7	92.7	97.6
	Don't know	4	2.0	2.0	99.5
	No response	1	.5	.5	100.0
	Total	205	100.0	100.0	



Five percent of the growers are planning to abandon cranberry acres in the next 2 years, 93% are not planning to abandon cranberry acres, 2% do not know if they will abandon any cranberry acres and 1% had no response.

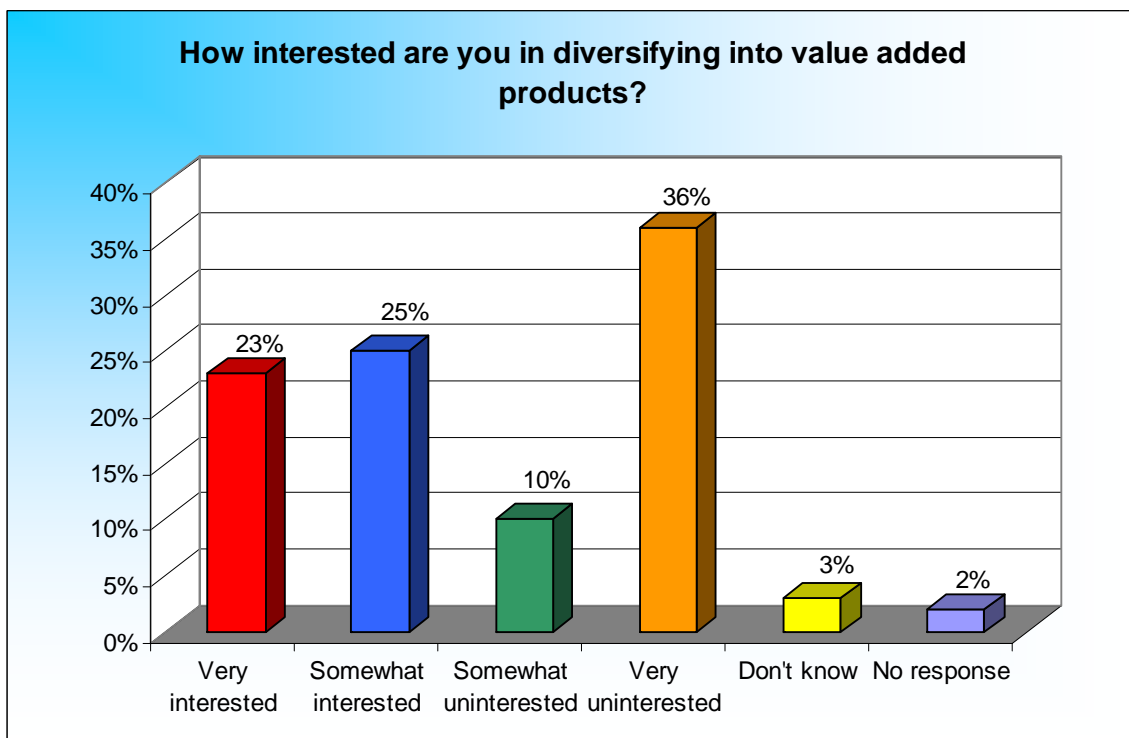
**Question 21:** If yes, how many?

	Frequency of Responses
5 and under	4
6-15	3
20-30	3
<b>Total Responses</b>	<b>10</b>

**Question 22: How interested are you in diversifying into value added products?**

**How interested are you in diversifying into value added products?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very interested	48	23.4	23.4	23.4
	Somewhat interested	52	25.4	25.4	48.8
	Somewhat uninterested	20	9.8	9.8	58.5
	Very uninterested	74	36.1	36.1	94.6
	Don't know	7	3.4	3.4	98.0
	No response	4	2.0	2.0	100.0
	Total	205	100.0	100.0	

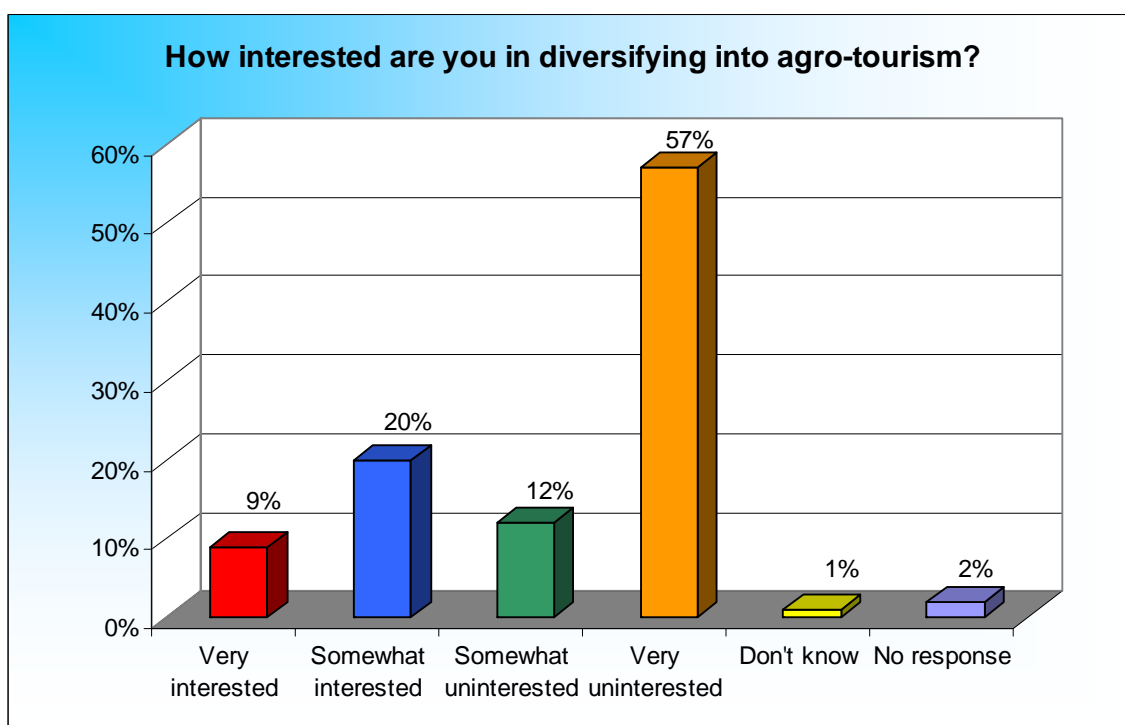


Twenty-three percent of the growers are very interested in diversifying into value added products, 25% are somewhat interested, 10% are somewhat uninterested, 36% are very uninterested, 3% do not know and 2% had no response.

**Question 22: How interested are you in diversifying into agro-tourism?**

**How interested are you in diversifying into agro-tourism?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very interested	18	8.8	8.8	8.8
	Somewhat interested	41	20.0	20.0	28.8
	Somewhat uninterested	24	11.7	11.7	40.5
	Very uninterested	117	57.1	57.1	97.6
	Don't know	2	1.0	1.0	98.5
	No response	3	1.5	1.5	100.0
	Total	205	100.0	100.0	

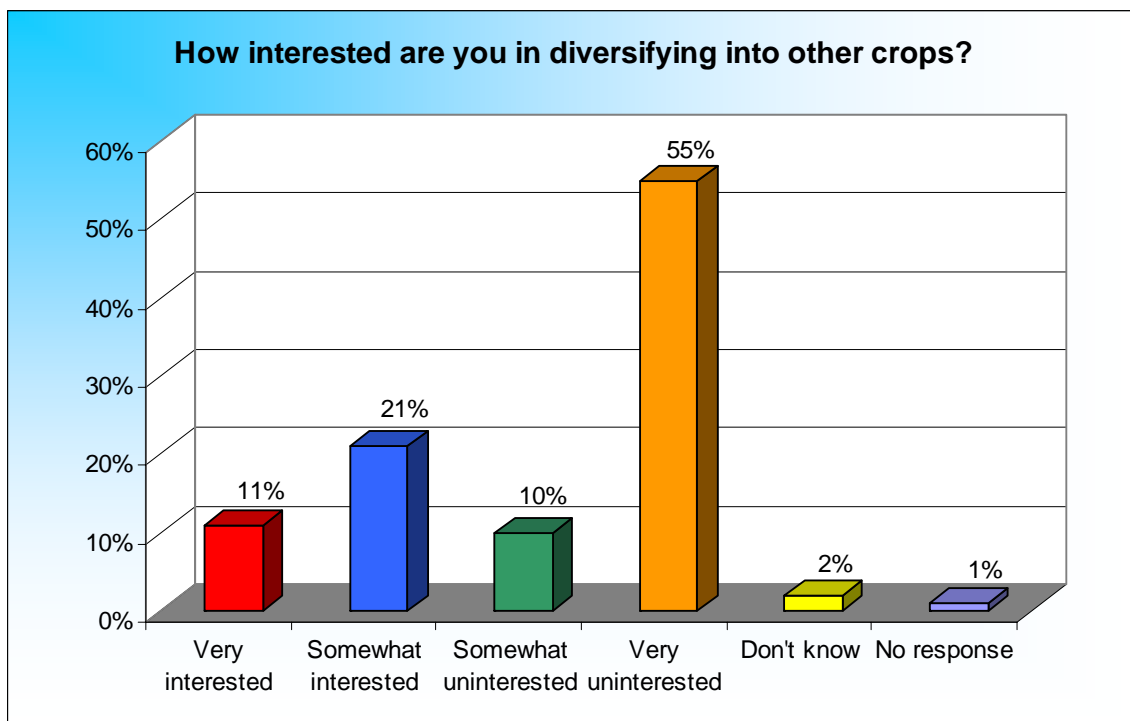


Nine percent of the growers are very interested in diversifying into agro-tourism, 20% are somewhat interested, 12% are somewhat uninterested, 57% are very uninterested, 1% do not know and 2% had no response.

**Question 22: How interested are you in diversifying into other crops?**

**How interested are you in diversifying into other crops?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very interested	23	11.2	11.2	11.2
	Somewhat interested	43	21.0	21.0	32.2
	Somewhat uninterested	21	10.2	10.2	42.4
	Very uninterested	113	55.1	55.1	97.6
	Don't know	3	1.5	1.5	99.0
	No response	2	1.0	1.0	100.0
	Total	205	100.0	100.0	

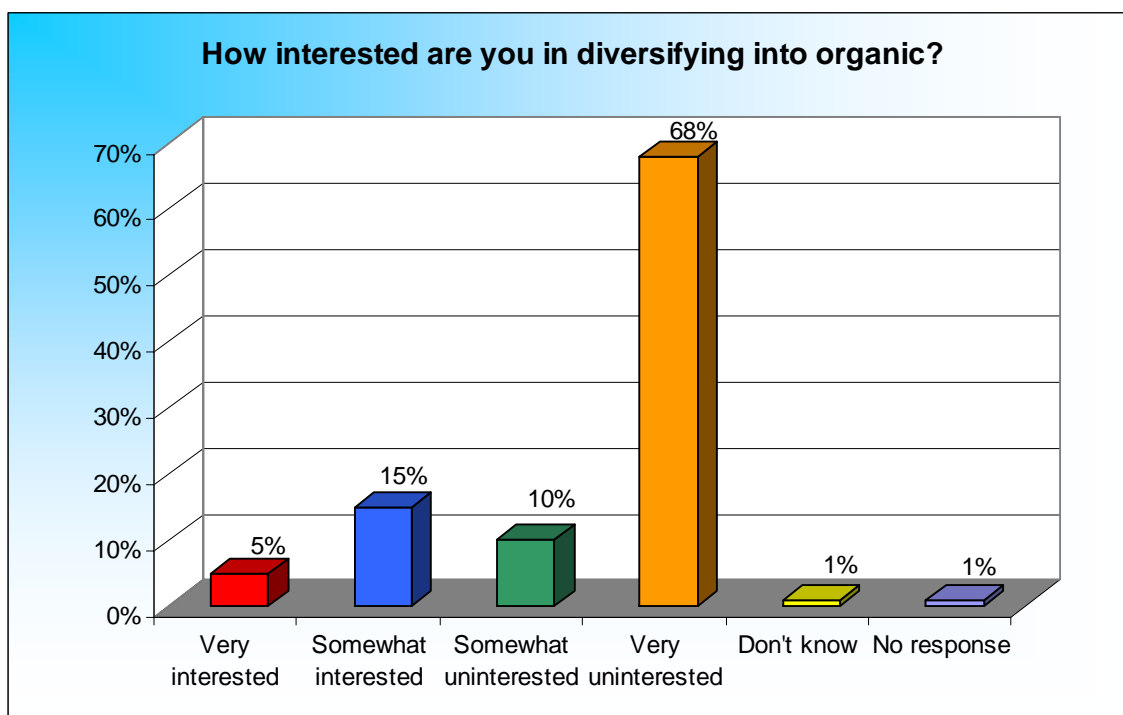


Eleven percent of the growers are very interested in diversifying into other crops, 21% are somewhat interested, 10% are somewhat uninterested, 55% are very uninterested, 2% do not know and 1% had no response.

**Question 22: How interested are you in diversifying into organic?**

**How interested are you in diversifying into organic?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very interested	11	5.4	5.4	5.4
	Somewhat interested	30	14.6	14.6	20.0
	Somewhat uninterested	20	9.8	9.8	29.8
	Very uninterested	140	68.3	68.3	98.0
	Don't know	2	1.0	1.0	99.0
	No response	2	1.0	1.0	100.0
	Total	205	100.0	100.0	

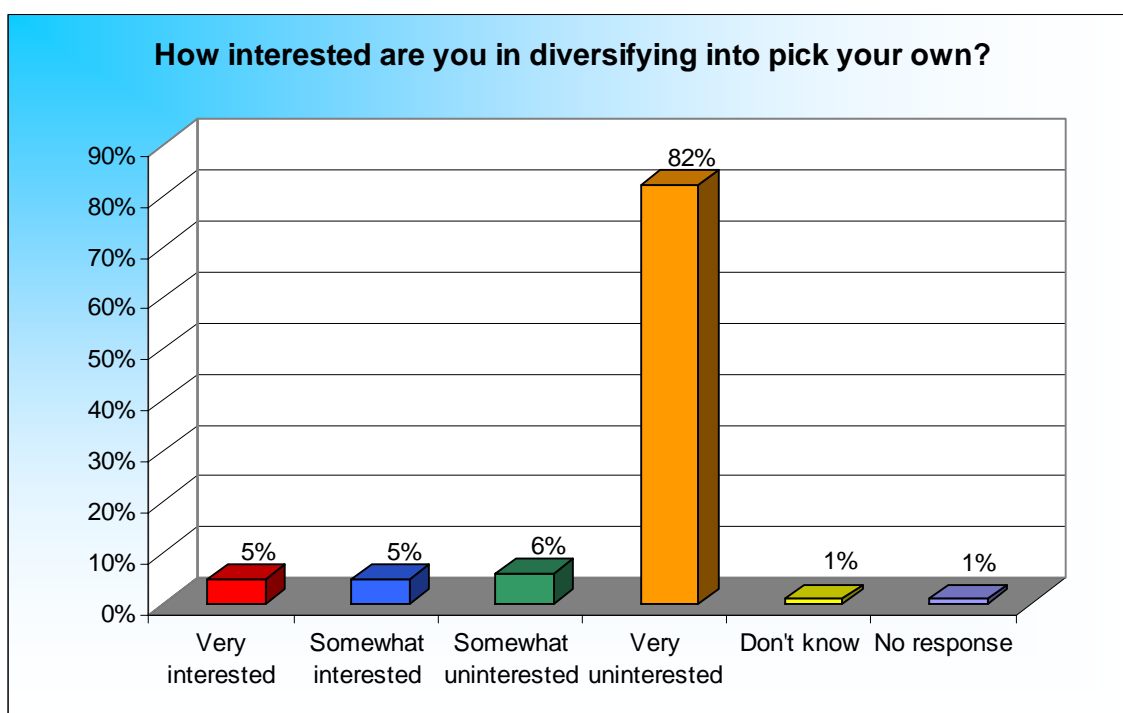


Five percent of the growers are very interested in diversifying into organic, 15% are somewhat interested, 10% are somewhat uninterested, 68% are very uninterested, 1% do not know and 1% had no response.

**Question 22: How interested are you in diversifying into pick your own?**

**How interested are you in diversifying into pick your own?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very interested	10	4.9	4.9	4.9
	Somewhat interested	11	5.4	5.4	10.2
	Somewhat uninterested	13	6.3	6.3	16.6
	Very uninterested	168	82.0	82.0	98.5
	Don't know	1	.5	.5	99.0
	No response	2	1.0	1.0	100.0
	Total	205	100.0	100.0	



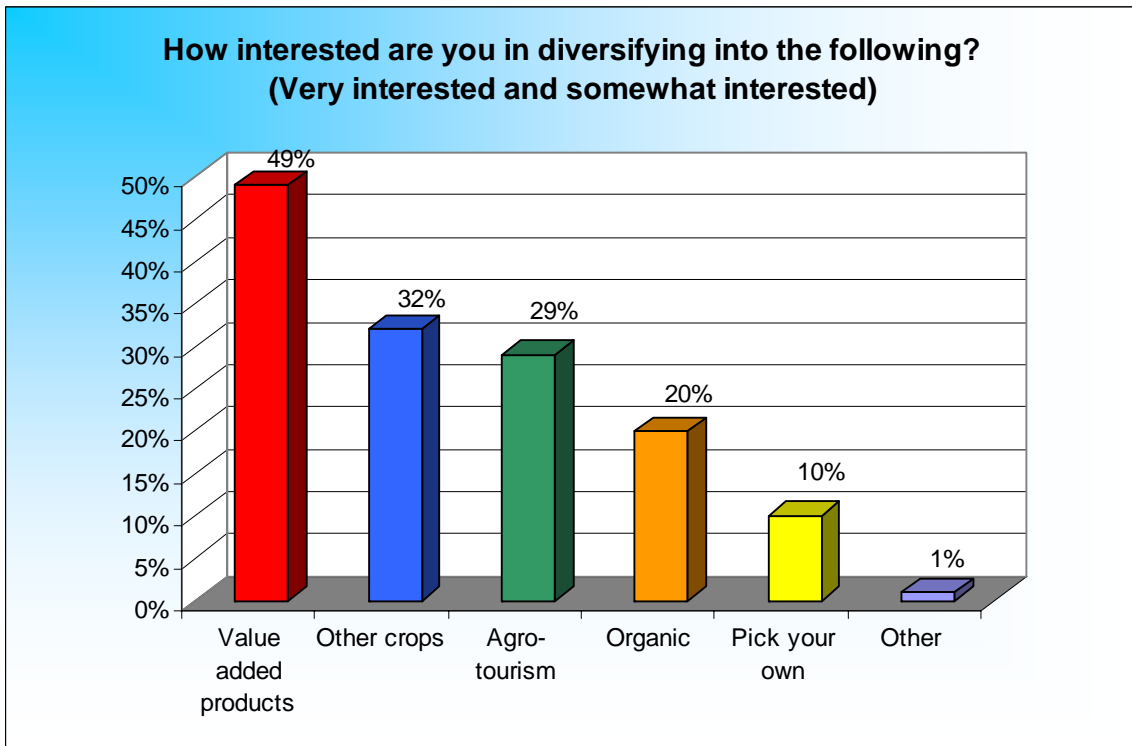
Five percent of the growers are very interested in diversifying into pick your own, 5% are somewhat interested, 6% are somewhat uninterested, 82% are very uninterested, 1% do not know and 1% had no response.

**Other Responses**

**Frequency of Responses**

Solar farming	1
<b>Total Responses</b>	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> 1

**Question 22:** How interested are you in diversifying into the following?  
(Very interested and somewhat interested)

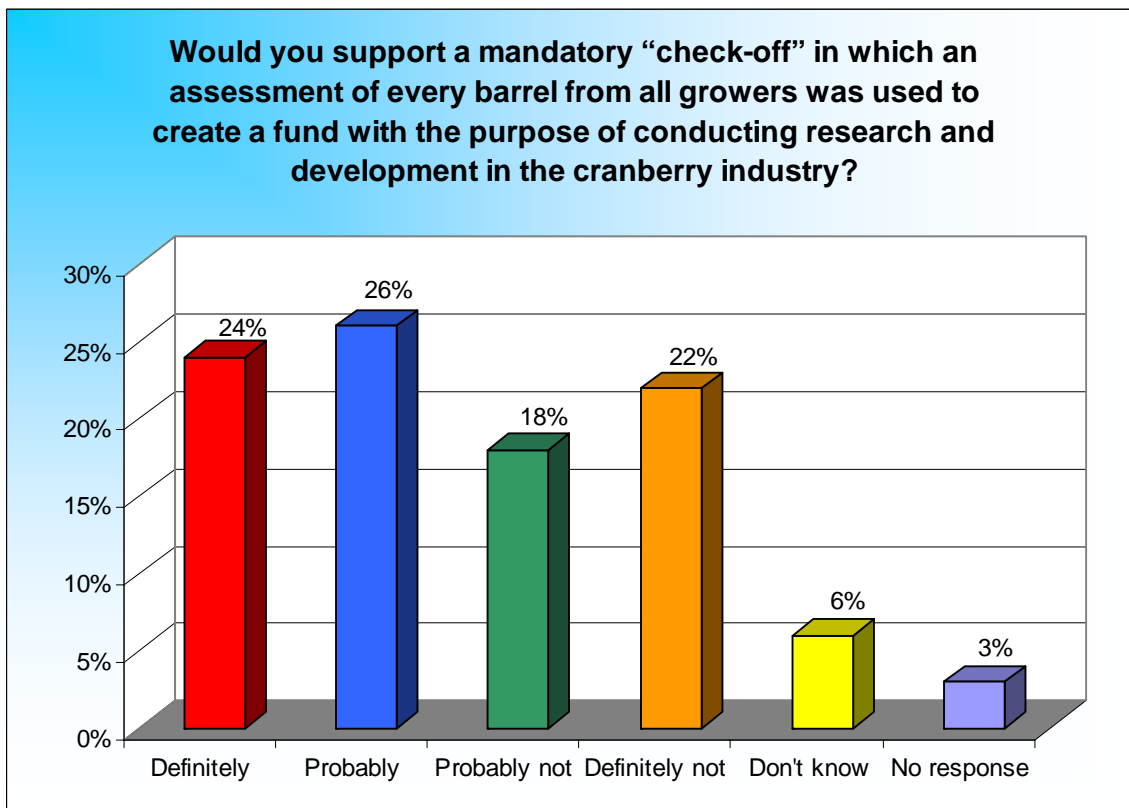


Respondents are most interested in diversifying into value added products.

**Question 23:** Would you support a mandatory “check-off” in which an assessment of every barrel from all growers was used to create a fund with the purpose of conducting research and development in the cranberry industry?

**Would you support a mandatory "check-off" in which an assessment of every barrel from all growers was used to create a fund with the purpose of conducting research and development in the cranberry industry?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Definitely	49	23.9	23.9	23.9
	Probably	54	26.3	26.3	50.2
	Probably not	37	18.0	18.0	68.3
	Definitely not	46	22.4	22.4	90.7
	Don't know	13	6.3	6.3	97.1
	No response	6	2.9	2.9	100.0
	Total	205	100.0	100.0	



Twenty-four percent of the growers would definitely support a mandatory “check off”, 26% would probably support it\*, 18% would probably not support it, 22% would definitely not support it, 6% do know if they would support it and 3% had no response.

\* Respondents who answered “definitely” or “probably” then proceeded to question #25 of the survey.

