

# **New Zealand Olive Grove Census 2012**

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## **Olives New Zealand – May 2012**

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Report prepared by Gayle Sheridan, Executive Officer



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## Background

Olives New Zealand launched a Grove Census during Christmas week 2011. The Grove Census was emailed to all members and non-members on the Olives New Zealand database, a total of approximately 200. Responses were solicited over the following few months both directly by the Executive Officer and the Regional Chairs, where these were located. Regional Chairs also provided Census forms to regional members who were not members of Olives New Zealand.

The reason Olives New Zealand undertook the survey was to develop a better understanding of the size and nature of the industry. It was intended to build on previous work<sup>1</sup> and would better inform the Executive on what actions need to be taken to achieve the Association's goal of being the leading business organisation for the Olive Industry in New Zealand. It would also allow the organisation to achieve greater credibility with Government and other organisations where it need to represent the interests of growers and other industry participants.

To encourage participation, potential participants were assured that information on individual businesses would not be revealed to other parties, other members or to the Executive. Rather summary data would be produced. A copy of the Grove Census form is attached as Appendix One.

This report is based on the responses received as at May 2012. This report is based on the data provided. Where appropriate, comparisons to the 2008 Grower Survey have been included.

## Response Rate

Survey forms were sent out to a total of 200 people; approximately 162 current members and the 38 non members. Responses were received from 116 current members and only 15 non members, which was expected. Thus for the following response rate charts, figures of current members have been used. It should be noted that one Northland member responded on behalf of a consortium of 41 groves, which also is not shown in the response rate figures. Grove data from the additional Northland groves and the non members however has been used in the comparative response chart to 2008 and subsequent sections of this report.

The number of response from current members compared to the number of survey forms sent to these members is shown below.

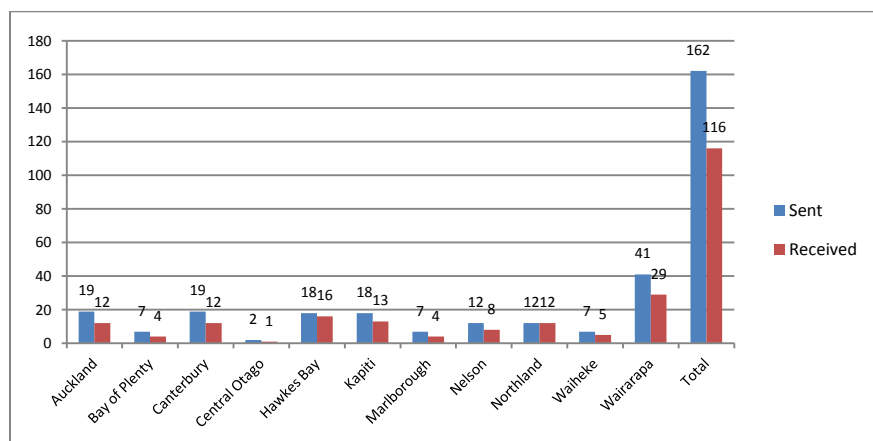


Figure 1 Survey Responses from Current Members

<sup>1</sup> The most recent previous research on the New Zealand olive industry was carried out on behalf of Olives New Zealand via a Grower Survey by Horticulture New Zealand in August 2008. This drew 199 responses; 167 members and 32 non members or not known.

The percentage of response rates across total current members was 70%, however varied from 50% being the lowest in Central Otago to 100% being the highest in Northland. The percentage response rate is shown on the following chart.

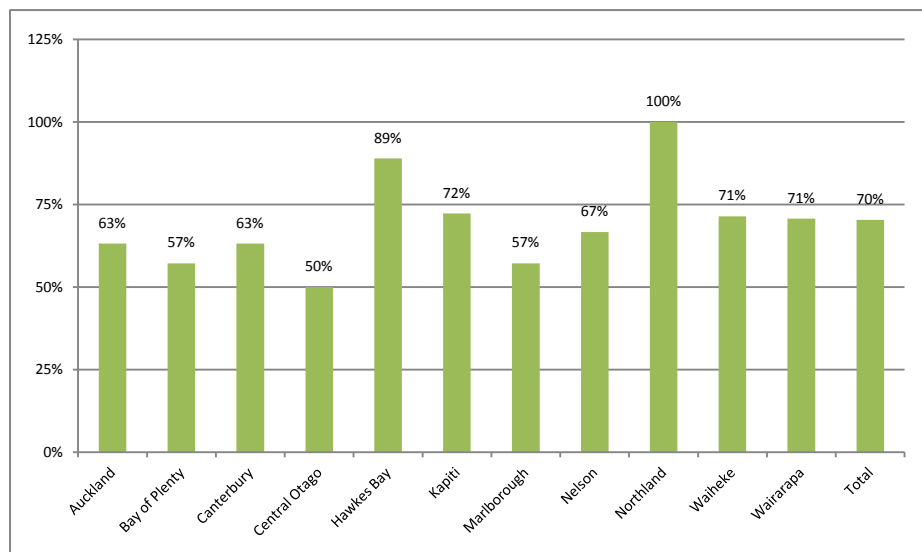


Figure 2 Percentage Response Rate from Current Members

For response comparison purposes the following chart shows total responses (i.e. current members plus non members) by region for the 2012 survey and the 2008 survey.

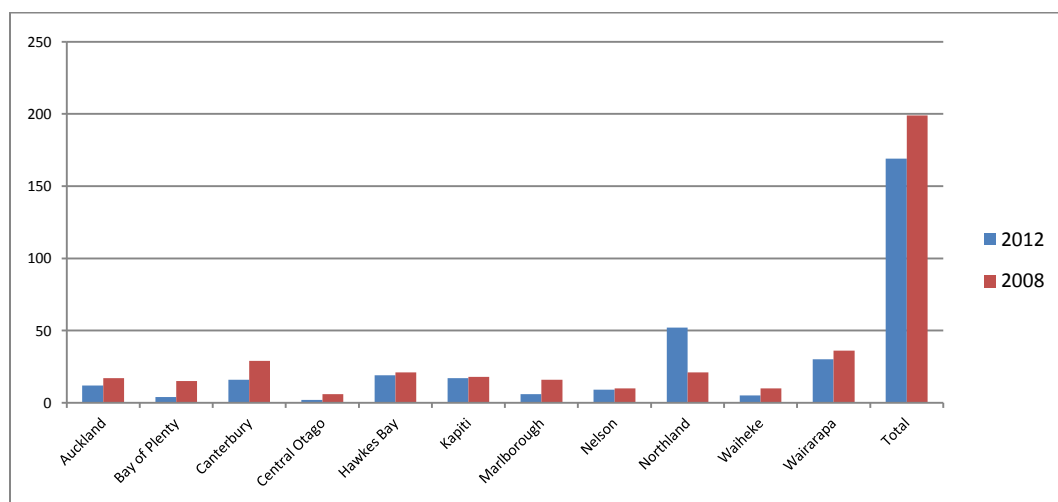


Figure 3 Responses Received 2012 vs 2008

## Grove Information

### *Year Planted*

The oldest grove reported was established in 1991 in Wairarapa and included Barnea, Frantoio, Leccino and Manzanillo. The most recent trees planted were in 2012 and included Nocholaro de Bellie in Bay of Plenty and Picual in Wairarapa. The number of trees planted from 1991 to 2012 is shown on the following chart.