**Question 24: If not, why?\***

	<b>Frequency of Responses</b>
Already pay enough	23
Can't afford it	19
There is already enough research	13
Not profitable	5
Too small of a company	3
Not beneficial	2
Don't want to give more money	2
Not effective	2
Competition	1
Don't have control over what the money is used for	1
Don't know enough about it	1
Don't like government intervention	1
Not sure	1
Not until prices go up	1
People should conduct their own research	1
Prices are too low	1
Should be mandatory	1
Should be voluntary	1
Wouldn't do it	1
<b>Total Responses</b>	<hr/> <b>80</b>

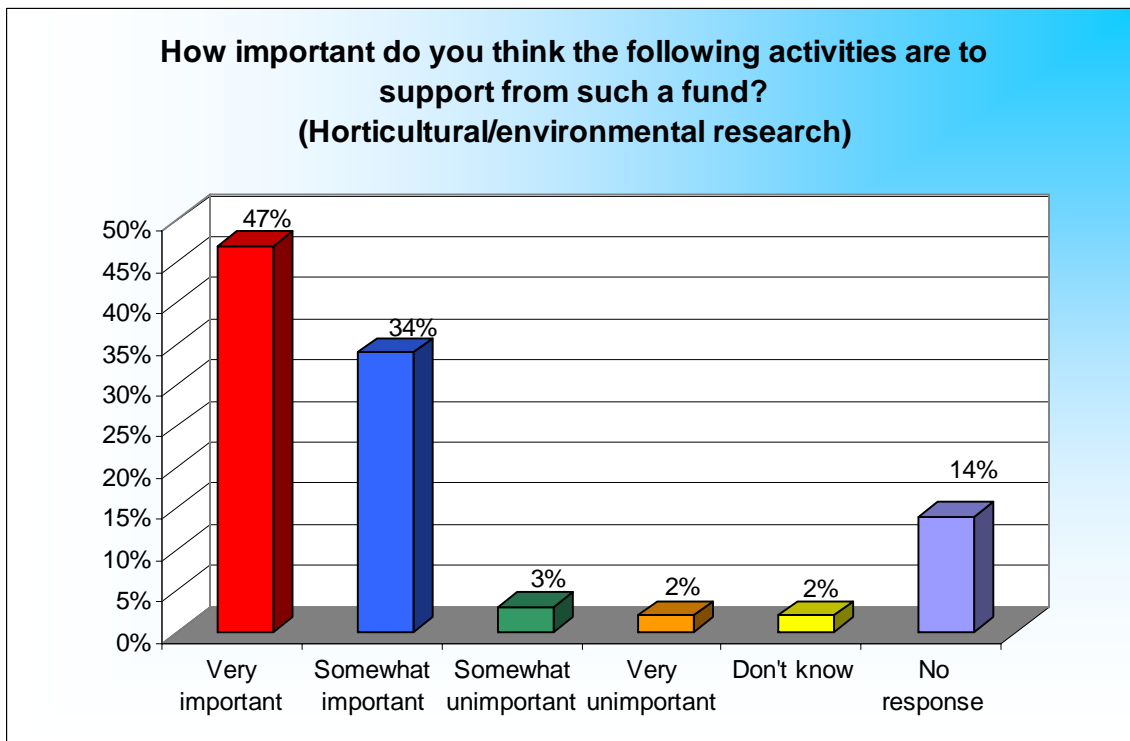
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\* Respondents who answered this question then proceeded to question #26 of the survey.

**Question 25:** How important do you think the following activities are to support from such a fund? (Horticultural/environmental research)

**How important do you think the following activities are to support from such a fund?  
(Horticultural/environmental research)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	57	27.8	46.7	46.7
	Somewhat important	41	20.0	33.6	80.3
	Somewhat unimportant	3	1.5	2.5	82.8
	Very unimportant	2	1.0	1.6	84.4
	Don't know	2	1.0	1.6	86.1
	No response	17	8.3	13.9	100.0
	Total	122	59.5	100.0	
Not	Applicable	83	40.5		
Total		205	100.0		

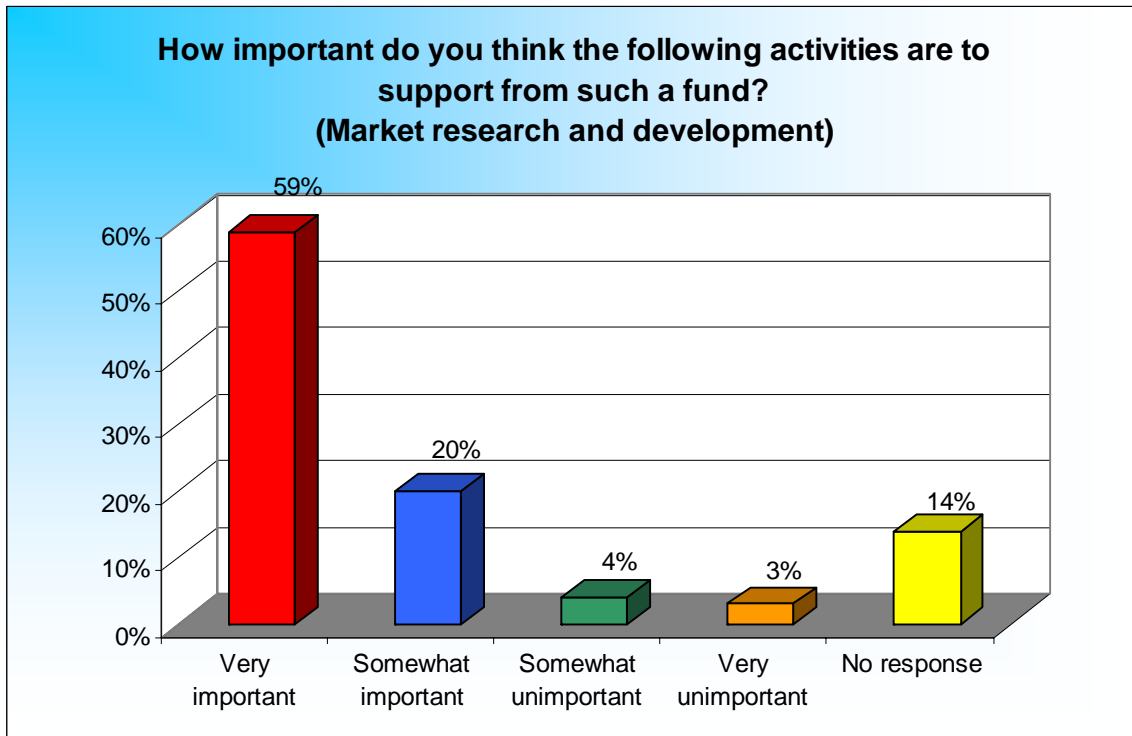


Forty-seven percent of the growers who would support a “check off” feel horticultural/environmental research is very important to support from such a fund, 34% feel it is somewhat important, 3% feel it is somewhat unimportant, 2% feel it is very unimportant, 2% do not know and 14% had no response.

**Question 25:** How important do you think the following activities are to support from such a fund? (Market research and development)

**How important do you think the following activities are to support from such a fund?  
(Market research and development)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	72	35.1	59.0	59.0
	Somewhat important	24	11.7	19.7	78.7
	Somewhat unimportant	5	2.4	4.1	82.8
	Very unimportant	4	2.0	3.3	86.1
	No response	17	8.3	13.9	100.0
Total		122	59.5	100.0	
Not	Applicable	83	40.5		
Total		205	100.0		

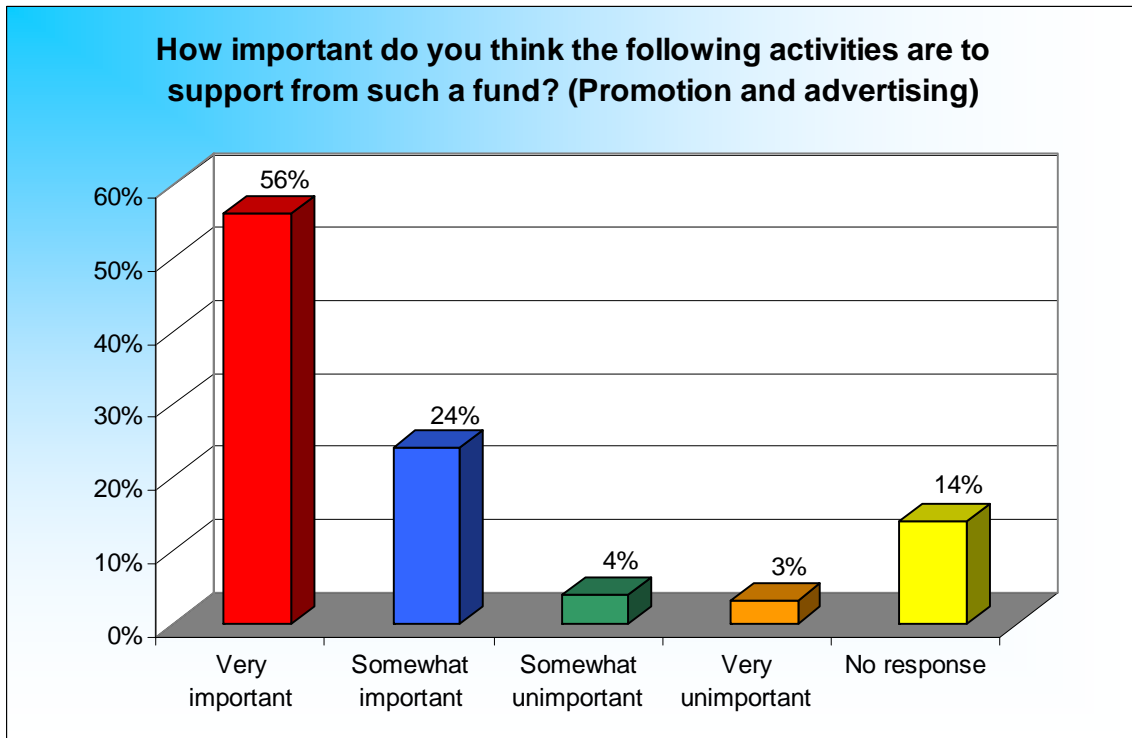


Fifty-nine percent of the growers who would support a “check off” feel market research and development is very important to support from such a fund, 20% feel it is somewhat important, 4% feel it is somewhat unimportant, 3% feel it is very unimportant and 14% had no response.

**Question 25:** How important do you think the following activities are to support from such a fund? (Promotion and advertising)

**How important do you think the following activities are to support from such a fund?  
(Promotion and advertising)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	68	33.2	55.7	55.7
	Somewhat important	29	14.1	23.8	79.5
	Somewhat unimportant	5	2.4	4.1	83.6
	Very unimportant	3	1.5	2.5	86.1
	No response	17	8.3	13.9	100.0
Total		122	59.5	100.0	
Not	Applicable	83	40.5		
Total		205	100.0		

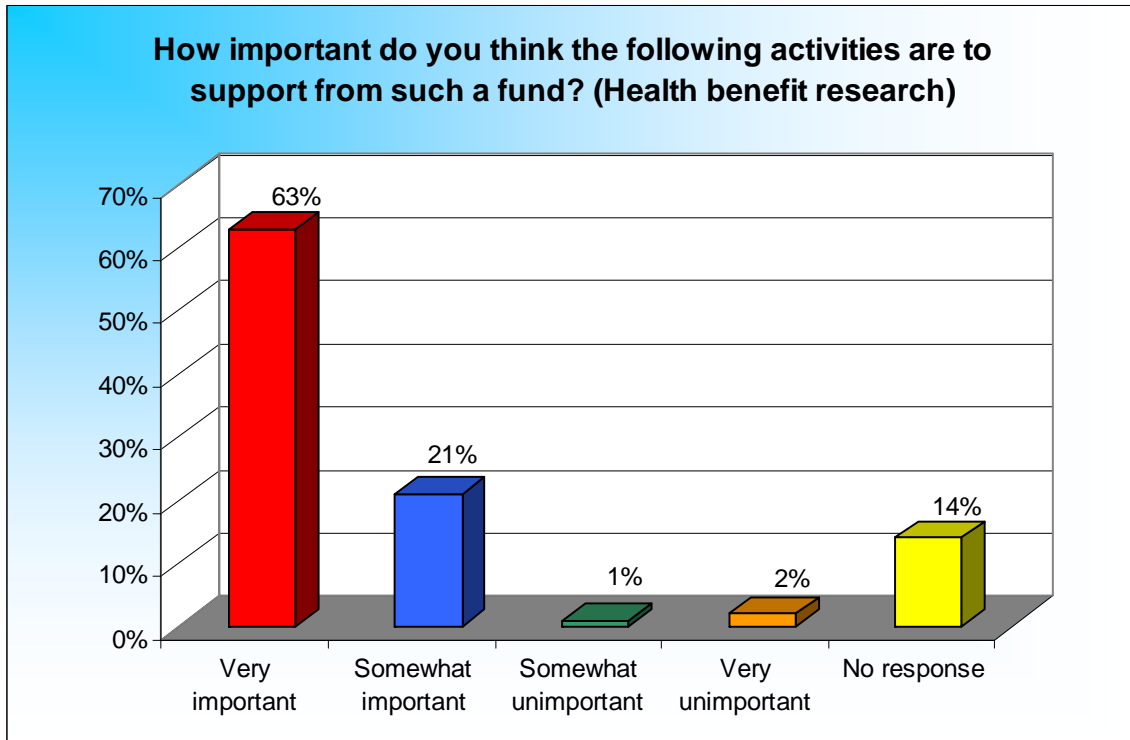


Fifty-six percent of the growers who would support a mandatory “check off” feel promotion and advertising is very important to support from such a fund, 24% feel it is somewhat important, 4% feel it is somewhat unimportant, 3% feel it is very unimportant and 14% had no response.

**Question 25:** How important do you think the following activities are to support from such a fund? (Health benefit research)

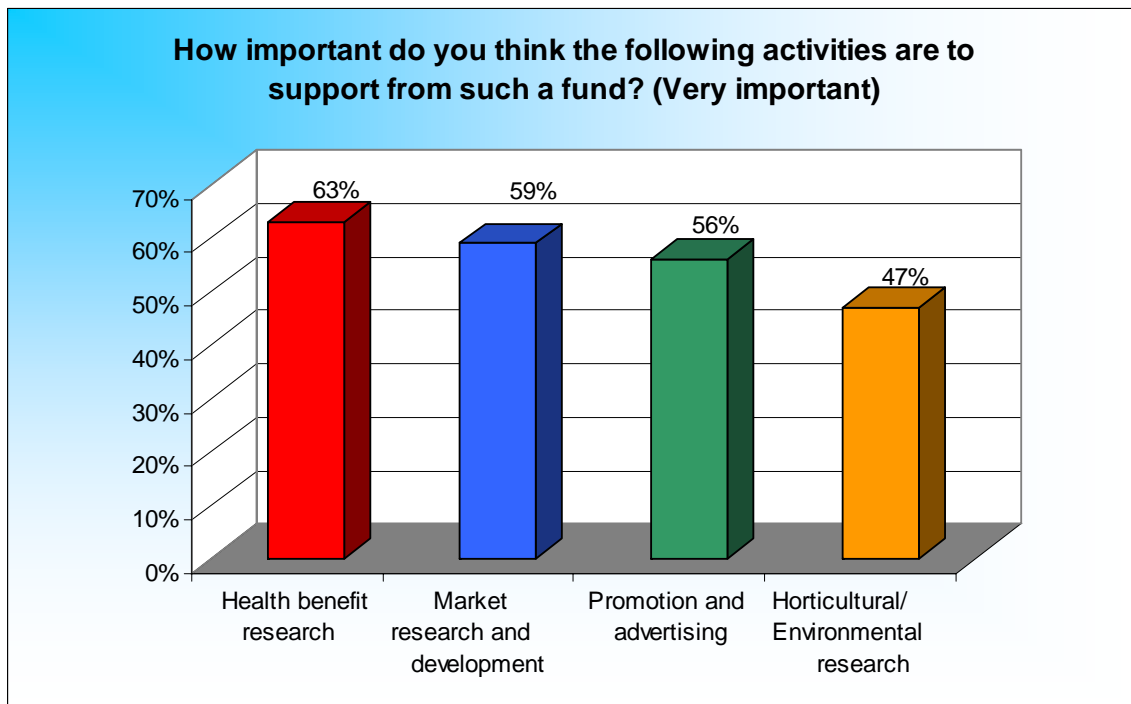
**How important do you think the following activities are to support from such a fund?  
(Health benefit research)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	77	37.6	63.1	63.1
	Somewhat important	25	12.2	20.5	83.6
	Somewhat unimportant	1	.5	.8	84.4
	Very unimportant	2	1.0	1.6	86.1
	No response	17	8.3	13.9	100.0
	Total	122	59.5	100.0	
Not	Applicable	83	40.5		
Total		205	100.0		



Sixty-three percent of the growers who would support a mandatory “check off” feel health benefit research is very important to support from such a fund, 21% feel it is somewhat important, 1% feel it is somewhat unimportant, 2% feel it is very unimportant and 14% had no response.

**Question 25:** How important do you think the following activities are to support from such a fund? (Very important)

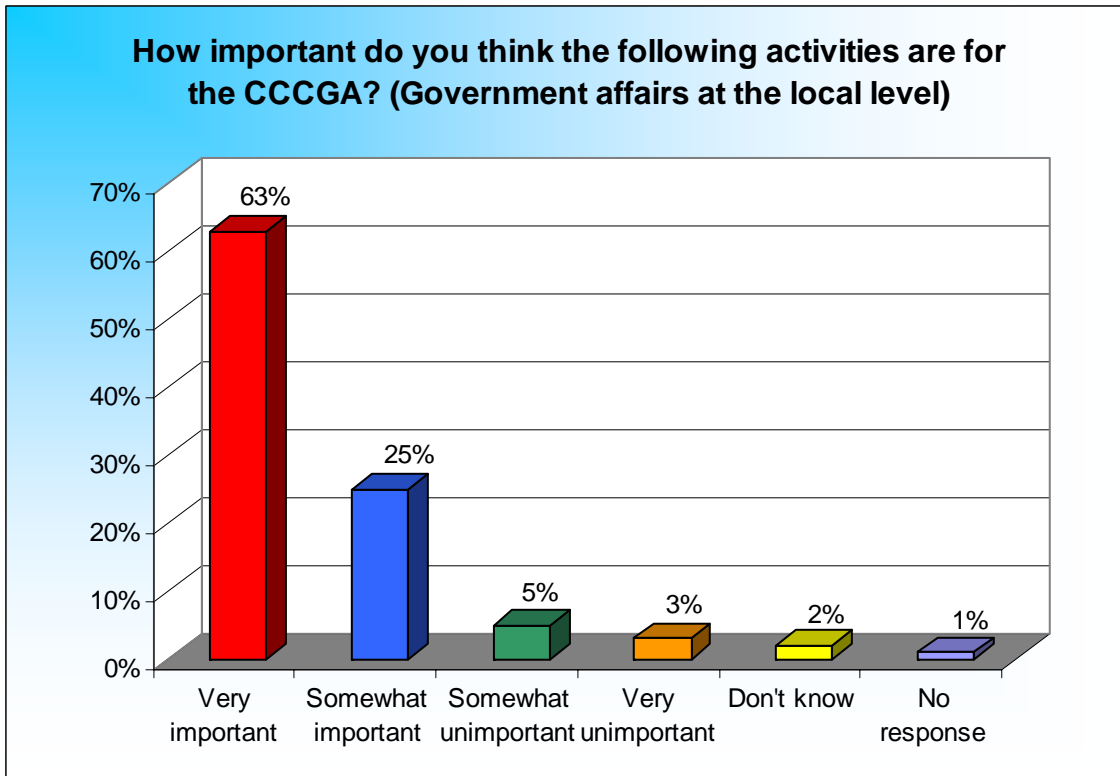


Sixty-three percent of the growers who would support a mandatory “check off” feel health benefit research is very important to support from such a fund, 59% feel market research and development is very important, 56% feel promotion and advertising is very important and 47% feel horticultural/environmental research is very important.

**Question 26: How important do you think the following activities are for the CCCGA?  
(Government affairs at the local level)**

**How important do you think the following activities are for the CCCGA?  
(Government affairs at the local level)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very important	130	63.4	63.4	63.4
Somewhat important	52	25.4	25.4	88.8
Somewhat unimportant	10	4.9	4.9	93.7
Very unimportant	6	2.9	2.9	96.6
Don't know	5	2.4	2.4	99.0
No response	2	1.0	1.0	100.0
Total	205	100.0	100.0	

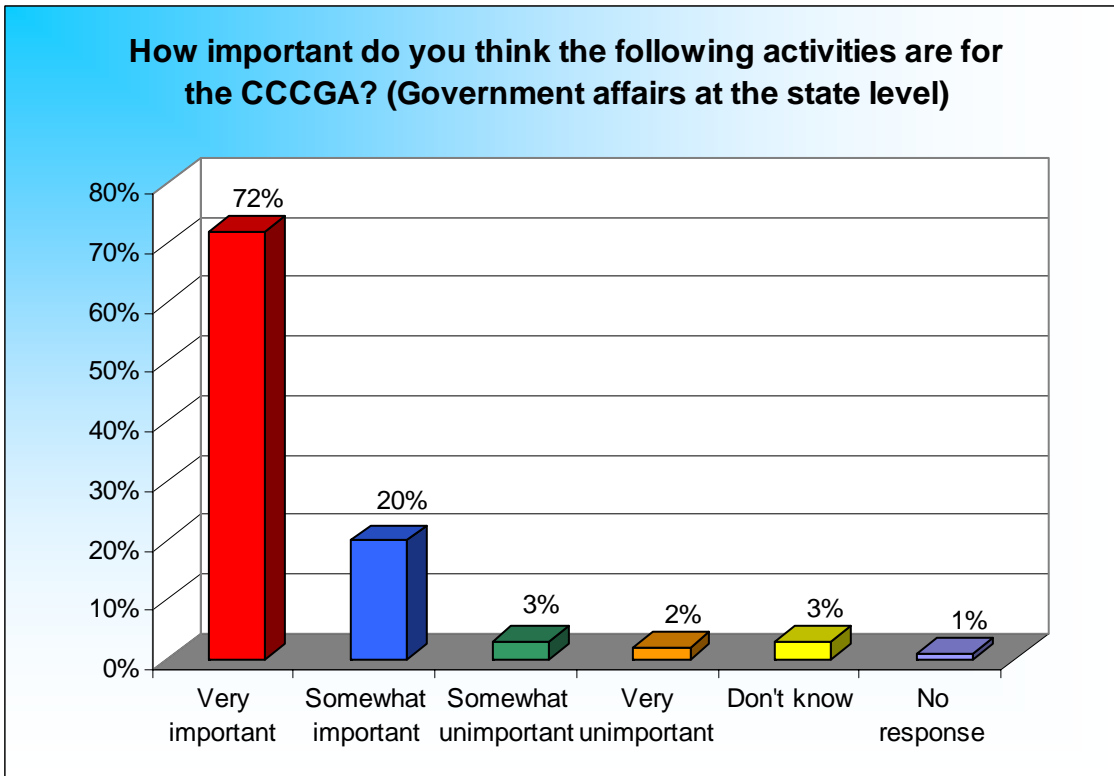


Sixty-three percent of the growers feel that government affairs at the local level is a very important activity for the CCCGA, 25% feel it is somewhat important, 5% feel it is somewhat unimportant, 3% feel it is very unimportant, 2% do not know and 1% had no response.

**Question 26: How important do you think the following activities are for the CCCGA?  
(Government affairs at the state level)**

**How important do you think the following activities are for the CCCGA?  
(Government affairs at the state level)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very important	147	71.7	71.7	71.7
Somewhat important	40	19.5	19.5	91.2
Somewhat unimportant	7	3.4	3.4	94.6
Very unimportant	3	1.5	1.5	96.1
Don't know	6	2.9	2.9	99.0
No response	2	1.0	1.0	100.0
Total	205	100.0	100.0	

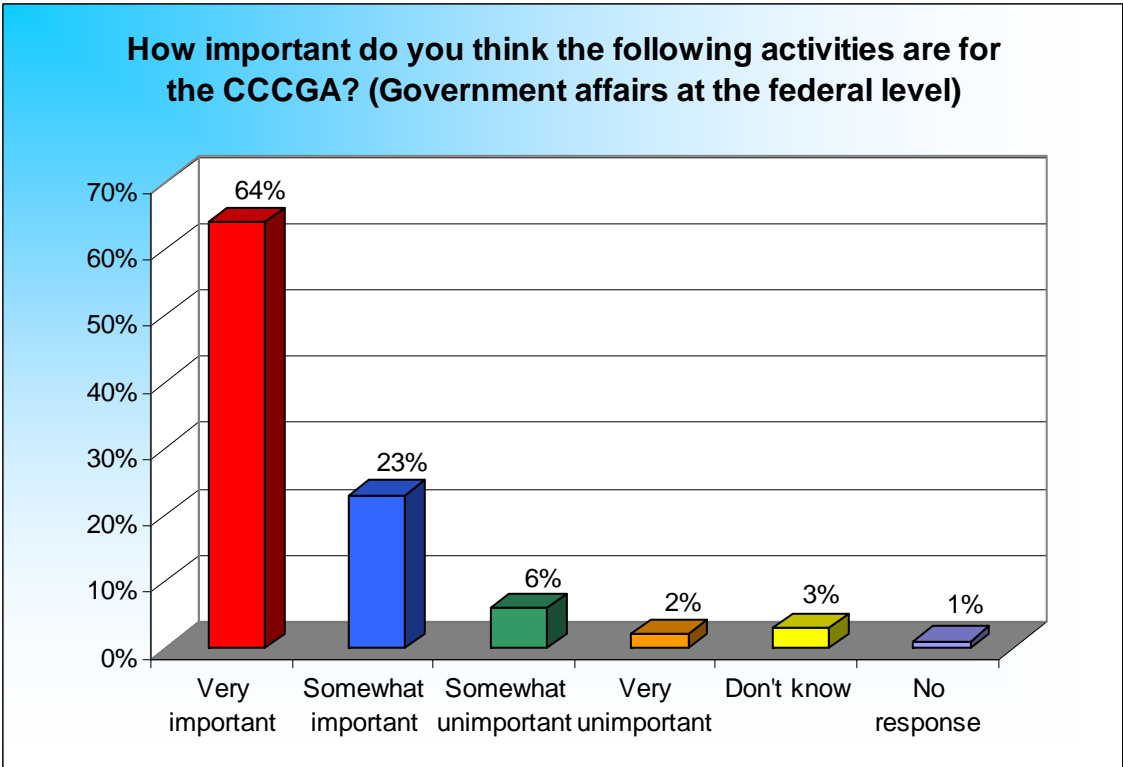


Seventy-two percent of the growers feel that government affairs at the state level is a very important activity for the CCCGA, 20% feel it is somewhat important, 3% feel it is somewhat unimportant, 2% feel it is very unimportant, 3% do not know and 1% had no response.

**Question 26: How important do you think the following activities are for the CCCGA?  
(Government affairs at the federal level)**

**How important do you think the following activities are for the CCCGA?  
(Government affairs at the federal level)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	132	64.4	64.4	64.4
	Somewhat important	48	23.4	23.4	87.8
	Somewhat unimportant	12	5.9	5.9	93.7
	Very unimportant	4	2.0	2.0	95.6
	Don't know	7	3.4	3.4	99.0
	No response	2	1.0	1.0	100.0
	Total	205	100.0	100.0	

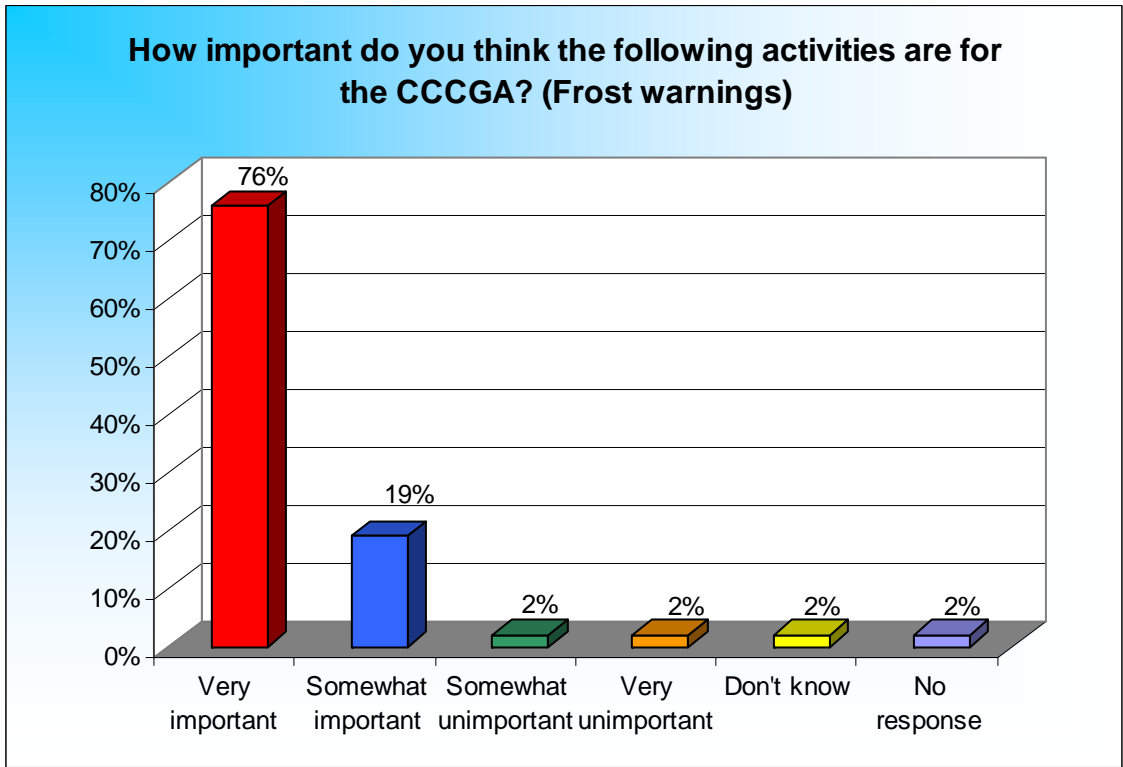


Sixty-four percent of the growers feel that government affairs at the federal level is a very important activity for the CCCGA, 23% feel it is somewhat important, 6% feel it is somewhat unimportant, 2% feel it is very unimportant, 3% do not know and 1% had no response.

**Question 26: How important do you think the following activities are for the CCCGA? (Frost warnings)**

**How important do you think the following activities are for the CCCGA? (Frost warnings)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	155	75.6	75.6	75.6
	Somewhat important	38	18.5	18.5	94.1
	Somewhat unimportant	3	1.5	1.5	95.6
	Very unimportant	3	1.5	1.5	97.1
	Don't know	3	1.5	1.5	98.5
	No response	3	1.5	1.5	100.0
	Total	205	100.0	100.0	

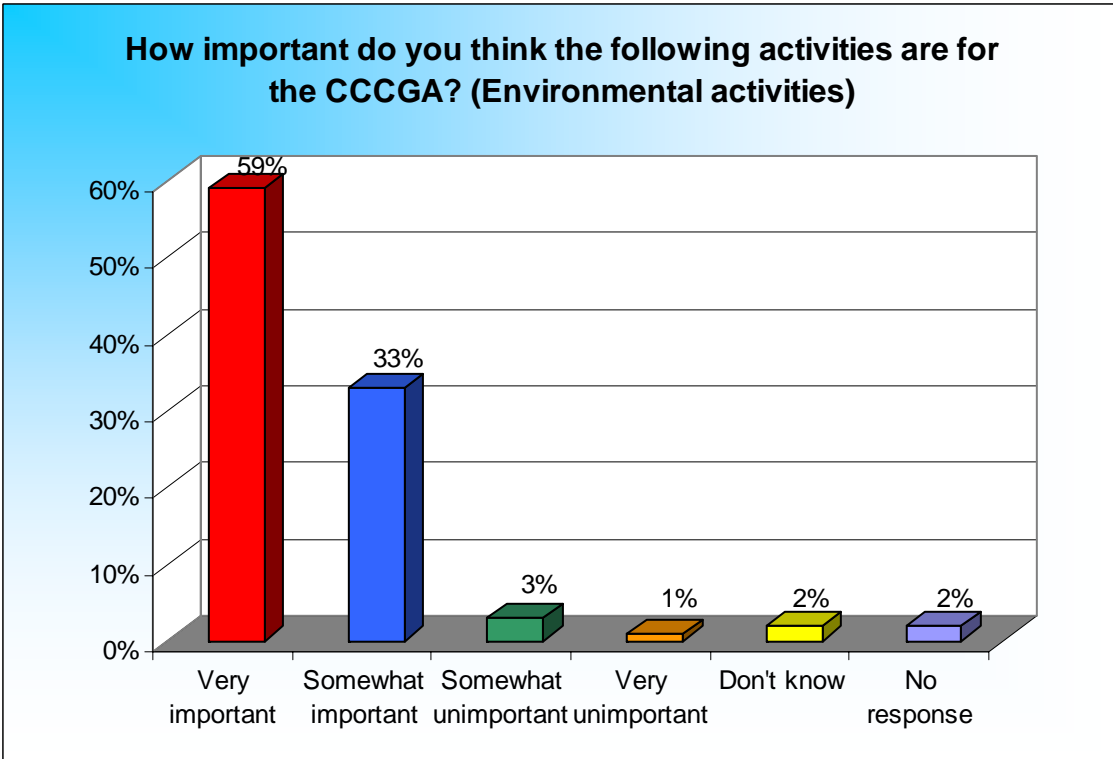


Seventy-six percent of the growers feel that frost warnings are a very important activity for the CCCGA, 19% feel they are somewhat important, 2% feel they are somewhat unimportant, 2% feel they are very unimportant, 2% do not know and 2% had no response.

**Question 26: How important do you think the following activities are for the CCCGA?  
(Environmental activities)**

**How important do you think the following activities are for the CCCGA?  
(Environmental activities)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very important	120	58.5	58.5	58.5
Somewhat important	68	33.2	33.2	91.7
Somewhat unimportant	6	2.9	2.9	94.6
Very unimportant	2	1.0	1.0	95.6
Don't know	5	2.4	2.4	98.0
No response	4	2.0	2.0	100.0
Total	205	100.0	100.0	

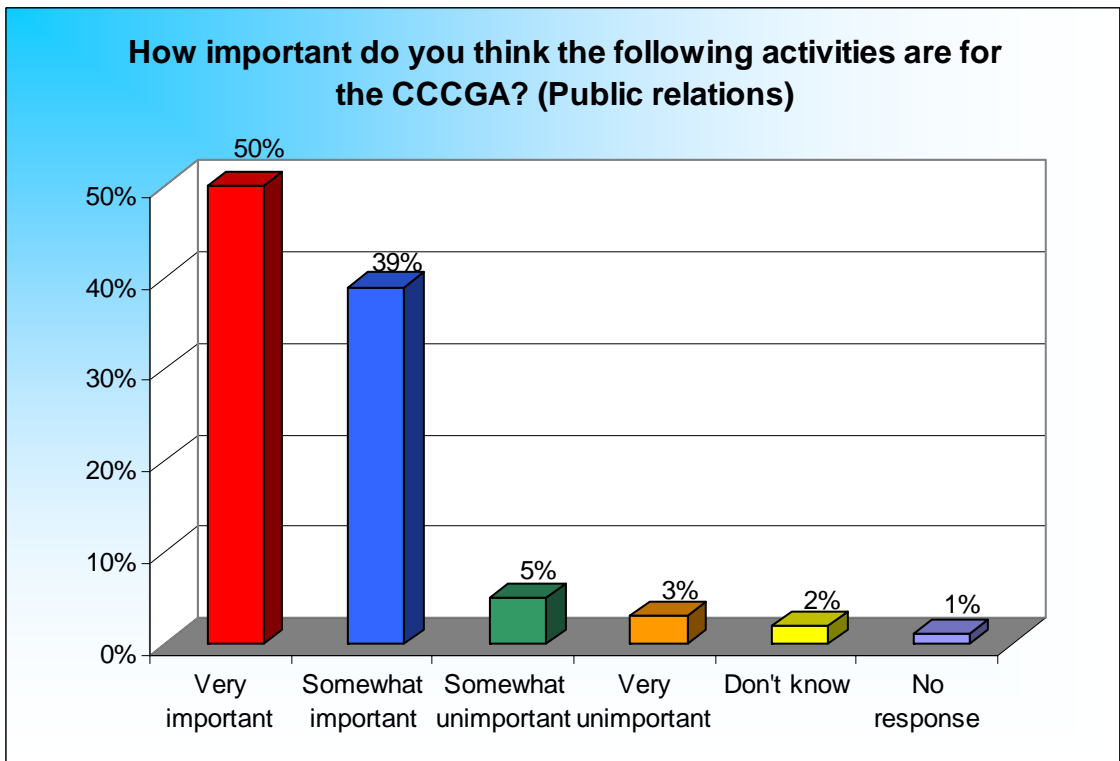


Fifty-nine percent of the growers feel that environmental activities are a very important activity for the CCCGA, 33% feel they are somewhat important, 3% feel they are somewhat unimportant, 1% feel they are very unimportant, 2% do not know and 2% had no response.

**Question 26: How important do you think the following activities are for the CCCGA?  
(Public relations)**

**How important do you think the following activities are for the CCCGA? (Public relations)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	103	50.2	50.2	50.2
	Somewhat important	79	38.5	38.5	88.8
	Somewhat unimportant	11	5.4	5.4	94.1
	Very unimportant	6	2.9	2.9	97.1
	Don't know	4	2.0	2.0	99.0
	No response	2	1.0	1.0	100.0
	Total	205	100.0	100.0	

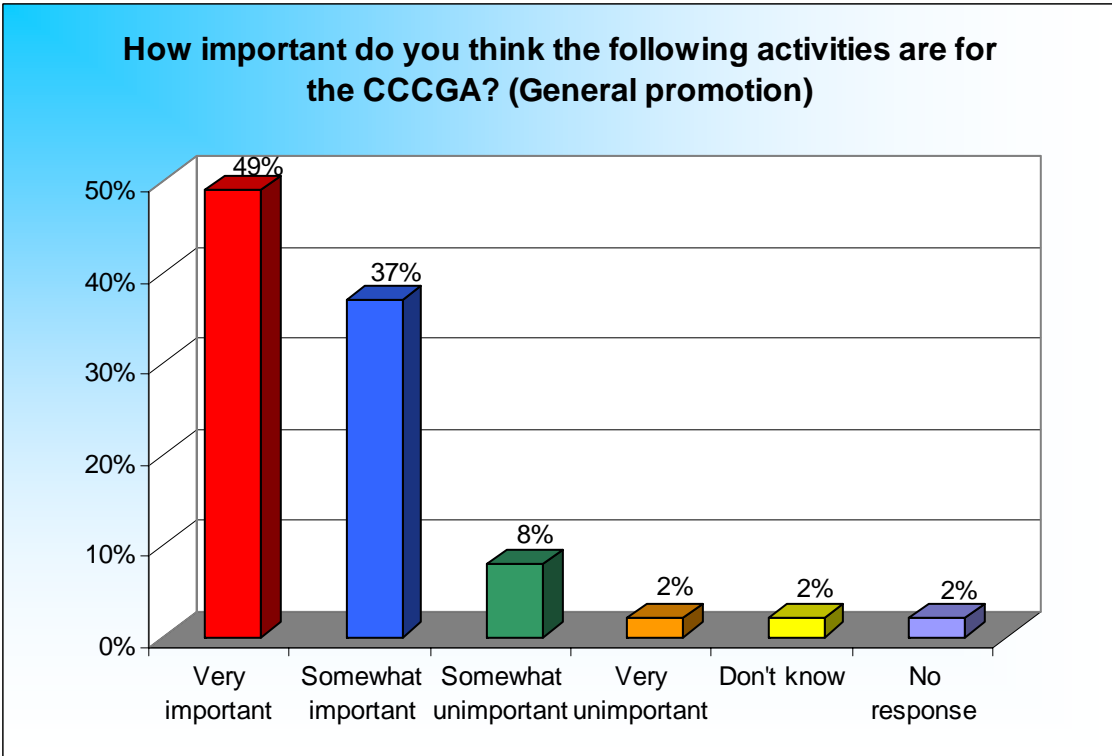


Fifty percent of the growers feel that public relations is a very important activity for the CCCGA, 39% feel it is somewhat important, 5% feel it is somewhat unimportant, 3% feel it is very unimportant, 2% do not know and 1% had no response.

**Question 26: How important do you think the following activities are for the CCCGA?  
(General promotion)**

**How important do you think the following activities are for the CCCGA?  
(General promotion)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	100	48.8	48.8	48.8
	Somewhat important	76	37.1	37.1	85.9
	Somewhat unimportant	17	8.3	8.3	94.1
	Very unimportant	5	2.4	2.4	96.6
	Don't know	4	2.0	2.0	98.5
	No response	3	1.5	1.5	100.0
	Total	205	100.0	100.0	

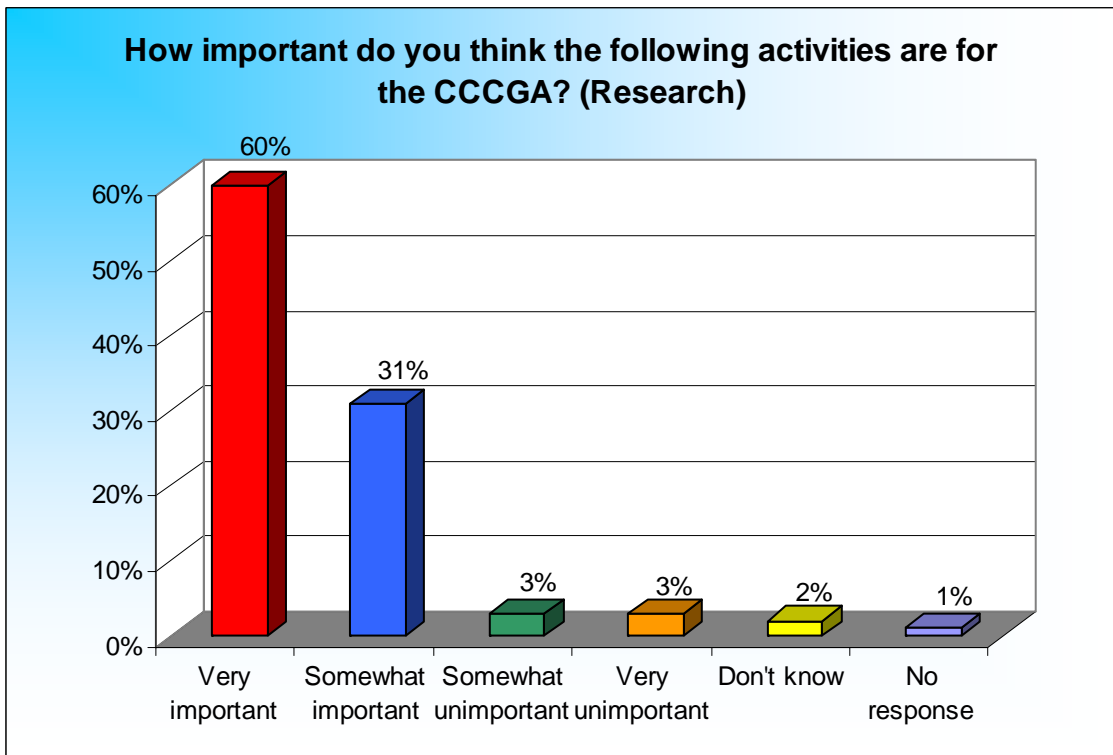


Forty-nine percent of the growers feel that general promotion is a very important activity for the CCCGA, 37% feel it is somewhat important, 8% feel it is somewhat unimportant, 2% feel it is very unimportant, 2% do not know and 2% had no response.

**Question 26: How important do you think the following activities are for the CCCGA? (Research)**

**How important do you think the following activities are for the CCCGA? (Research)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	123	60.0	60.0	60.0
	Somewhat important	63	30.7	30.7	90.7
	Somewhat unimportant	7	3.4	3.4	94.1
	Very unimportant	6	2.9	2.9	97.1
	Don't know	4	2.0	2.0	99.0
	No response	2	1.0	1.0	100.0
	Total	205	100.0	100.0	

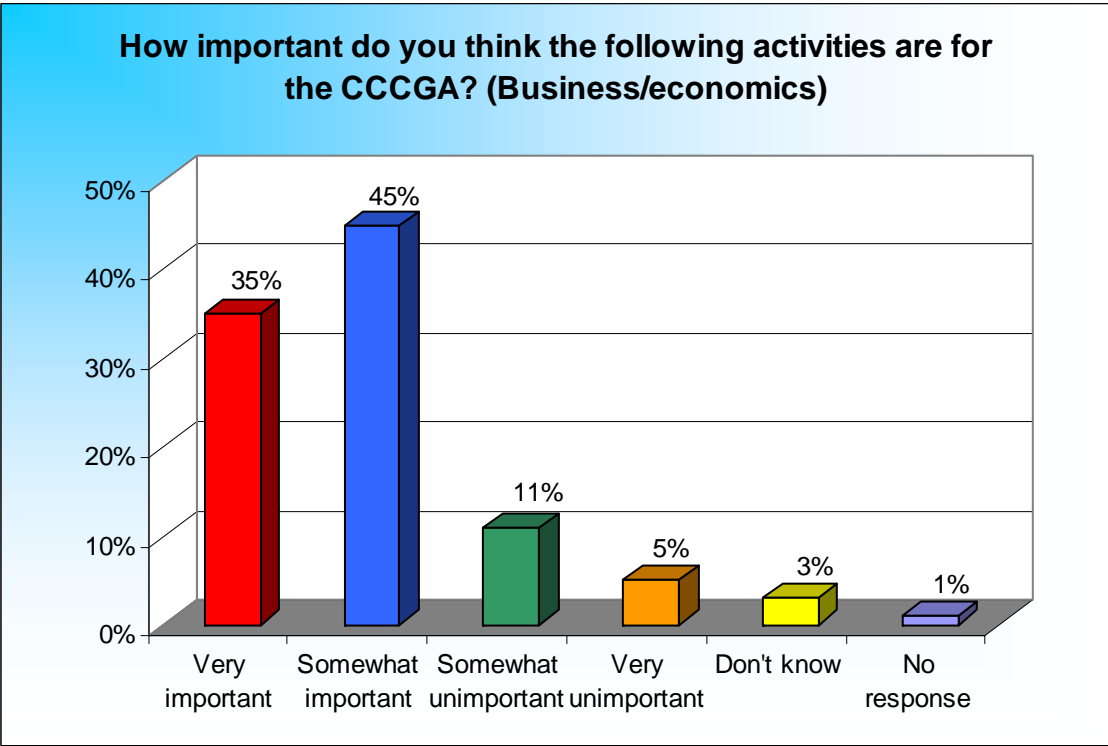


Sixty percent of the growers feel that research is a very important activity for the CCCGA, 31% feel it is somewhat important, 3% feel it is somewhat unimportant, 3% feel it is very unimportant, 2% do not know and 1% had no response.