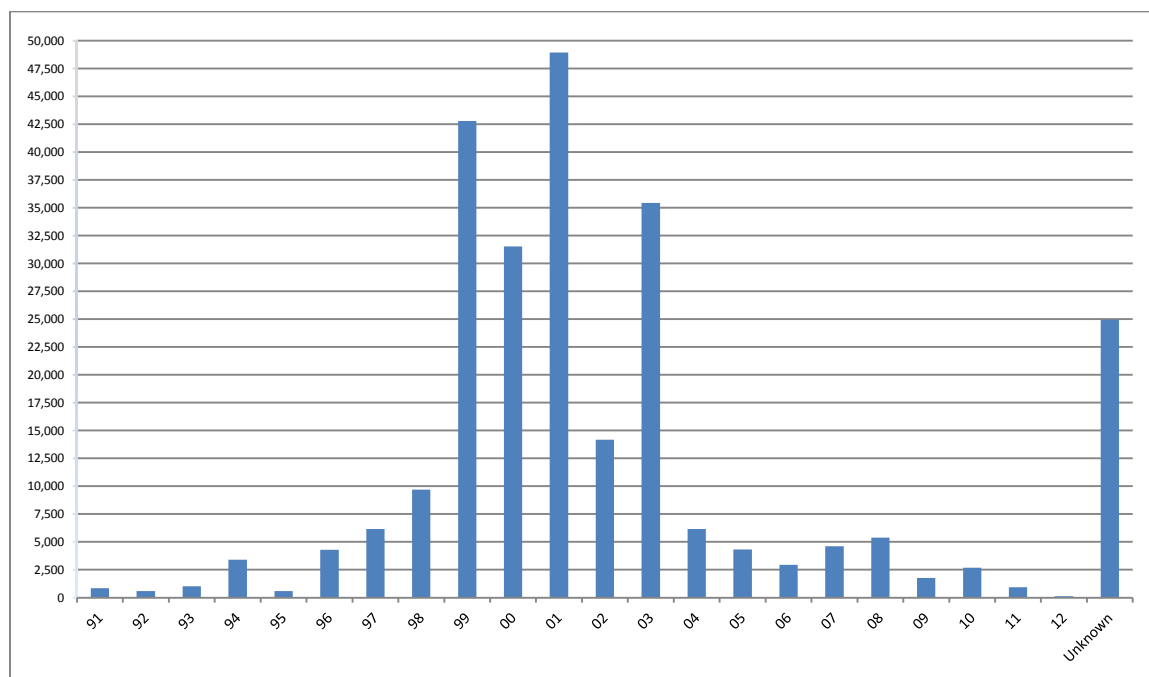


Figure 4 Trees Planted by Year

The chart shows that the greatest number of trees planted was 48,936 in 2001 followed by 42,784 in 1999, 35,439 in 2003 and 31,533 in 2000. The grand total of trees is 276,205 (2008 was 269,649).

### *Tree Variety*

The ten most planted cultivars across the country in order are; Frantoio, Leccino, Barnea, Manzanillo, Picual, Koroneiki, Kalamata, J5, Pendolino and Picholene. These are the same top ten varieties as in 2008 but in a slightly different order. The following chart shows the top ten varieties in 2012 compared with 2008.