**Question 26: How important do you think the following activities are for the CCCGA?  
(Business/economics)**

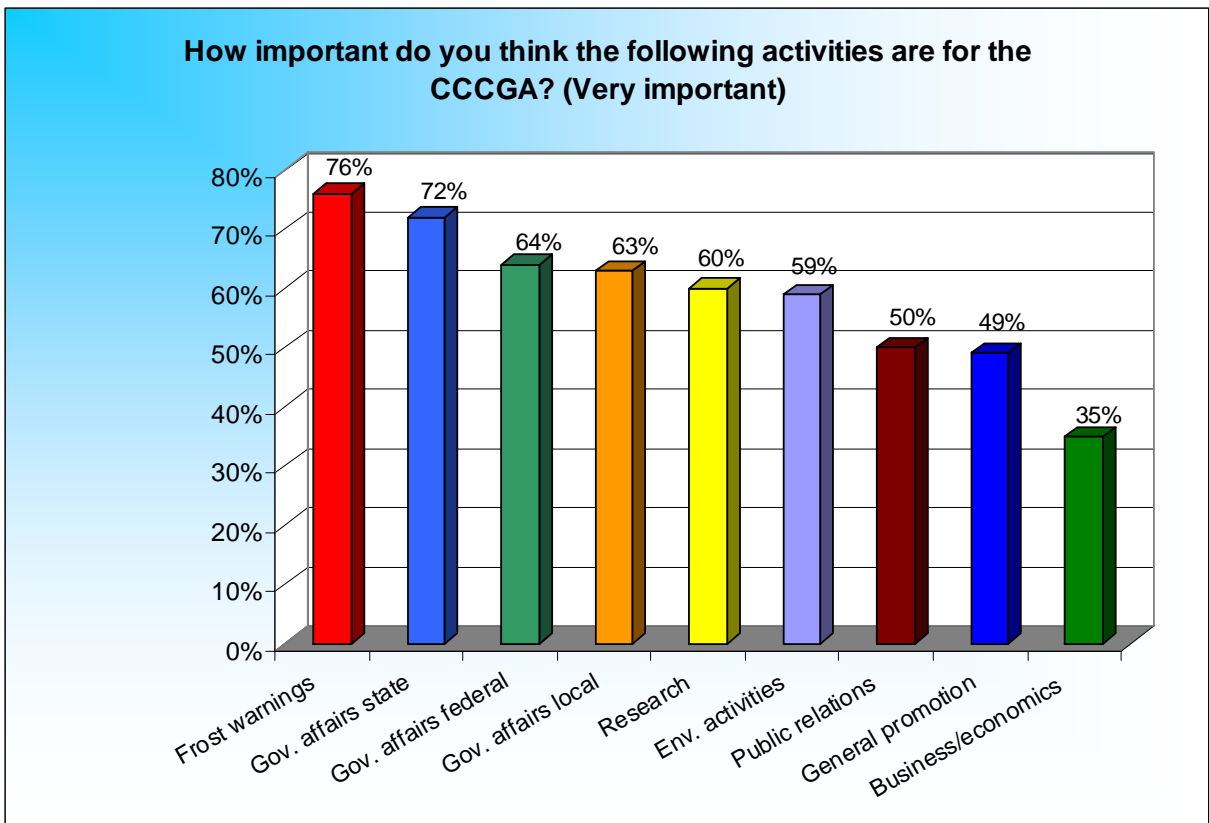
**How important do you think the following activities are for the CCCGA?  
(Business/economics)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	72	35.1	35.1	35.1
	Somewhat important	92	44.9	44.9	80.0
	Somewhat unimportant	22	10.7	10.7	90.7
	Very unimportant	10	4.9	4.9	95.6
	Don't know	7	3.4	3.4	99.0
	No response	2	1.0	1.0	100.0
	Total	205	100.0	100.0	



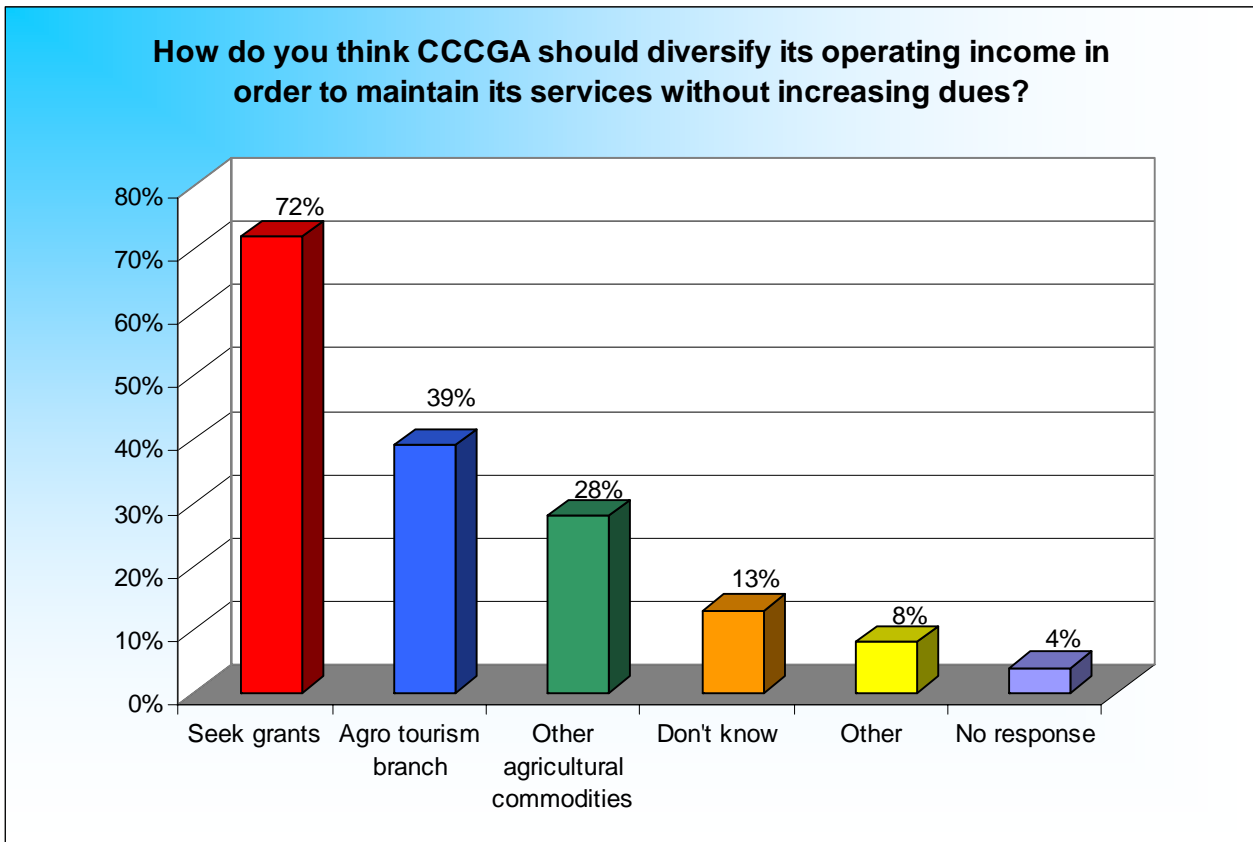
Thirty-five percent of the growers feel that business/economics is a very important activity for the CCCGA, 45% feel it is somewhat important, 11% feel it is somewhat unimportant, 5% feel it is very unimportant, 3% do not know and 1% had no response.

**Question 26:** How important do you think the following activities are for the CCCGA?  
(Very important)



The top three activities that growers feel are very important for the CCCGA are frost warnings (76%), government affairs at the state level (72%) and government affairs at the federal level (64%).

**Question 27:** How do you think CCCGA should diversify its operating income in order to maintain its services without increasing dues? (Check as many as apply)



Seventy-two percent of the growers think the CCCGA should diversify its operating income in order to maintain its services without increasing dues through seeking grants, 39% think they should diversify income through creating an agro tourism branch, 28% think they should diversify income through representing other agricultural commodities, 13% do not know, 8% think something other\* than those listed and 4% had no response.

\* Please refer to the next page for a list of other responses.

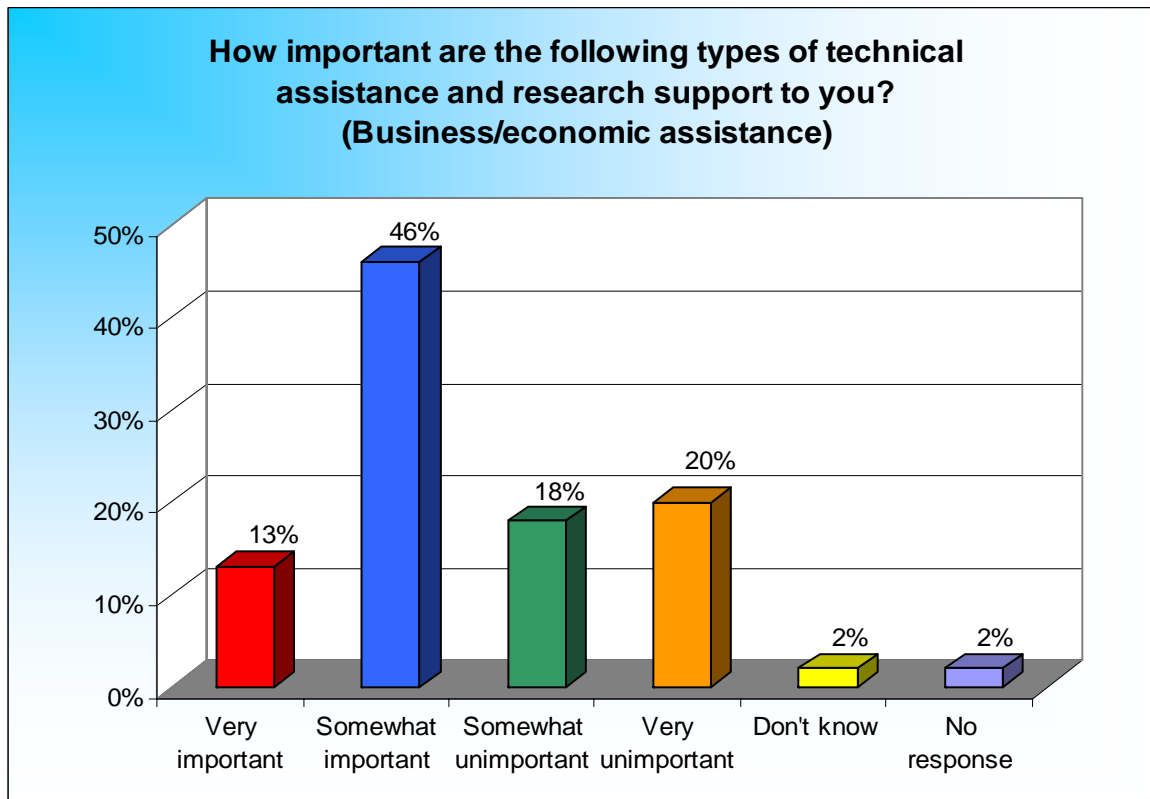
**Question 27:** How do you think CCCGA should diversify its operating income in order to maintain its services without increasing dues? (Other)

	<b>Frequency of Responses</b>
Increase dues	4
Festivals	2
Advertise	1
Be more available to the public	1
Become closer with Ocean Spray	1
Buy their own bogs	1
Corporate partnerships	1
Diversify and generate income from different sources	1
Increase membership of more growers	1
Open new markets	1
Represent peach plums	1
Stay with cranberry growers	1
<b>Total Responses</b>	<hr/> <b>16</b>

**Question 28:** How important are the following types of technical assistance and research support to you? (Business/economic assistance)

**How important are the following types of technical assistance and research support to you? (Business/economic assistance)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	27	13.2	13.2	13.2
	Somewhat important	94	45.9	45.9	59.0
	Somewhat unimportant	37	18.0	18.0	77.1
	Very unimportant	40	19.5	19.5	96.6
	Don't know	3	1.5	1.5	98.0
	No response	4	2.0	2.0	100.0
	Total	205	100.0	100.0	

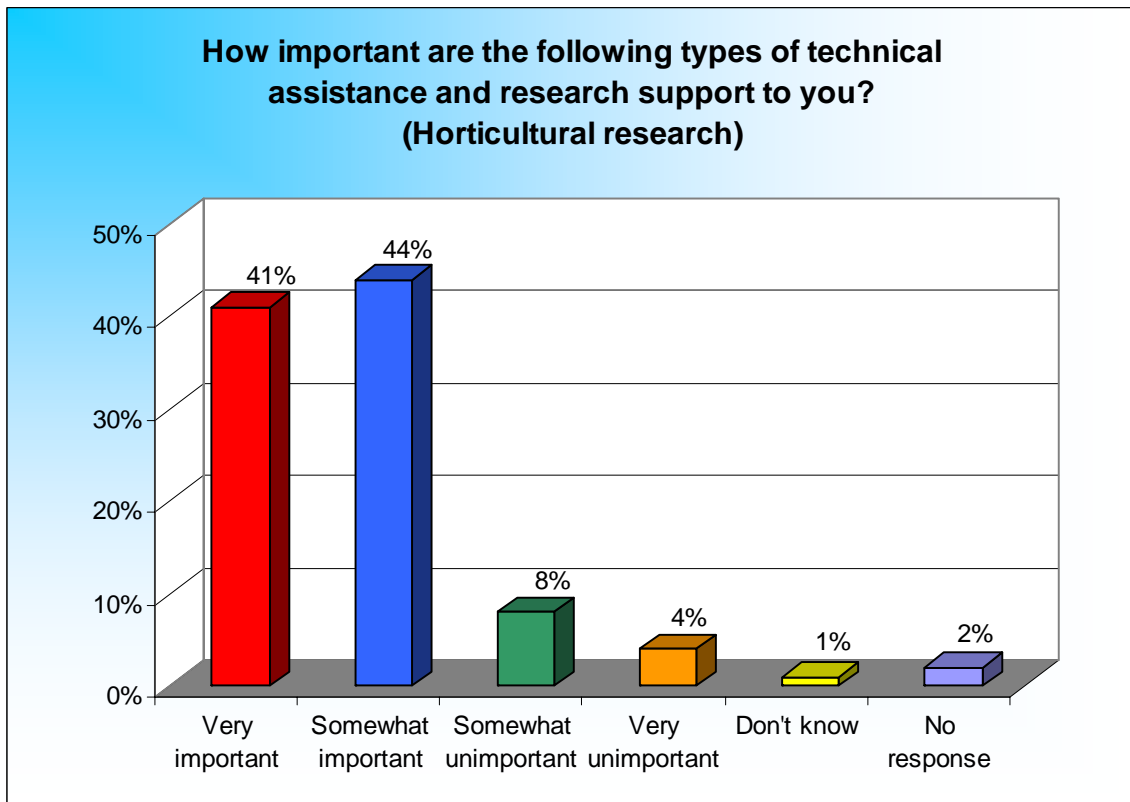


Thirteen percent of the growers feel business/economic assistance is very important to them, 46% feel it is somewhat important, 18% feel it somewhat unimportant, 20% feel it is very unimportant, 2% do not know and 2% had no response.

**Question 28:** How important are the following types of technical assistance and research support to you? (Horticultural research)

**How important are the following types of technical assistance and research support to you? (Horticultural research)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very important	84	41.0	41.0	41.0
Somewhat important	90	43.9	43.9	84.9
Somewhat unimportant	16	7.8	7.8	92.7
Very unimportant	9	4.4	4.4	97.1
Don't know	2	1.0	1.0	98.0
No response	4	2.0	2.0	100.0
Total	205	100.0	100.0	

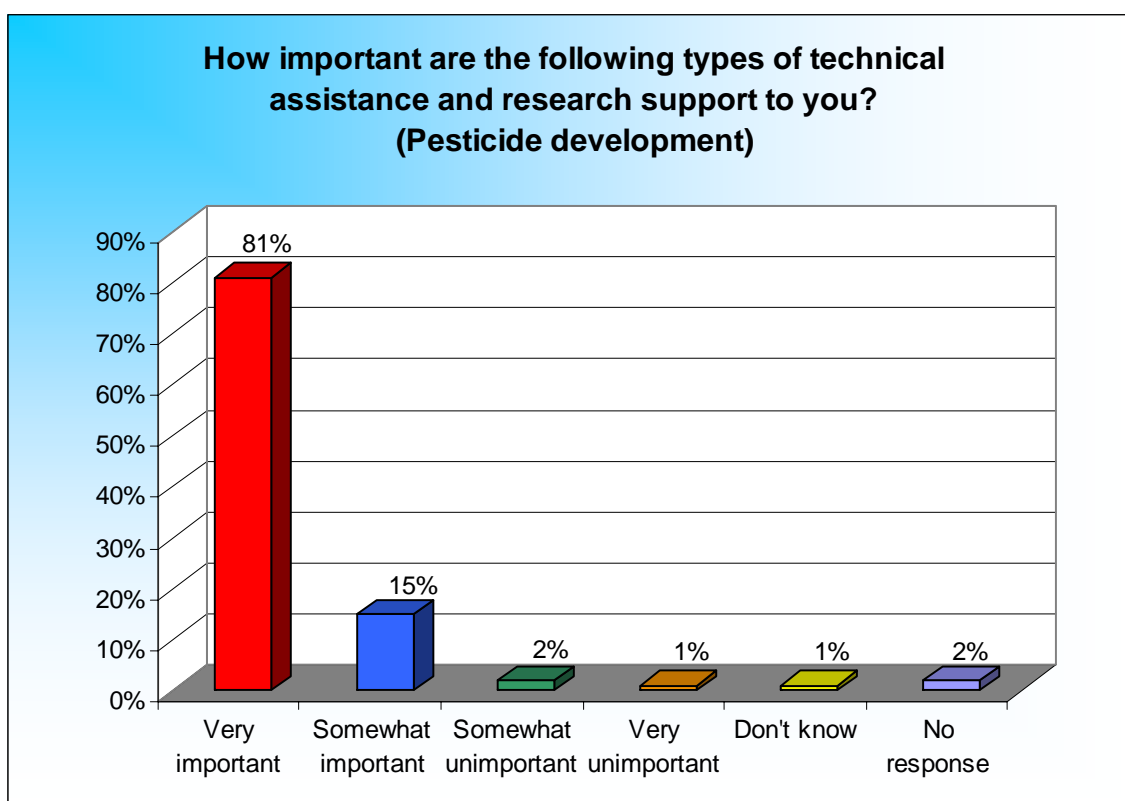


Forty-one percent of the growers feel horticultural research is very important to them, 44% feel it is somewhat important, 8% feel it is somewhat unimportant, 4% feel it is very unimportant, 1% do not know and 2% had no response.

**Question 28:** How important are the following types of technical assistance and research support to you? (Pesticide development)

**How important are the following types of technical assistance and research support to you? (Pesticide development)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	165	80.5	80.5	80.5
	Somewhat important	31	15.1	15.1	95.6
	Somewhat unimportant	3	1.5	1.5	97.1
	Very unimportant	2	1.0	1.0	98.0
	Don't know	1	.5	.5	98.5
	No response	3	1.5	1.5	100.0
	Total	205	100.0	100.0	

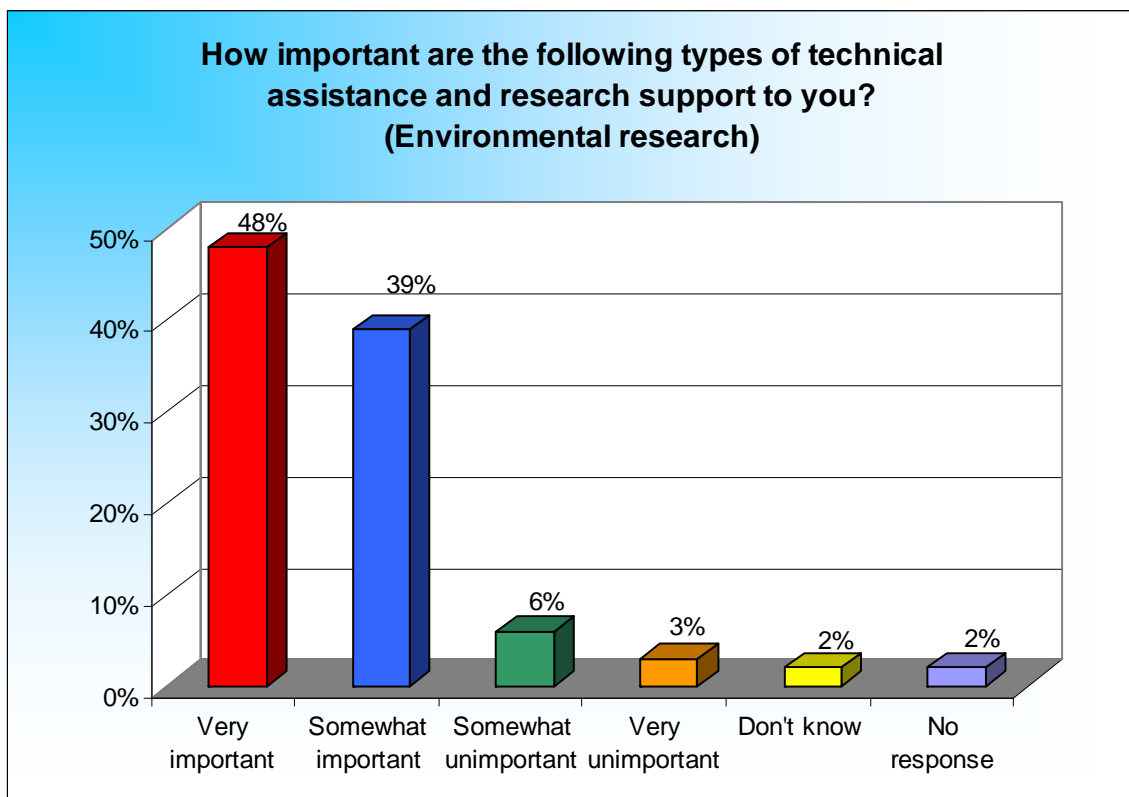


Eighty-one percent of the growers feel that pesticide development is very important to them, 15% feel it is somewhat important, 2% feel it is somewhat unimportant, 1% feel it is very unimportant, 1% do not know and 2% had no response.

**Question 28:** How important are the following types of technical assistance and research support to you? (Environmental research)

**How important are the following types of technical assistance and research support to you? (Environmental research)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	99	48.3	48.3	48.3
	Somewhat important	80	39.0	39.0	87.3
	Somewhat unimportant	12	5.9	5.9	93.2
	Very unimportant	7	3.4	3.4	96.6
	Don't know	3	1.5	1.5	98.0
	No response	4	2.0	2.0	100.0
	Total	205	100.0	100.0	

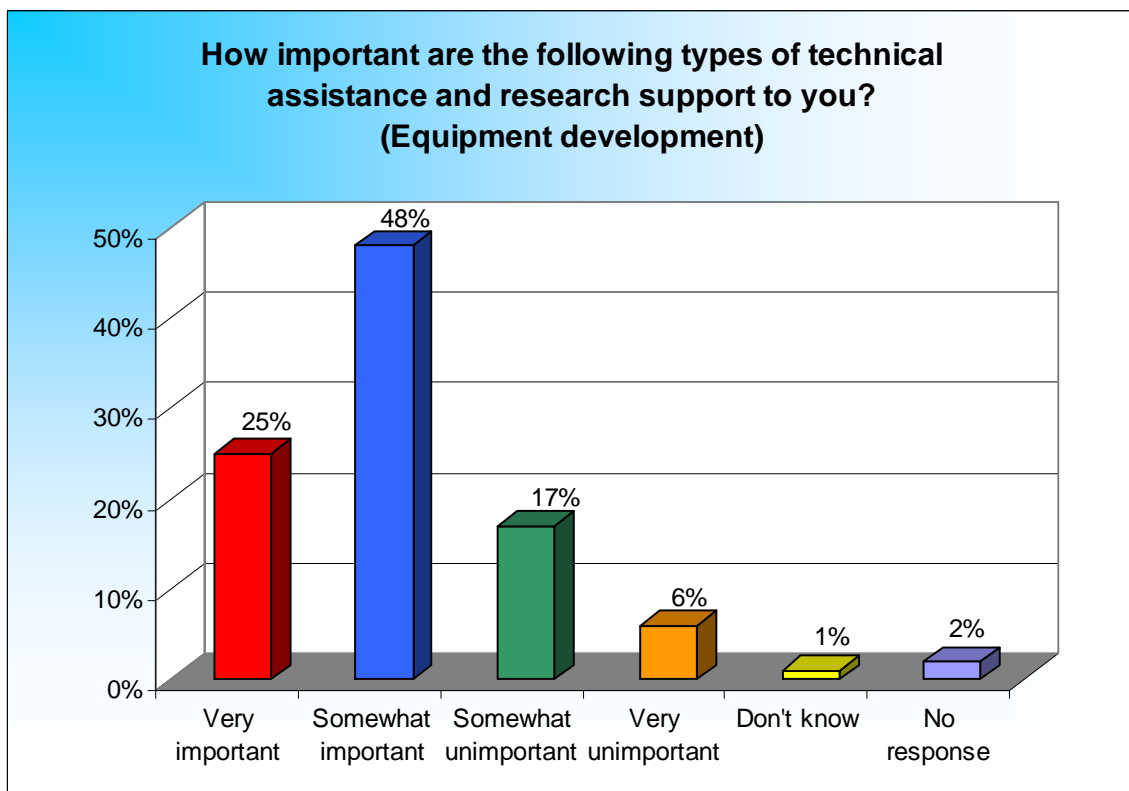


Forty-eight percent of the growers feel that environmental research is very important to them, 39% feel it is somewhat important, 6% feel it is somewhat unimportant, 3% feel it is very unimportant, 2% do not know and 2% had no response.

**Question 28:** How important are the following types of technical assistance and research support to you? (Equipment development)

**How important are the following types of technical assistance and research support to you? (Equipment development)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very important	52	25.4	25.4	25.4
Somewhat important	99	48.3	48.3	73.7
Somewhat unimportant	35	17.1	17.1	90.7
Very unimportant	13	6.3	6.3	97.1
Don't know	2	1.0	1.0	98.0
No response	4	2.0	2.0	100.0
Total	205	100.0	100.0	

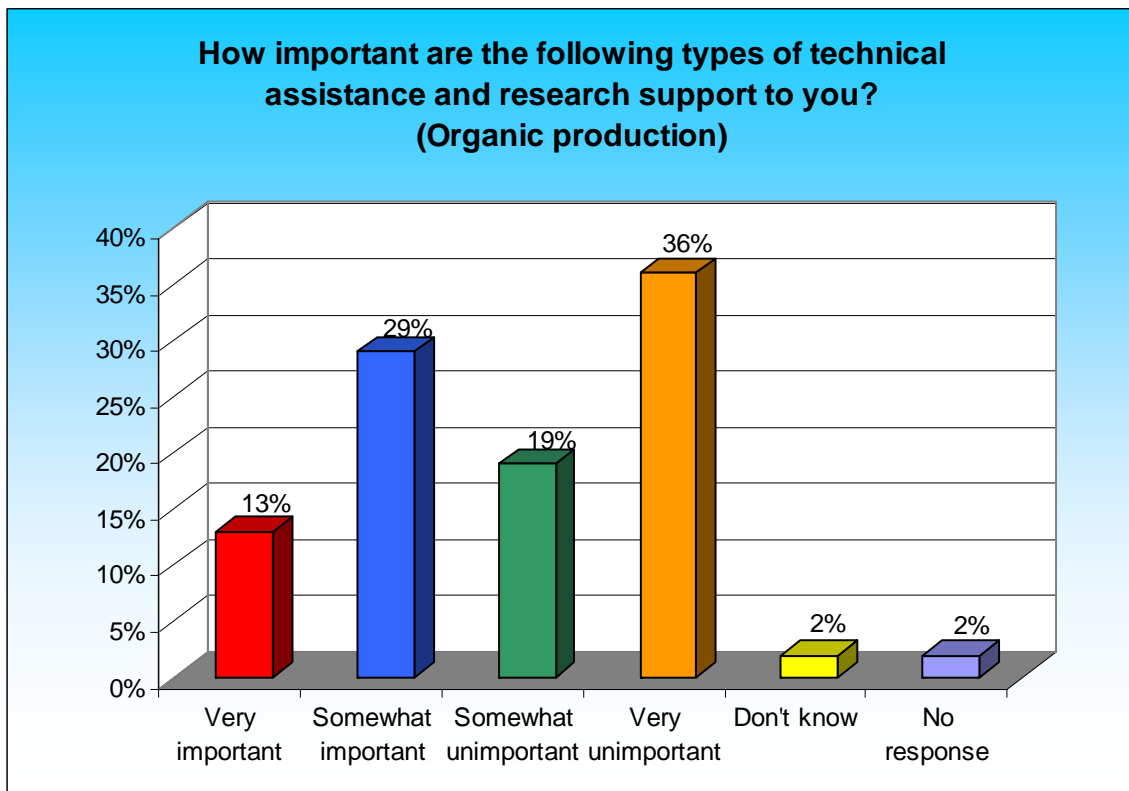


Twenty-five percent of the growers feel that equipment development is very important to them, 48% feel it is somewhat important, 17% feel it is somewhat unimportant, 6% feel it is very unimportant, 1% do not know and 2% had no response.

**Question 28:** How important are the following types of technical assistance and research support to you? (Organic production)

**How important are the following types of technical assistance and research support to you? (Organic production)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very important	26	12.7	12.7	12.7
Somewhat important	59	28.8	28.8	41.5
Somewhat unimportant	39	19.0	19.0	60.5
Very unimportant	74	36.1	36.1	96.6
Don't know	4	2.0	2.0	98.5
No response	3	1.5	1.5	100.0
Total	205	100.0	100.0	

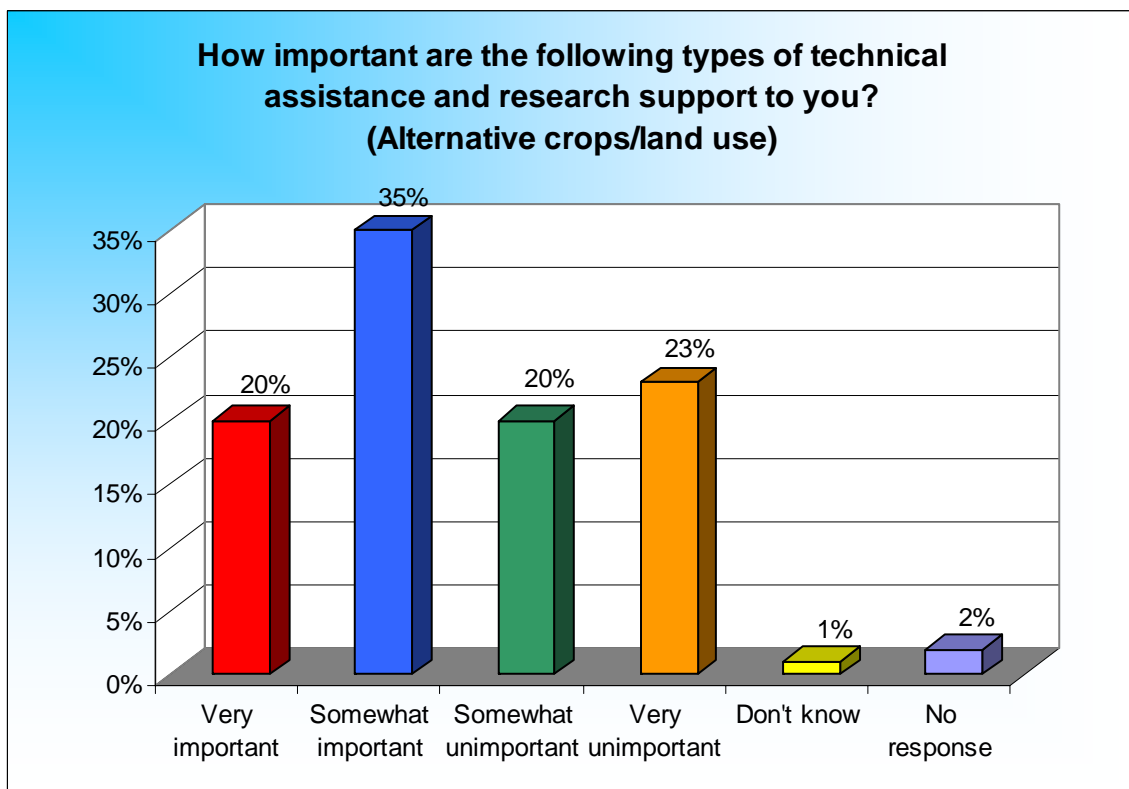


Thirteen percent of the growers feel that organic production is very important to them, 29% feel it is somewhat important, 19% feel it is somewhat unimportant, 36% feel it is very unimportant, 2% do not know and 2% had no response.

**Question 28:** How important are the following types of technical assistance and research support to you? (Alternative crops/land use)

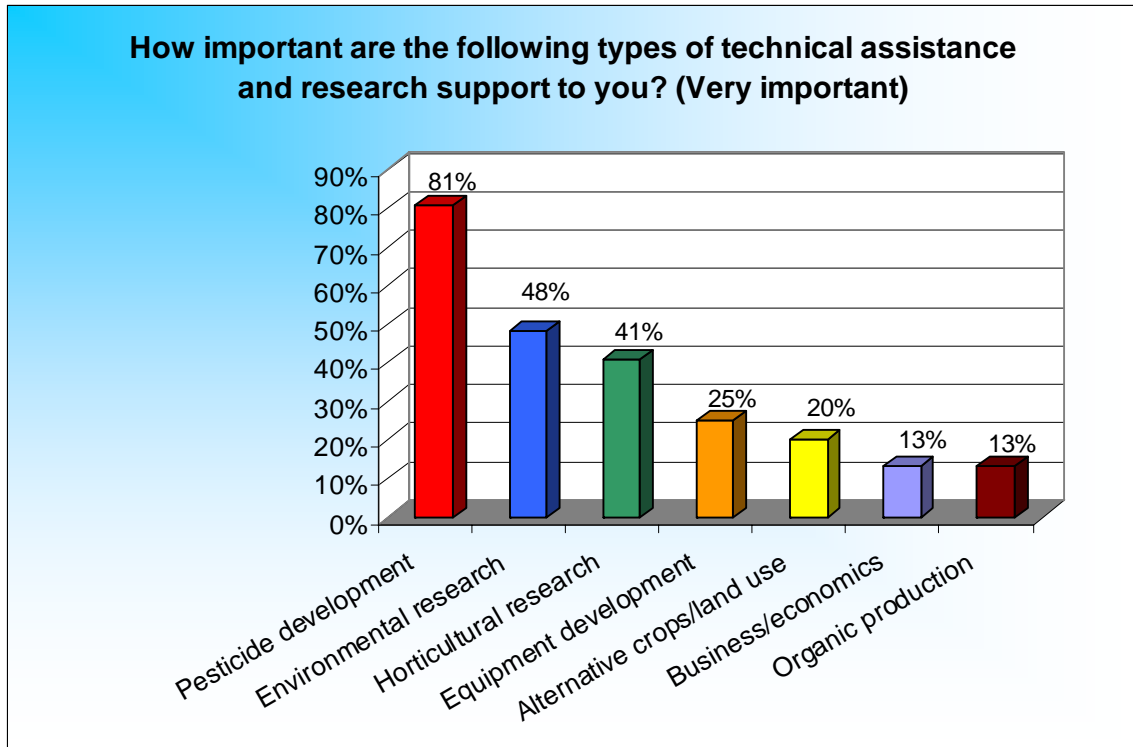
**How important are the following types of technical assistance and research support to you? (Alternative crops/land use)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	40	19.5	19.5	19.5
	Somewhat important	71	34.6	34.6	54.1
	Somewhat unimportant	40	19.5	19.5	73.7
	Very unimportant	48	23.4	23.4	97.1
	Don't know	2	1.0	1.0	98.0
	No response	4	2.0	2.0	100.0
	Total	205	100.0	100.0	



Twenty percent of the growers feel that alternative crop/land use is very important to them, 35% feel it is somewhat important, 20% feel it is somewhat unimportant, 23% feel it is very unimportant, 1% do not know and 2% had no response.

**Question 28:** How important are the following types of technical assistance and research support to you? (Very important)



The top three types of technical assistance and research support that are very important to the growers are pesticide development (81%), environmental research (48%) and horticultural research (41%).

<b>Additional comments?</b>
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**Ocean Spray**

- “Have agreement with Ocean Spray”
- “Sell to Ocean Spray”

**Diversification**

- “Already diversify into value added products and agro tourism”
- “Already diversify into pick your own strawberries”

**Renovating**

- “Already renovating 7 acres of cranberry, 5 acres of blueberry and 7 acres of Christmas trees”
- “Planning to add at least 50 acres in the next 10 years”
- “Looking to buy more acres but its too expensive”

**Organic**

- “We have an organic bog”
- “Really excited about organic farming”

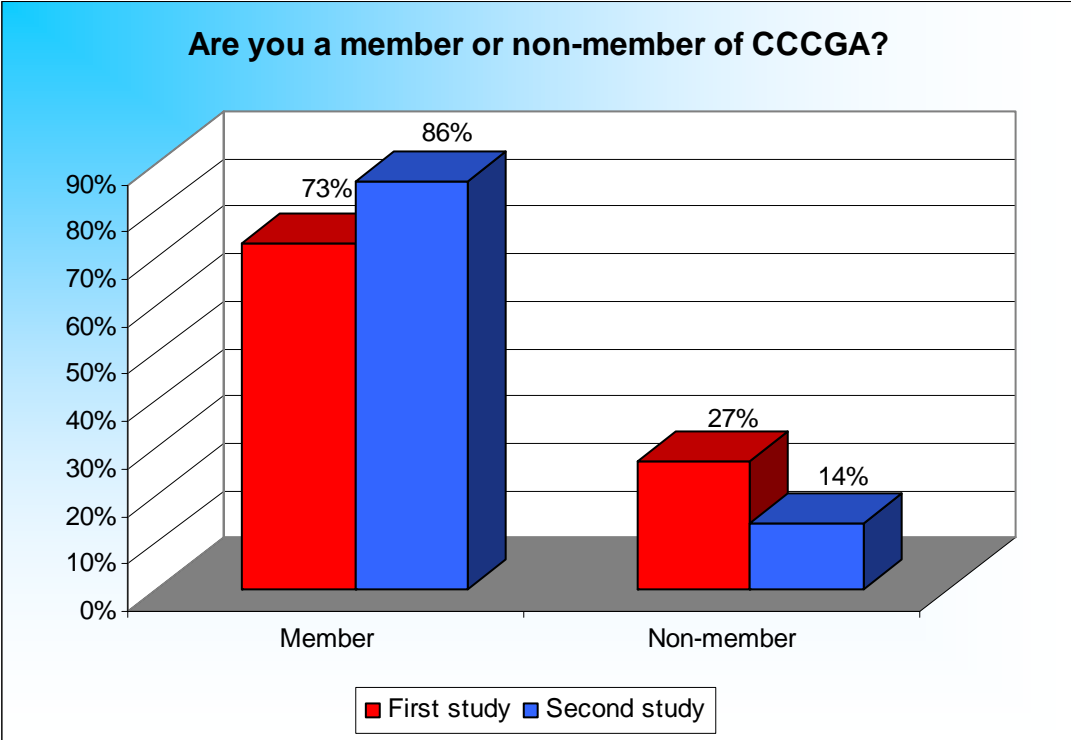
**Leasing and Loans**

- “Lease bog with 10 year option to buy”
- “Lease out the farm”
- “Need more information on interest loan programs”

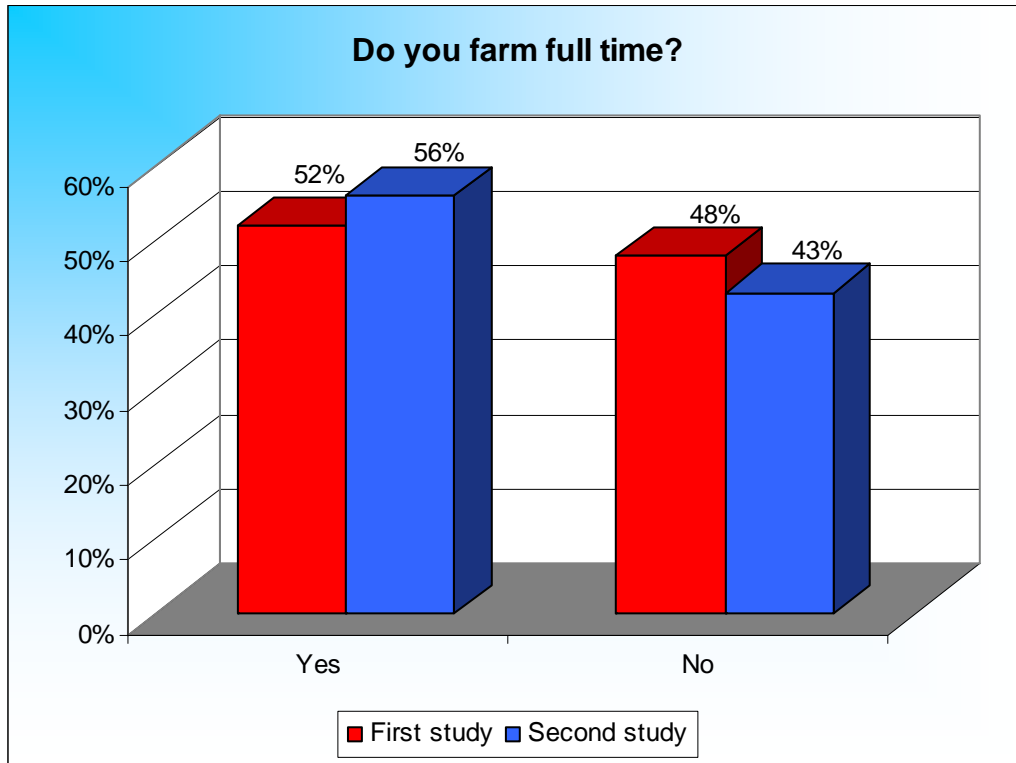
**Interests**

- “Interested in solar farming”
- “Interested in tail water recovery system”
- “Interested in flax-seed but need more information”

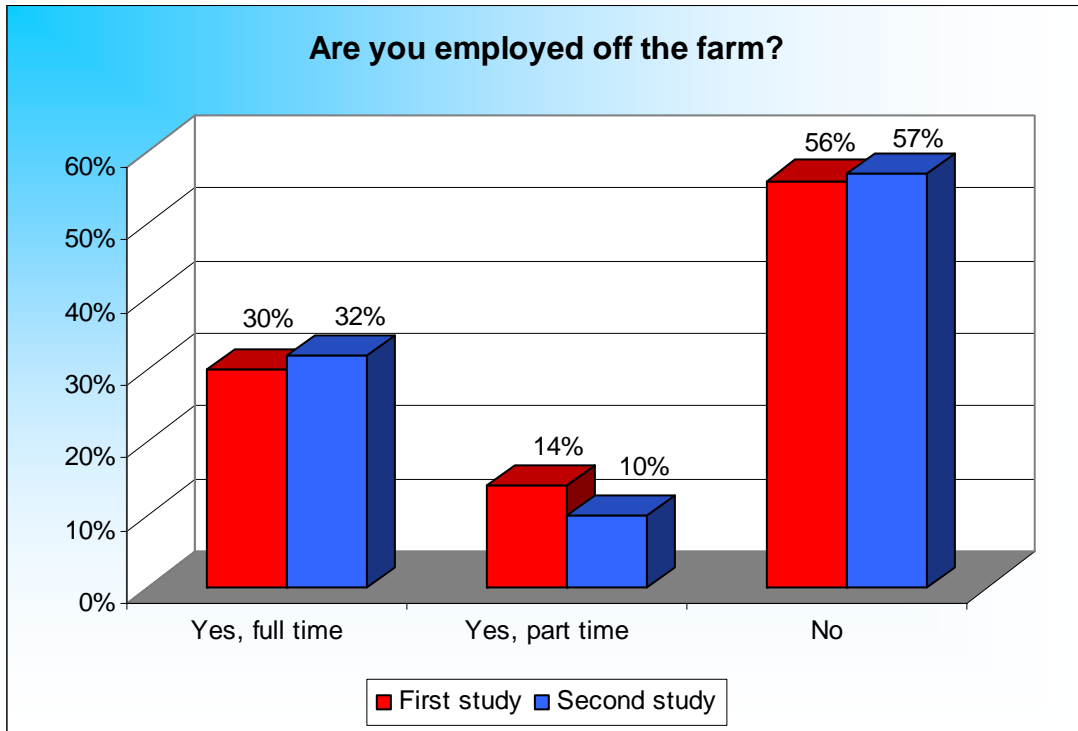
**Are you a member or non-member of CCCGA?**



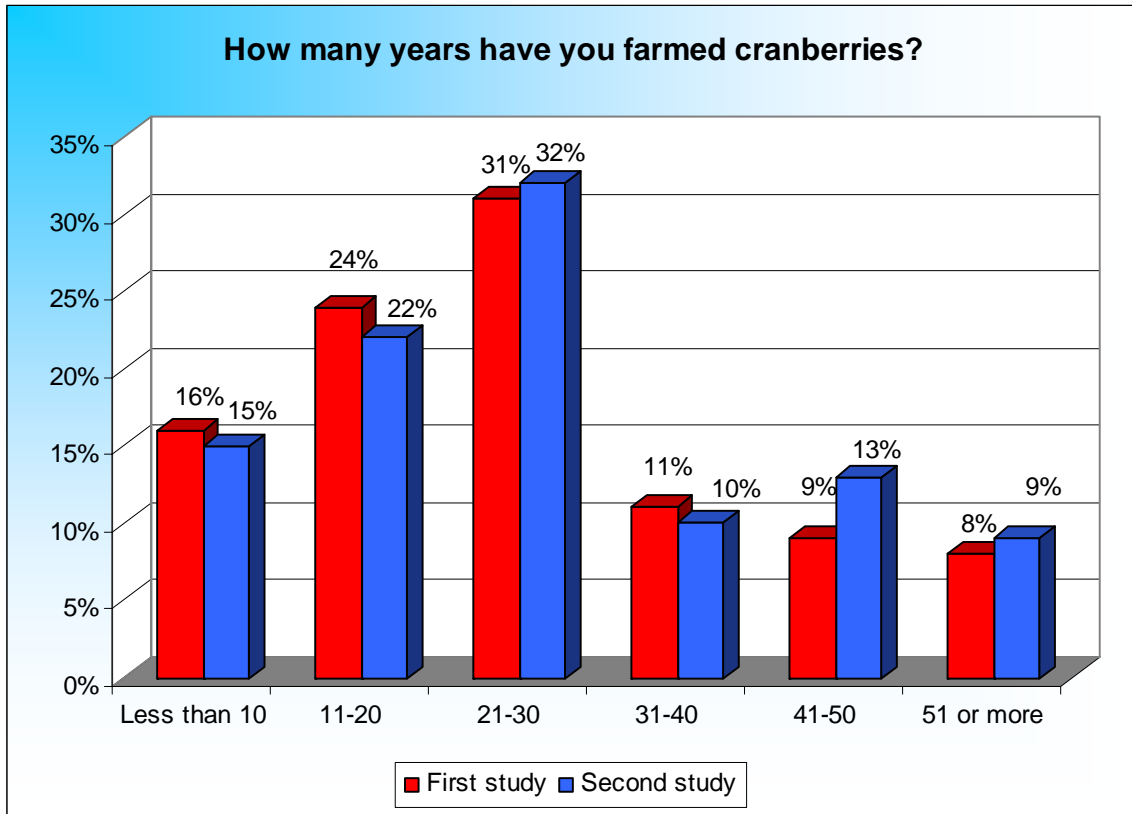
**Do you farm full time?**



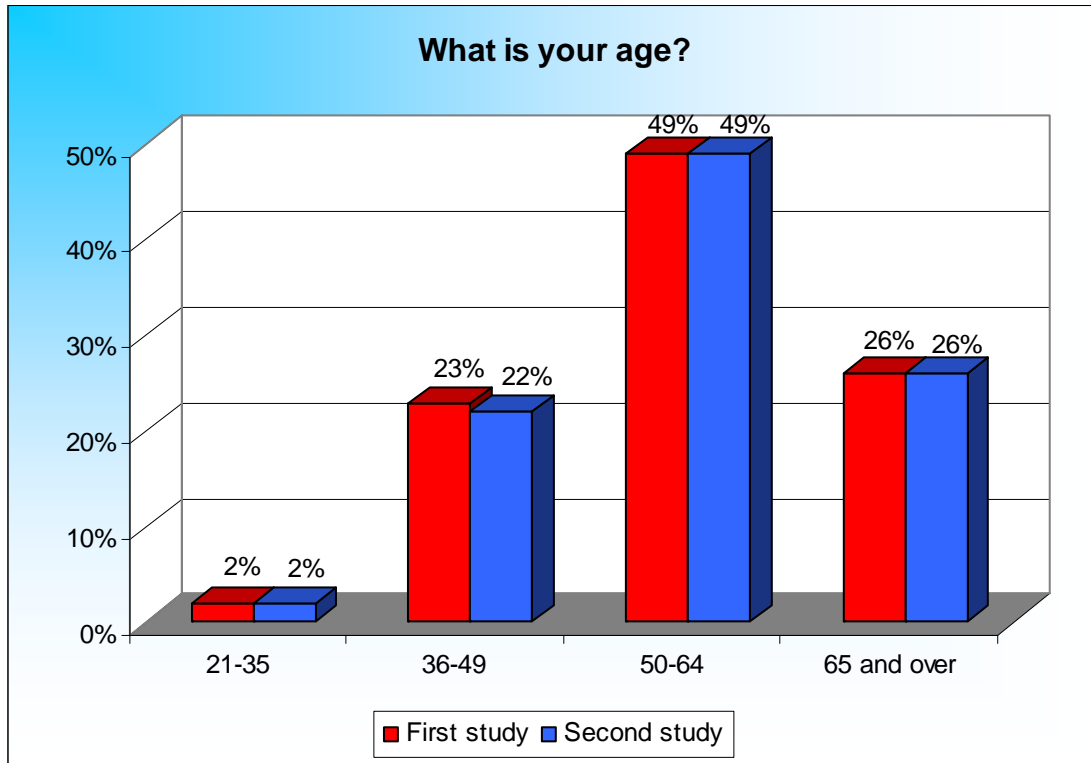
**Are you employed off the farm?**



**How many years have you farmed cranberries?**

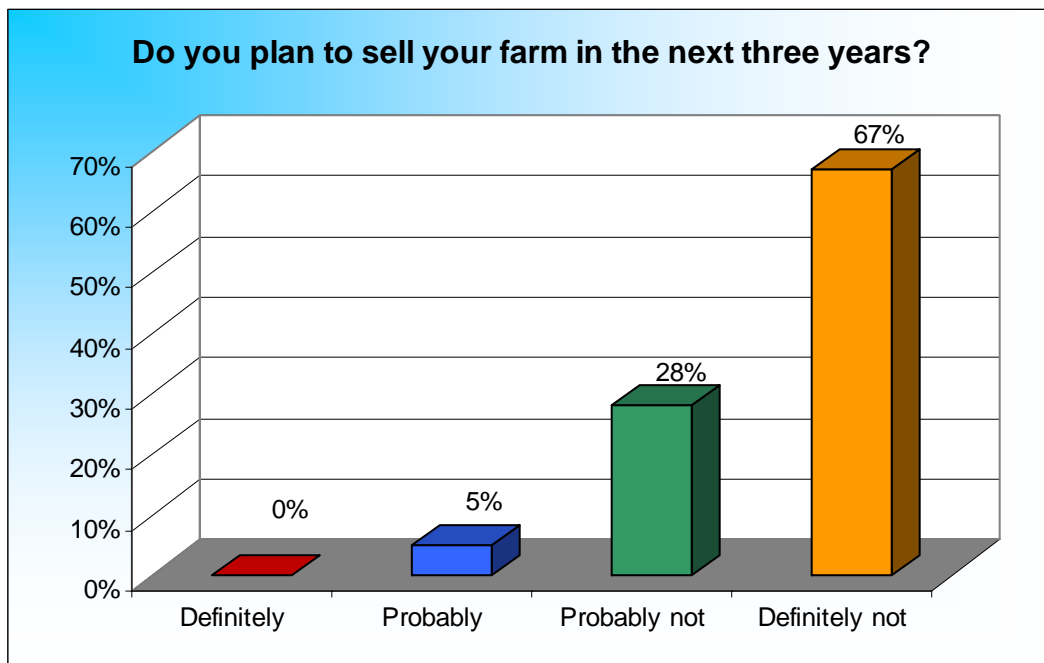


What is your age?

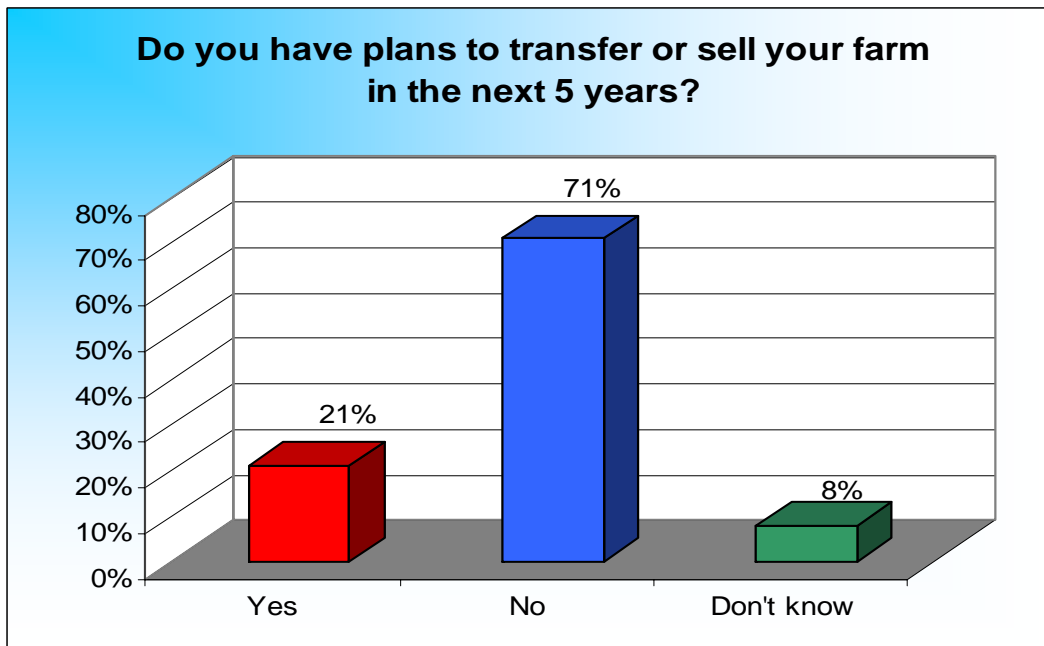


**Do you have plans to transfer or sell your farm in the next 5 years?**

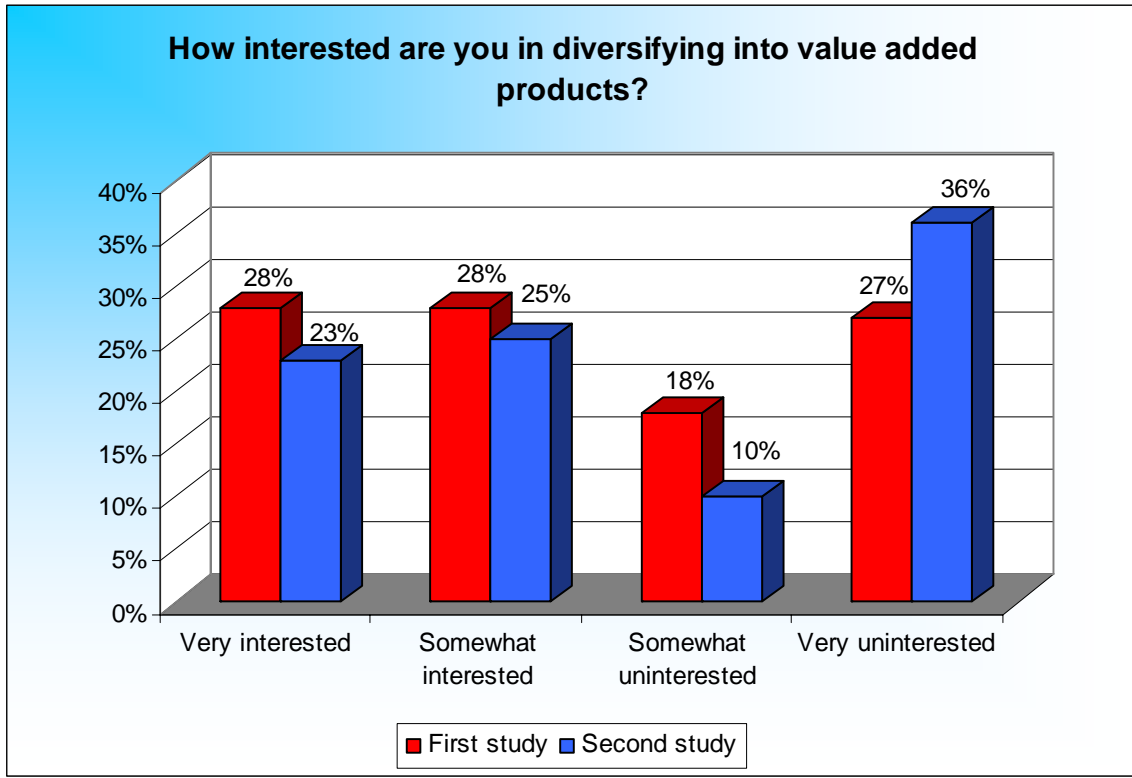
**First Study**



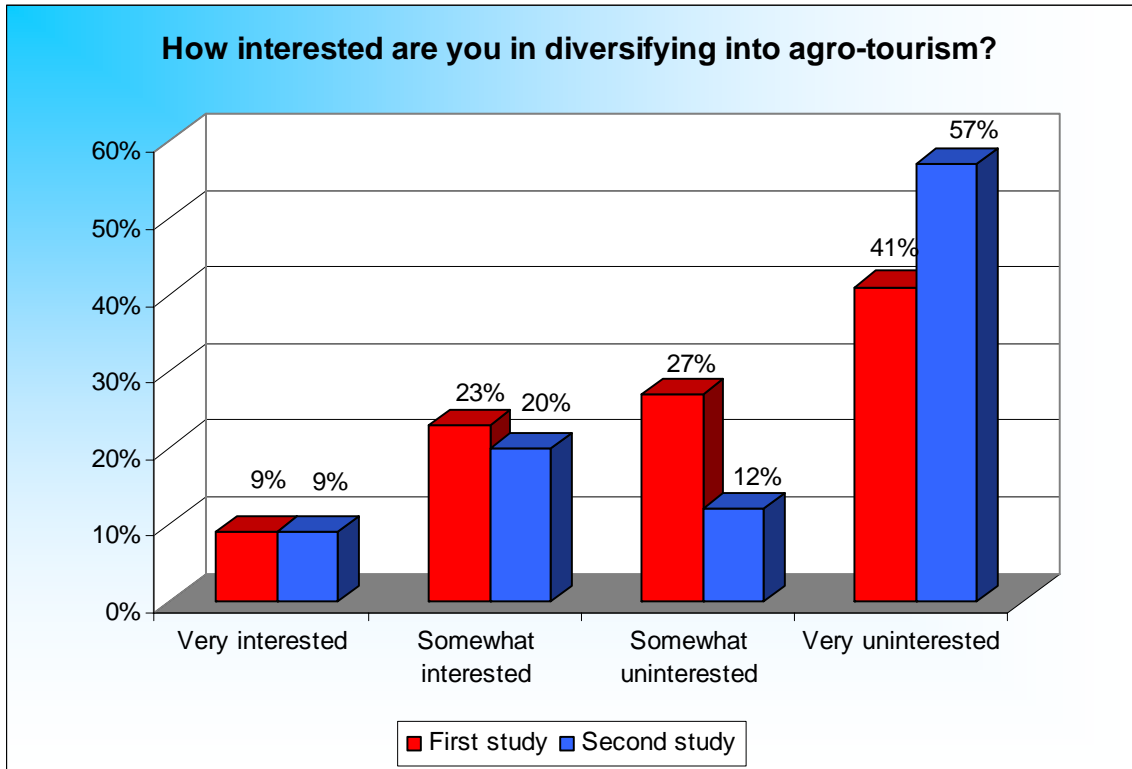
**Second study**



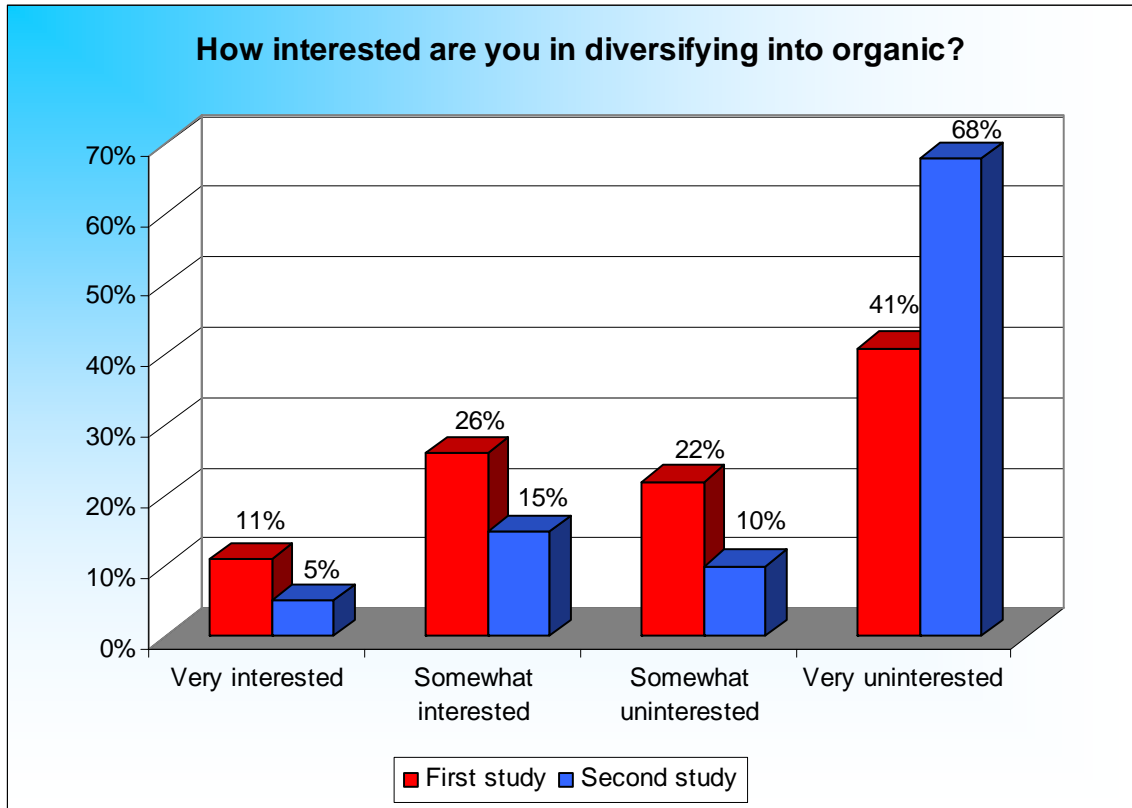
**How interested are you in diversifying into value added products?**



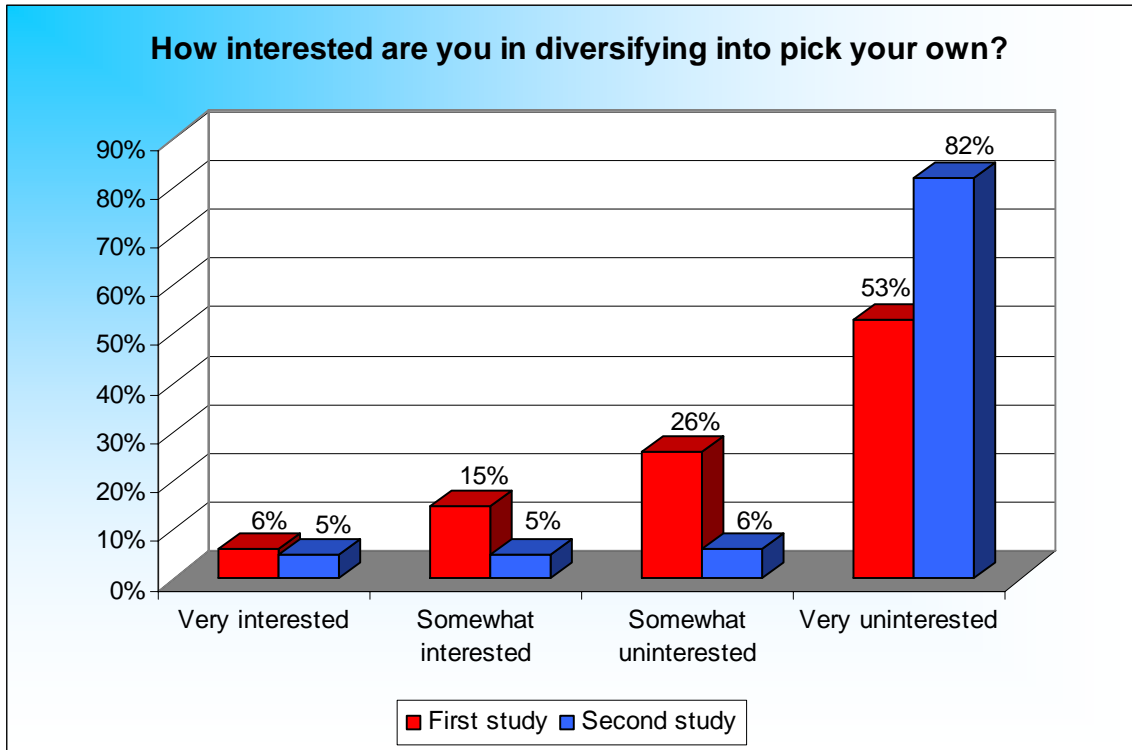
**How interested are you in diversifying into agro-tourism?**



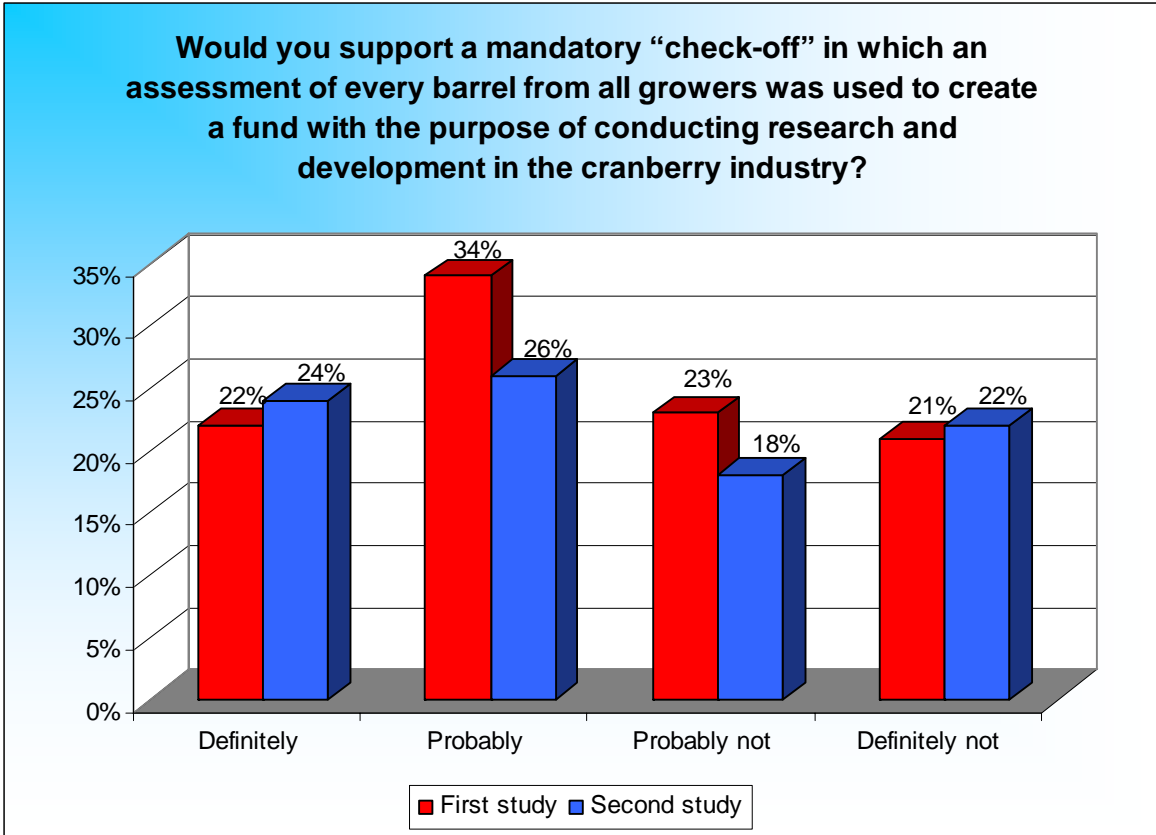
**How interested are you in diversifying into organic?**



**How interested are you in diversifying into pick your own?**

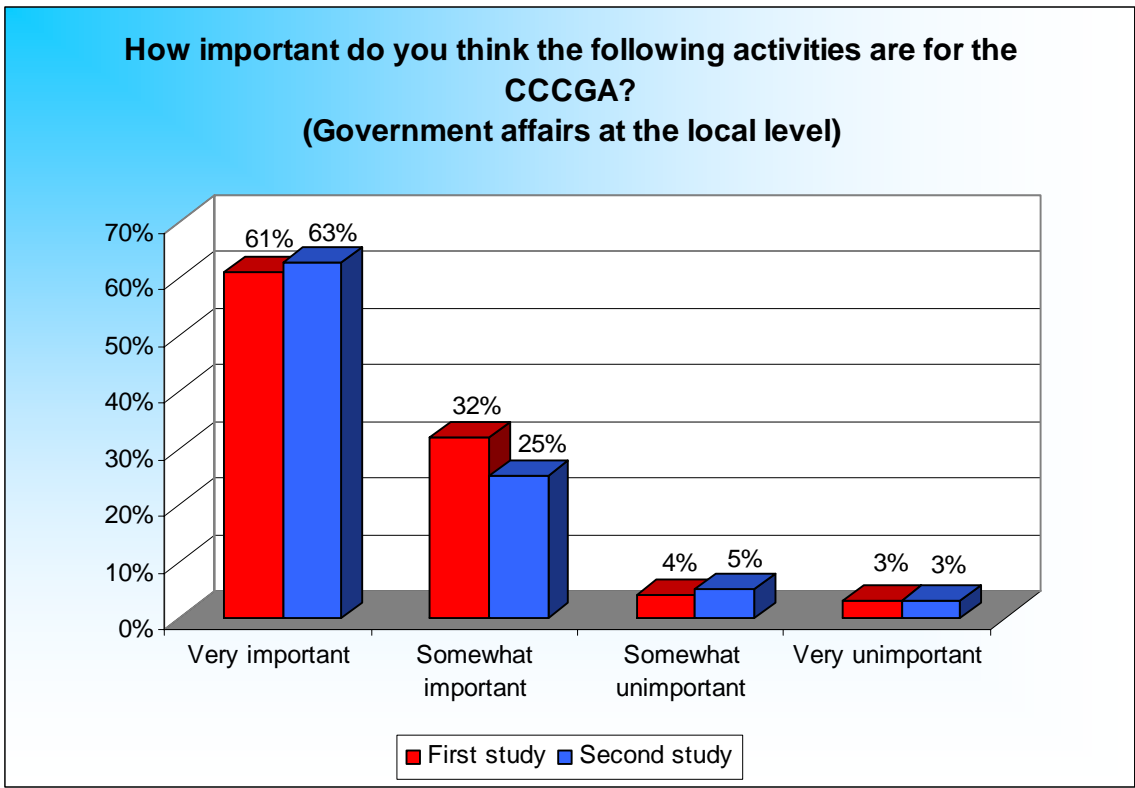


**Would you support a mandatory “check-off” in which an assessment of every barrel from all growers was used to create a fund with the purpose of conducting research and development in the cranberry industry?\***

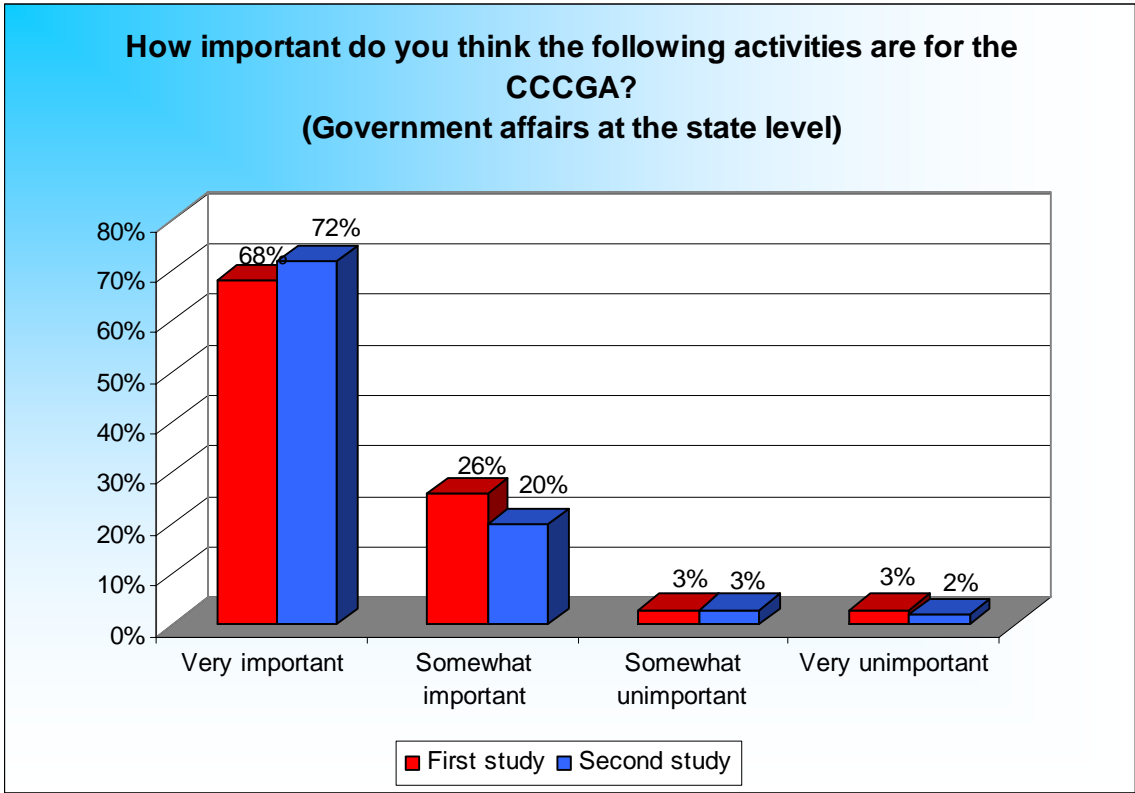


\* The purpose of the “check-off” stated in the 2003 study is “providing sustainable growth and development of the cranberry industry”.

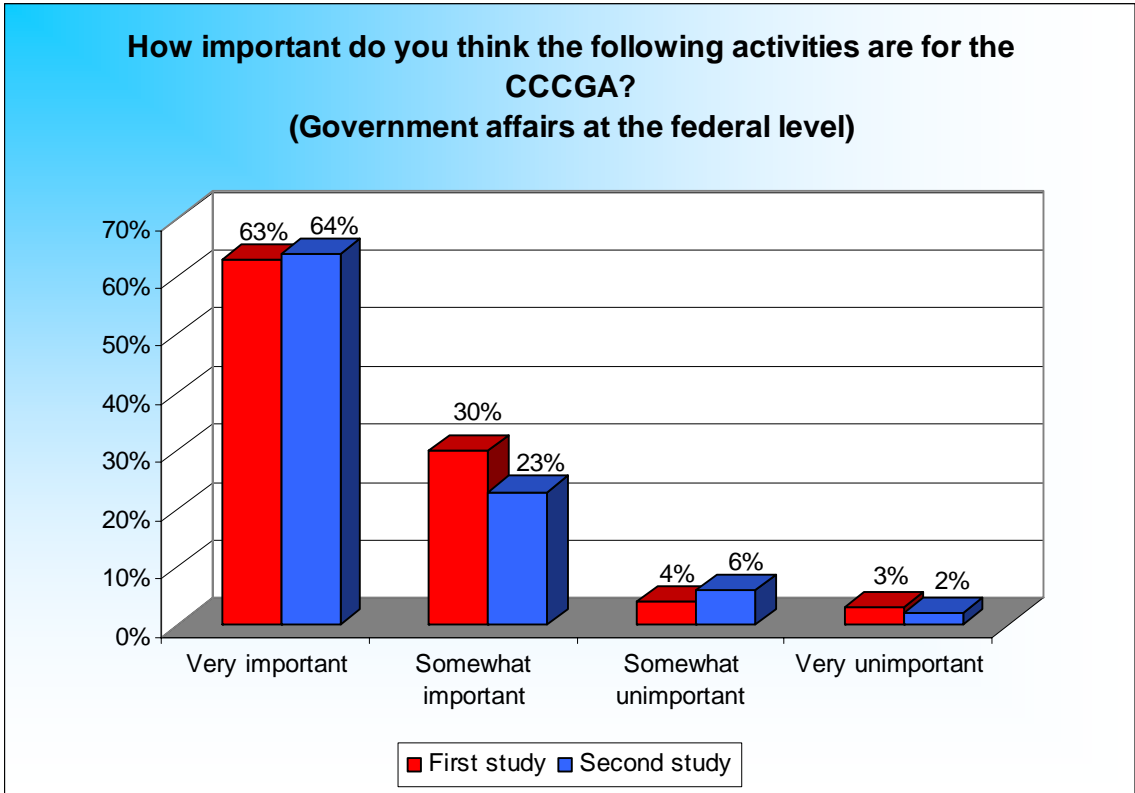
**How important do you think the following activities are for the CCCGA?  
(Government affairs at the local level)**



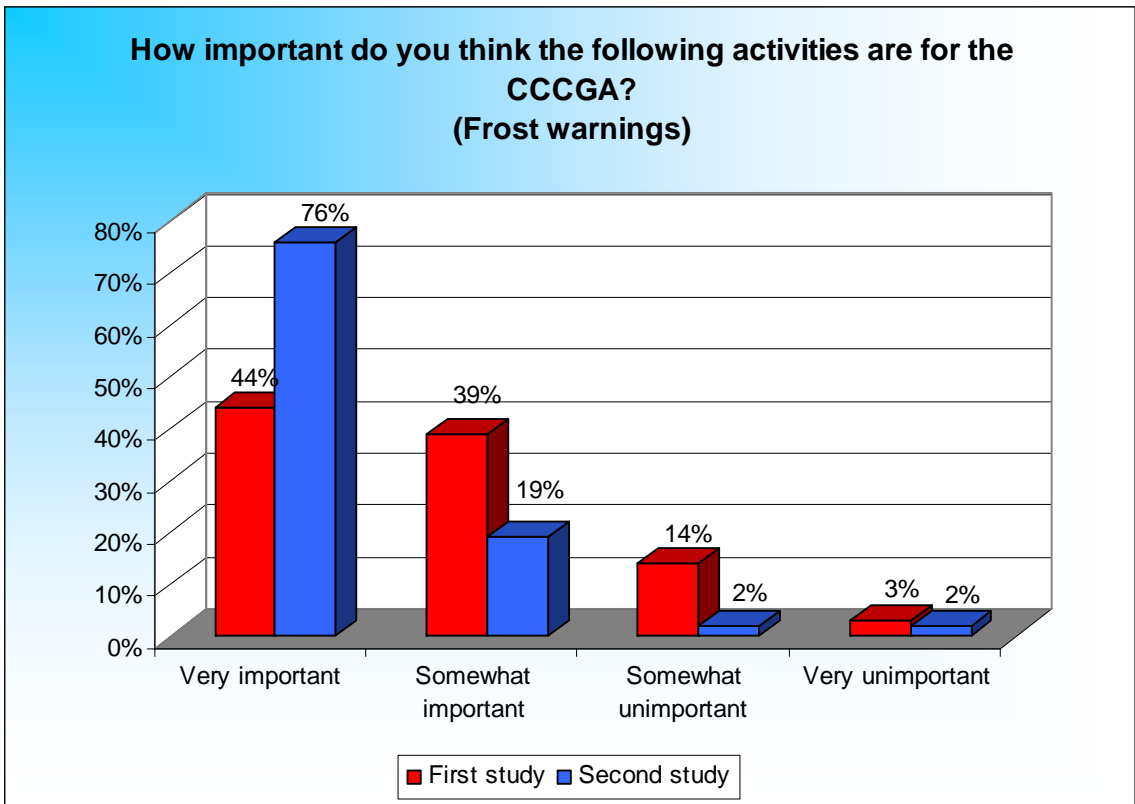
**How important do you think the following activities are for the CCCGA?  
(Government affairs at the state level)**



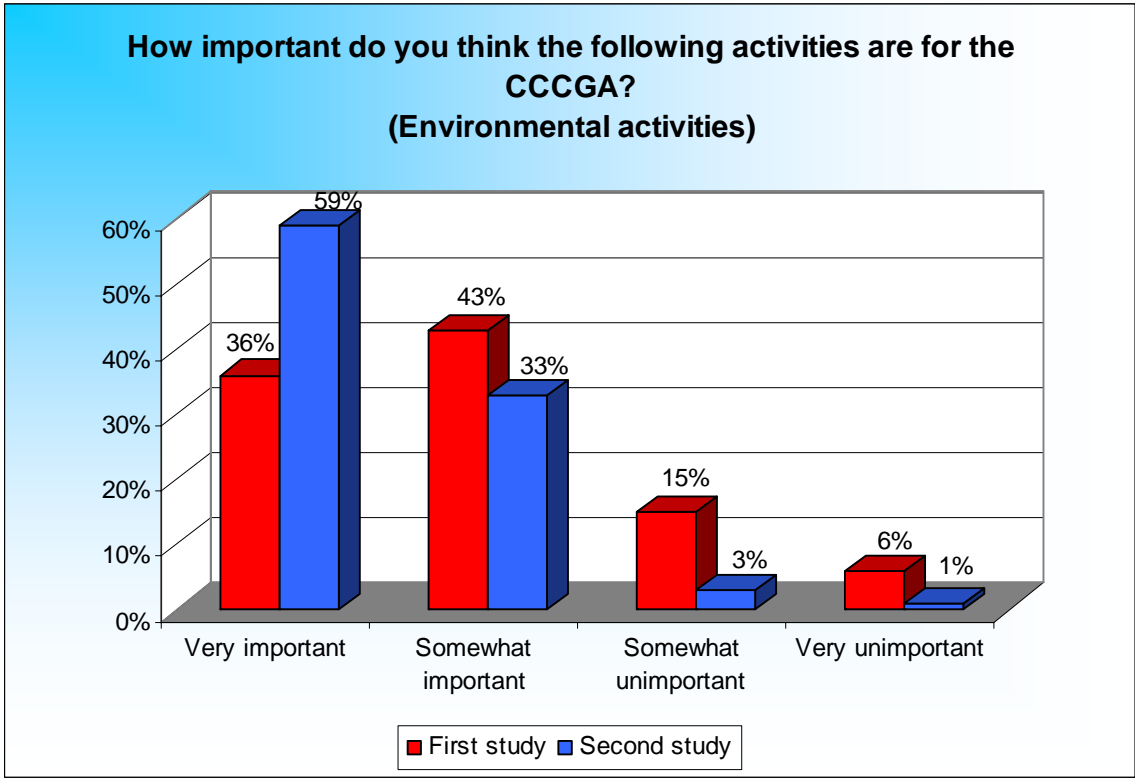
**How important do you think the following activities are for the CCCGA?  
(Government affairs at the federal level)**



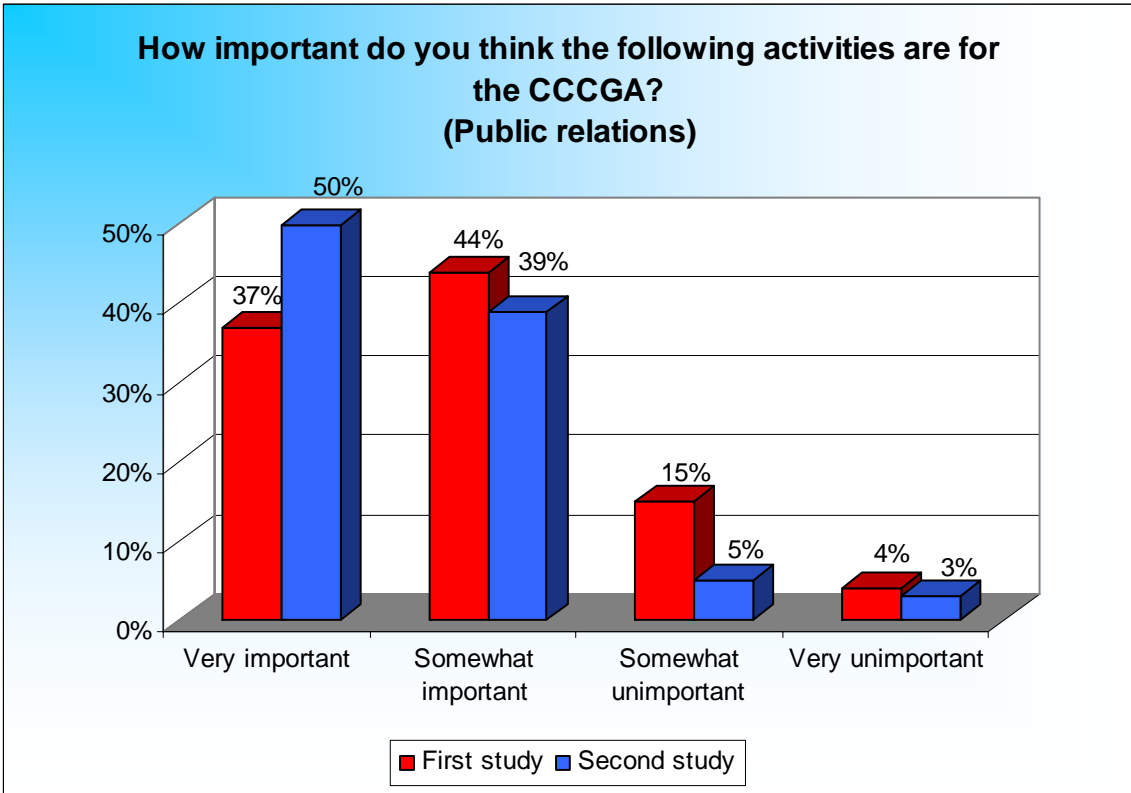
**How important do you think the following activities are for the CCCGA?  
(Frost warnings)**



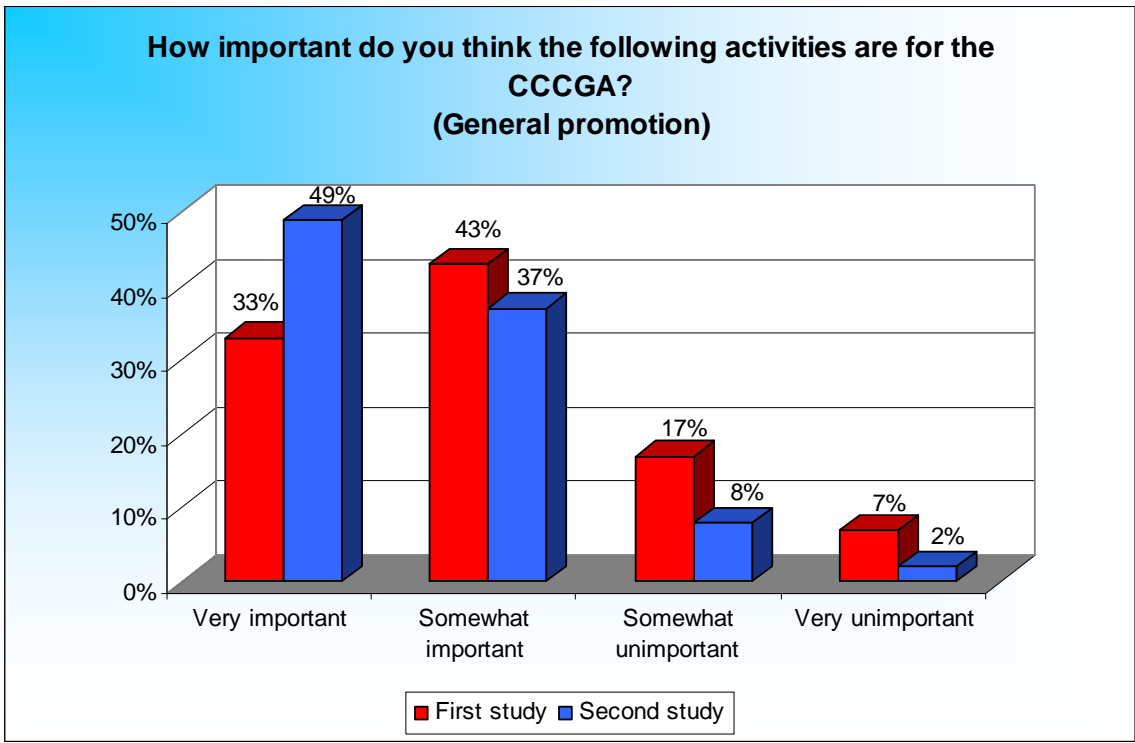
**How important do you think the following activities are for the CCCGA?  
(Environmental activities)**



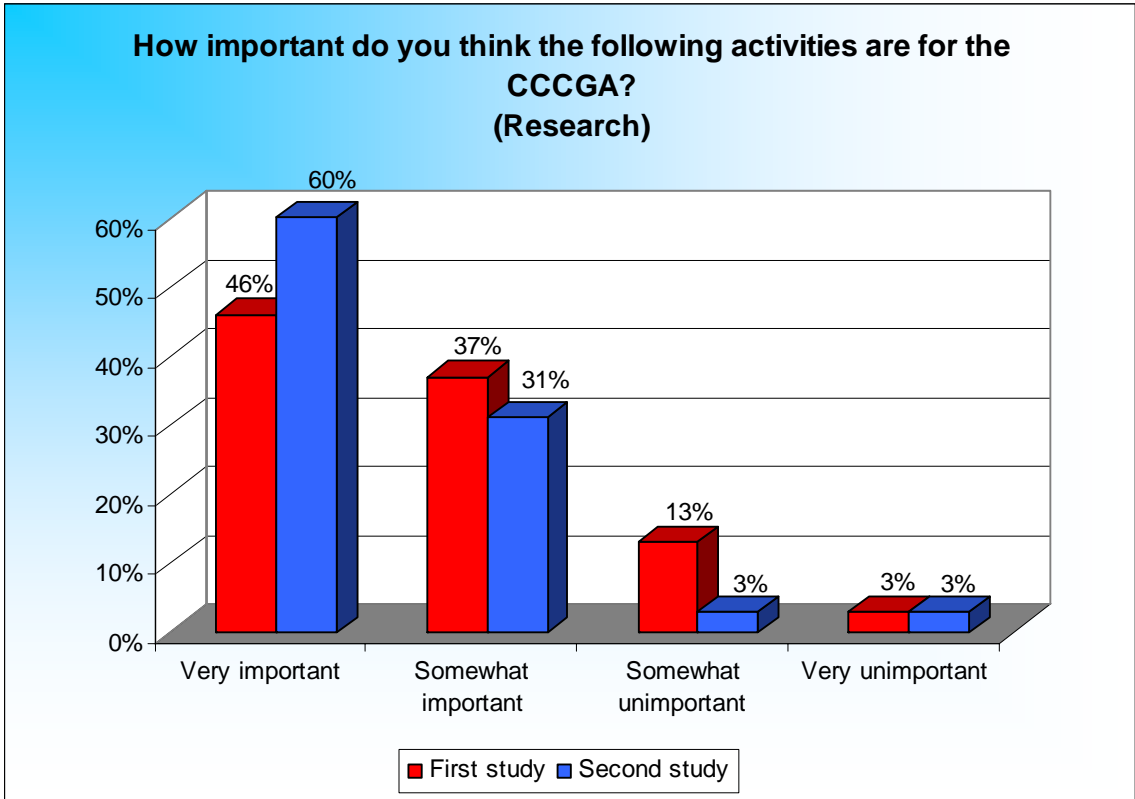
**How important do you think the following activities are for the CCCGA?  
(Public relations)**



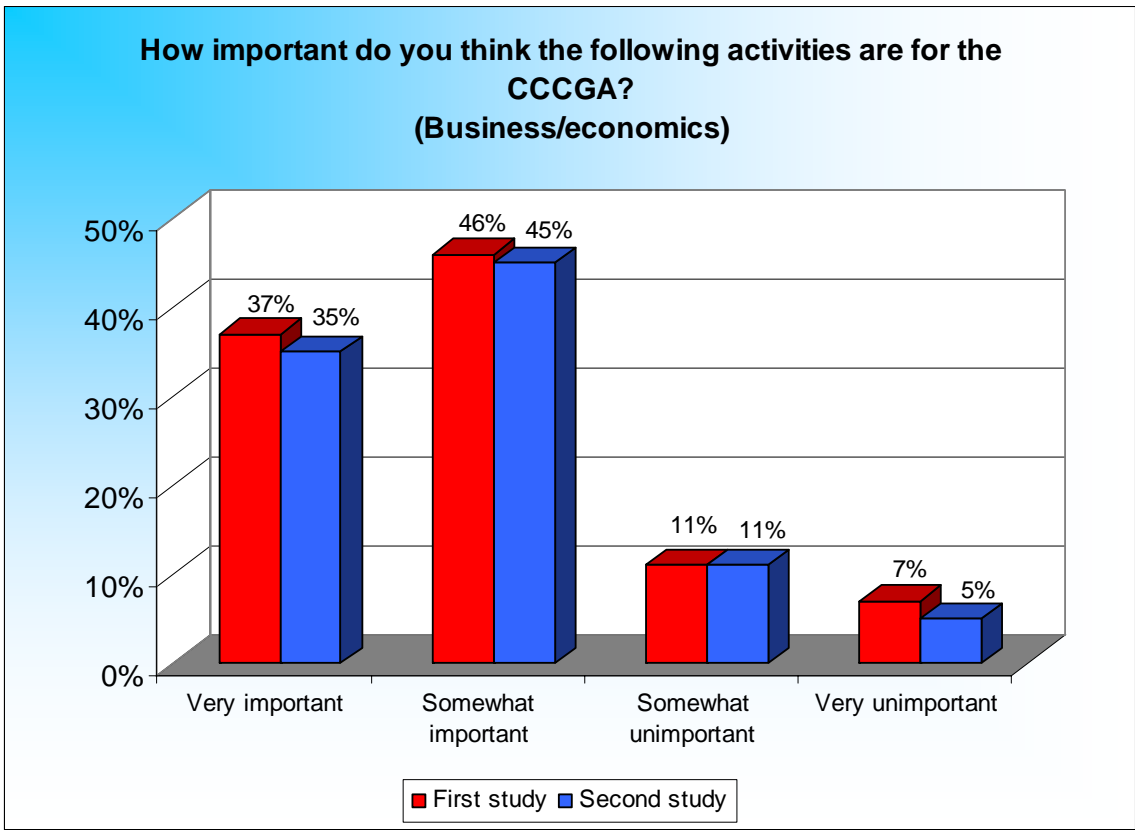
**How important do you think the following activities are for the CCCGA?  
(General promotion)**



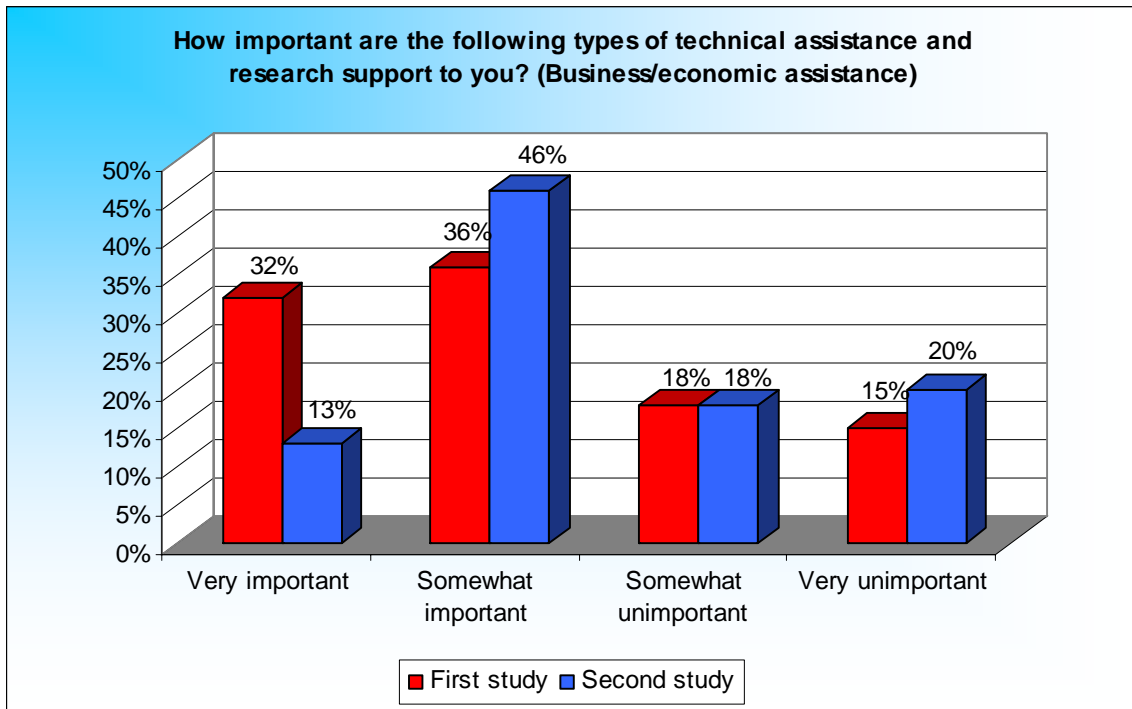
**How important do you think the following activities are for the CCCGA?  
(Research)**



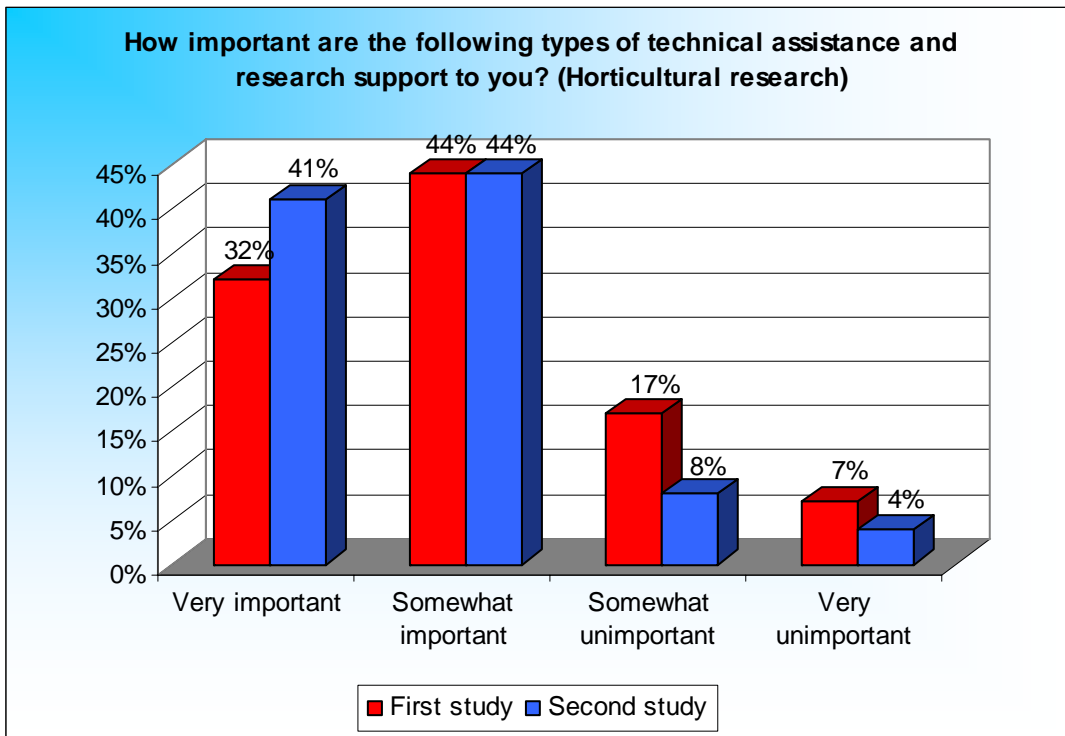
**How important do you think the following activities are for the CCCGA?  
(Business/economics)**



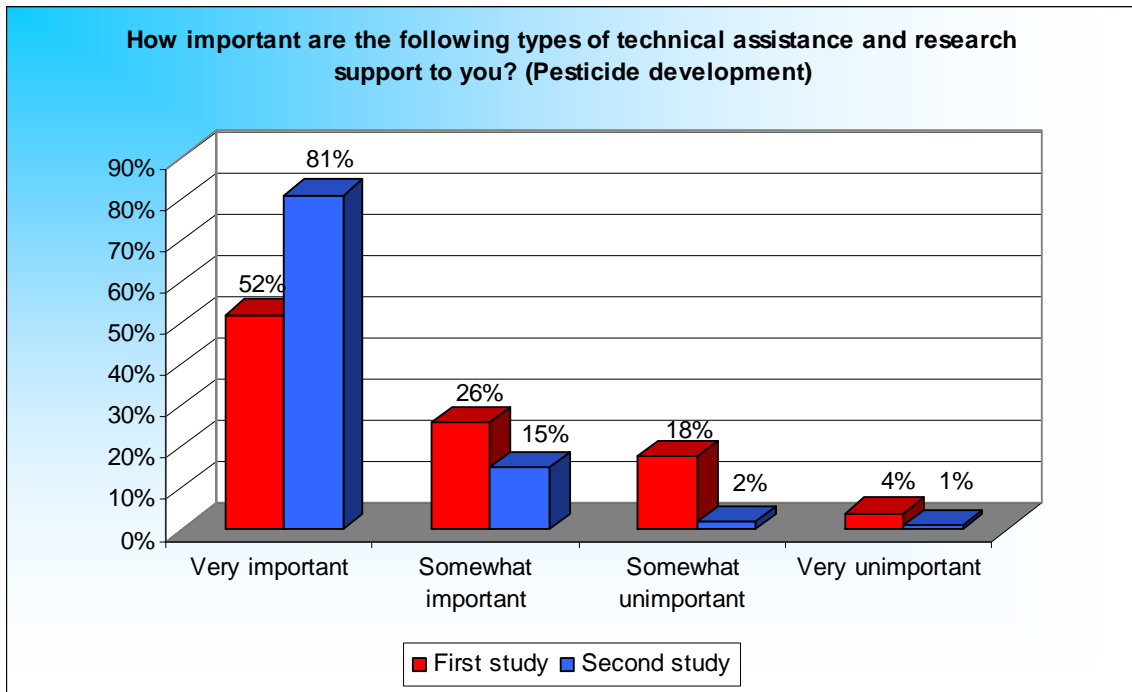
**How important are the following types of technical assistance and research support to you? (Business/economic assistance)**



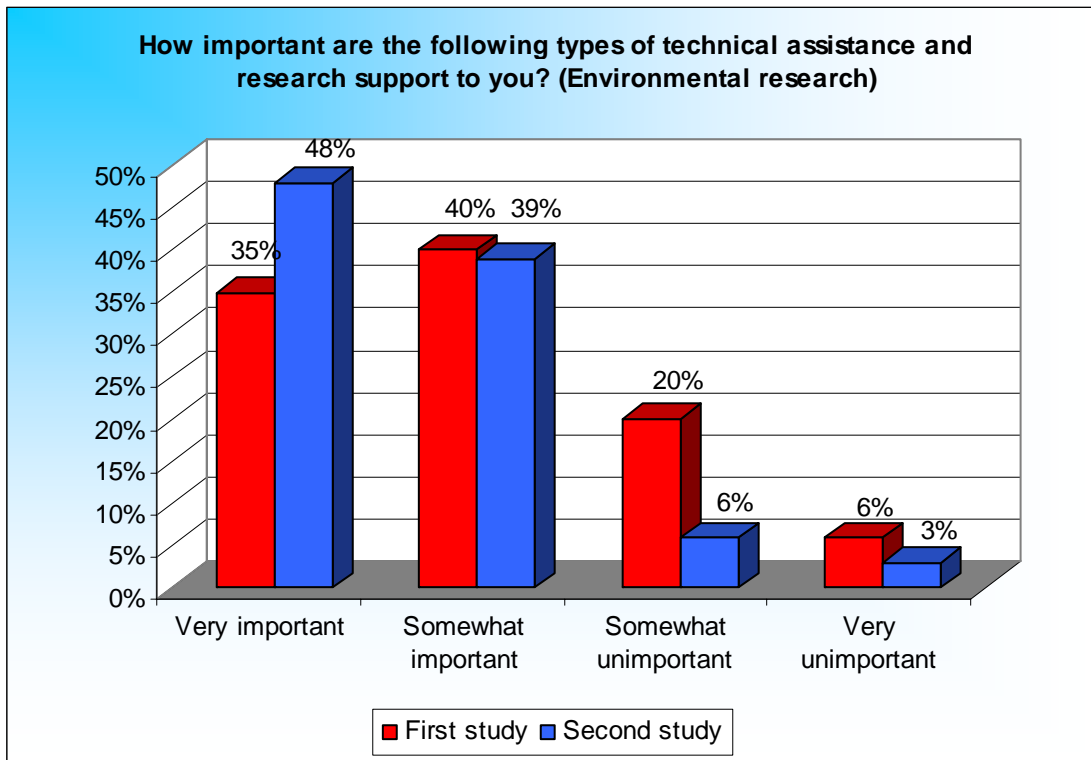
**How important are the following types of technical assistance and research support to you? (Horticultural research)**



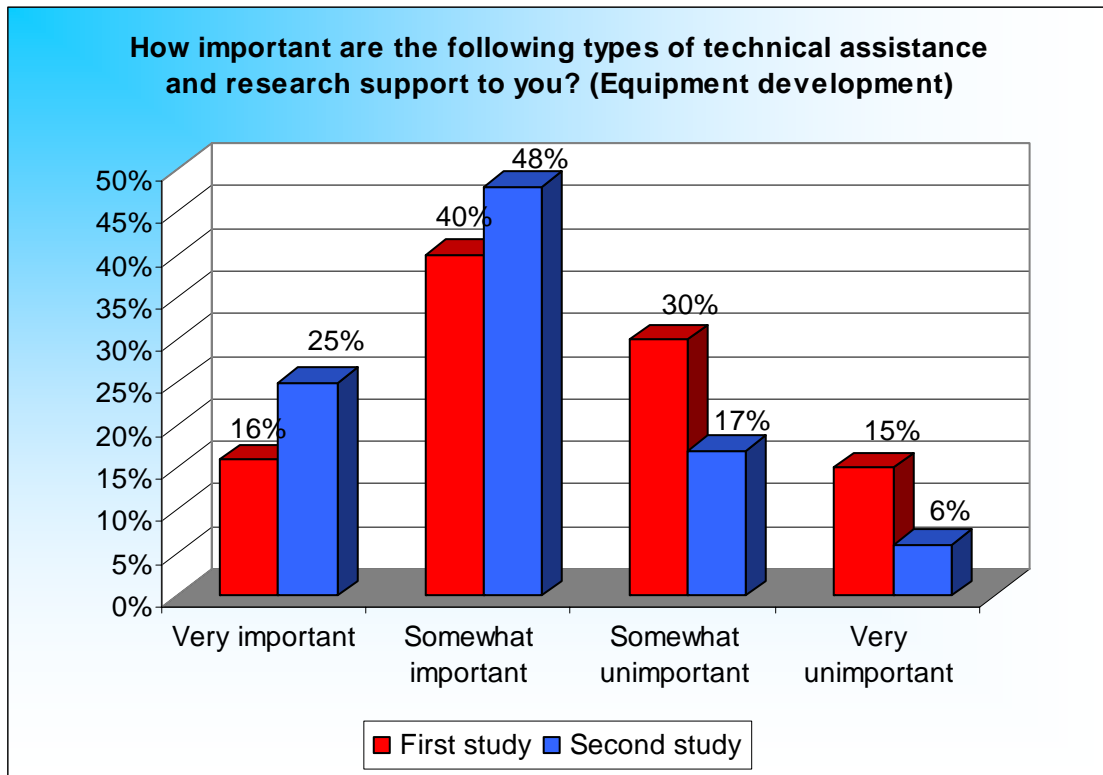
**How important are the following types of technical assistance and research support to you? (Pesticide development)**



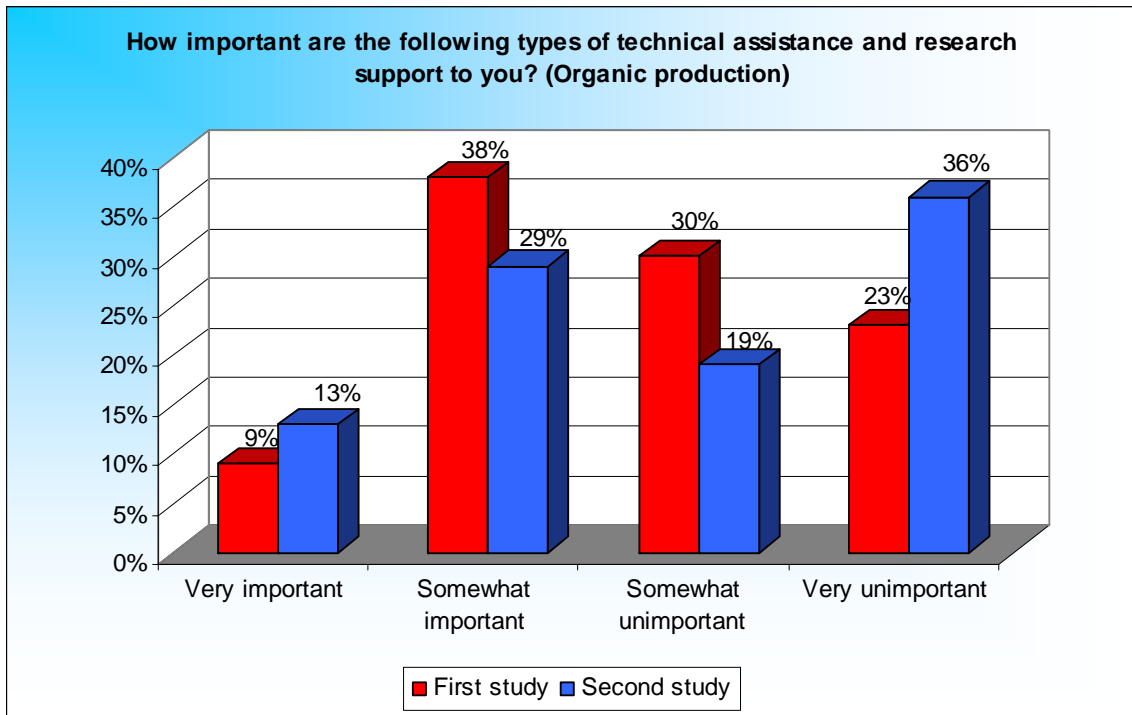
**How important are the following types of technical assistance and research support to you? (Environmental research)**



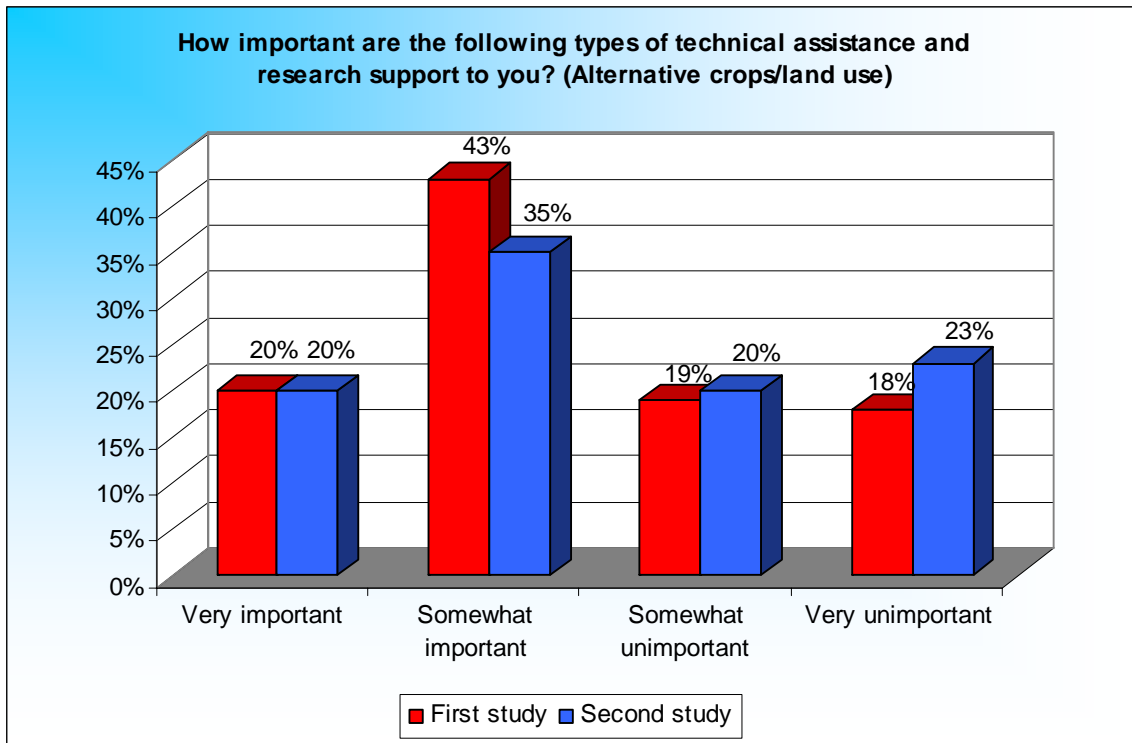
**How important are the following types of technical assistance and research support to you? (Equipment development)**



**How important are the following types of technical assistance and research support to you? (Organic production)**



**How important are the following types of technical assistance and research support to you? (Alternative crops/land use)**



## Recommendations and Conclusion

The findings of this study suggest that the future of Massachusetts cranberry bogs is one that depends on innovation, renovation and market expansion. The world's most experienced cranberry growers must now use their ingenuity to compete in the industry they have dominated for so long.

The average Massachusetts cranberry grower is about 56 years old, has farmed approximately 25 years and farms less than 20 acres. The majority run family owned farms. While most growers plan to keep their farms, 42% are currently employed off the farm to supplement their income. Of those, most work full time "off bog". Fifty-six percent of growers in this study describe themselves as full time farmers. Eighty-five percent of growers work on their farms themselves and over half report spouses and/or children working on the farm as well.

One third of the growers surveyed report yields of less than 100 barrels per acre. That number rises to approximately 50% when we include farms yielding 125 barrels per acre or less. Twenty-one percent (42 growers)\* report plans to transfer or sell their farms in the next five years. Eight percent (17 growers) are undecided. Of these 59 growers, almost one-third plan to sell their farm for continued cranberry farming, 20% will continue in the same family growing cranberries, 10% will sell for development, and 9% will do some combination of cranberry growing, development and conservation. Those planning to sell for cranberry farming may provide opportunities for new, young farmers and land link programs.

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\* This study is statistically valid and generalizable to the entire population. While 21% of the sample is 42 growers, it can be assumed that this finding applies to all growers in MA in the same proportion. Given that there are approximately 425 growers in MA, there are probably close to 90 growers planning to sell or transfer their farm in the next five years.

Other than those planning to transfer ownership to family members, respondents did not know who specifically would take over their farm. There is some interest in selling farms to younger growers with lease to buy arrangements being the most popular transaction.

About sixty percent of farmers have not made any changes in how they farm over the past five years. Those that have made changes, report using more technology and more temporary employees or contract workers.

Over a third of the growers surveyed report it is likely that they will renovate producing acres in the next two to five years. Over half of these growers would choose to use low or no interest loans for such a project, if available. The two biggest incentives to renovate bogs are poor yields or good prices per barrel.

Estimates on renovation costs per acre vary widely with 26% putting the cost at under \$10,000 per acre, 22% estimate \$10,000-\$15,000 per acre, 29% estimate the cost to be over \$15,000 per acre. In addition there are another 22% of growers who said they did not know how much it would cost to renovate their bogs.

About half the growers in this study have some interest in value-added products, almost a third are interested in growing other crops, 29% are interested in agro-tourism, 20% are interested in organic and 9% in pick your own. Growers also have concern about the environment. Half the growers would support a mandatory “check-off” fund that would support health benefit research, market research/promotion and horticultural/environmental research.

Given the findings of this study, the following recommendations are provided:

**1. Develop a young farmers network to encourage new farmers and provide them with mentoring and support.** This group could be matched with growers interested in selling or transferring farms. Lease to buy programs and other arrangements could be explored.

**2. Conduct informational workshops/programs on renovation and innovation.** Growers may be more interested in making changes if cost options and specific benefits were clearly delineated. Estimates on the cost of renovation varied widely in this study while 22% could not make an estimate at all.

**3. The market for value-added cranberry products should be researched and defined given the interest among growers.** A co-op store carrying these and other cranberry products could jump start interest in these products and help to launch them in the marketplace.

**4. CCCGA is encouraged to continue its close attention and focus on frost warnings.** This is a vital service and one the growers have come to depend on. There is great support and appreciation for this among growers.

**5. CCCGA is encouraged to continue its work in government affairs at all levels.** Growers recognize the importance of legislation and its impact on them. They clearly depend on the Association to provide influence and intervention with government officials on their behalf.

**6. The growers would like CCCGA to seek grants, open an agro-tourism branch and represent other agricultural groups in order to diversify its operating income.** Growers indicate a desire for CCCGA to maintain services, and keep dues at their current level.

**7. Pesticide research and technical assistance is the biggest concern among growers.**

Over eighty percent of those surveyed rate this as a high priority. Researchers in this area at the University of MA, the Cranberry Experiment Station and elsewhere should be supported in their efforts to develop new and effective pesticides, applications or methods that will assist growers with the unique pest problems inherent in MA bogs.

**8. The University of MA, the Cranberry Industry and other interested parties need to assist in locating and matching growers with low interest and no interest loans for innovation.**

Growers did report that such assistance would move them to renovate and innovate with regard to their bogs and growing process.

**9. Consider creation of multi-purpose venue to educate visitors and promote cranberries.**

A visitor's center of some type, possibly modeled on the old Ocean Spray "Cranberry World" exhibit might be considered. If such a venue could include a working bog, full kitchen, gift store, educational videos and interactive exhibits, large numbers of people could visit.

For Massachusetts cranberry growers to compete with Wisconsin and others, they will need bigger yields, new capital, and new customers for their fruit. New hybrids have been shown to sharply increase bog yields, but introducing them is costly. New markets (both human and non-human) for cranberries are slowly becoming viable. International markets show promise. It is time to reexamine the state of the industry in Massachusetts and find a way to innovate. The Massachusetts cranberry industry is at a cross roads. They need to increase their yields in order to remain viable. To do that, the growers must be given the tools to grow better. A higher level of support – in the form of low interest/no interest loans, technical assistance, and education will result in higher yields. Higher yields

will allow the Massachusetts cranberry growers to enjoy the satisfaction of being the best they can be.