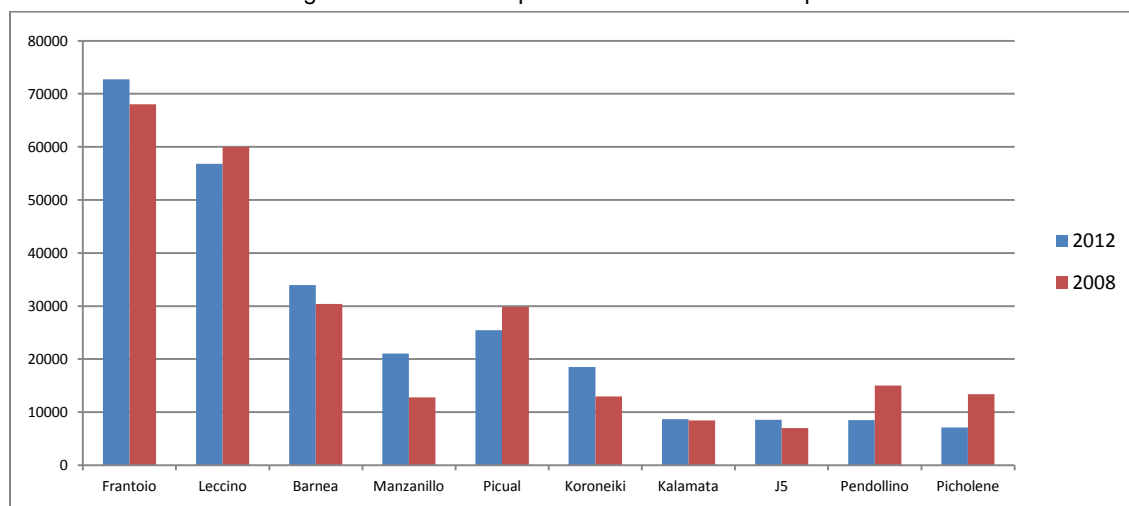
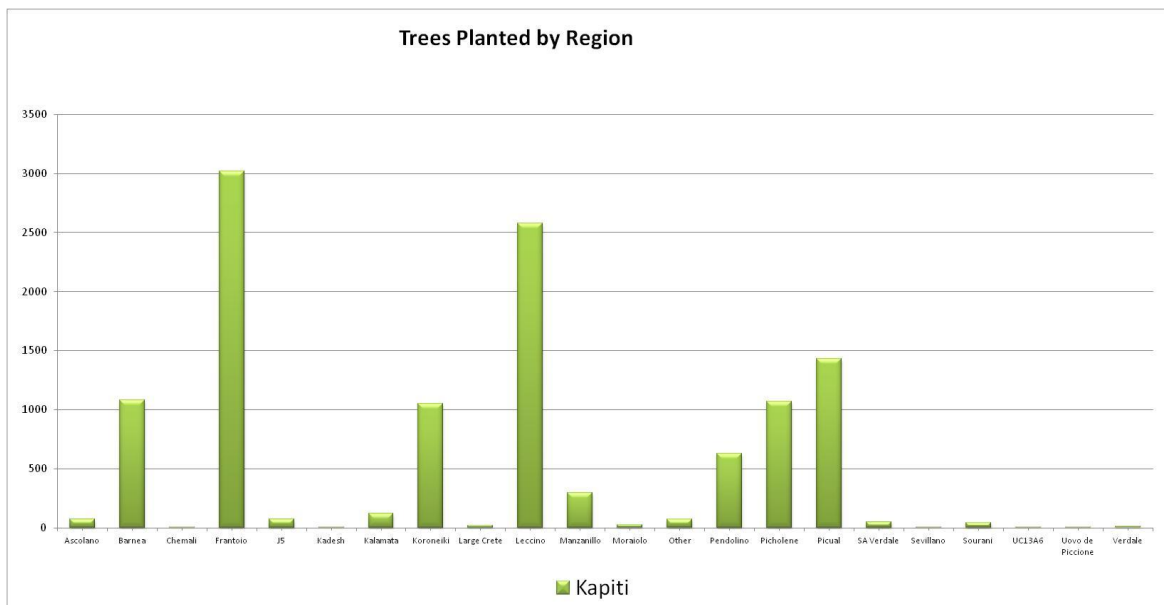
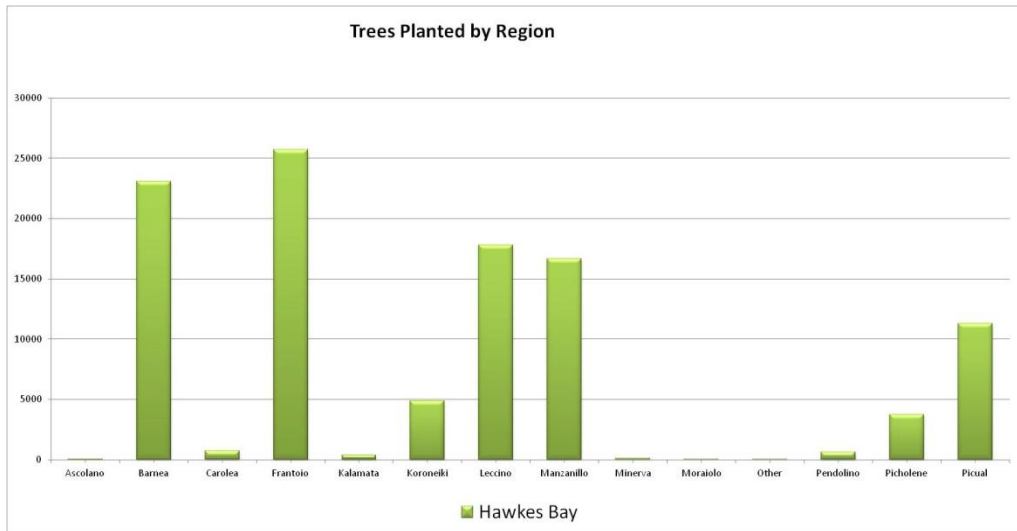
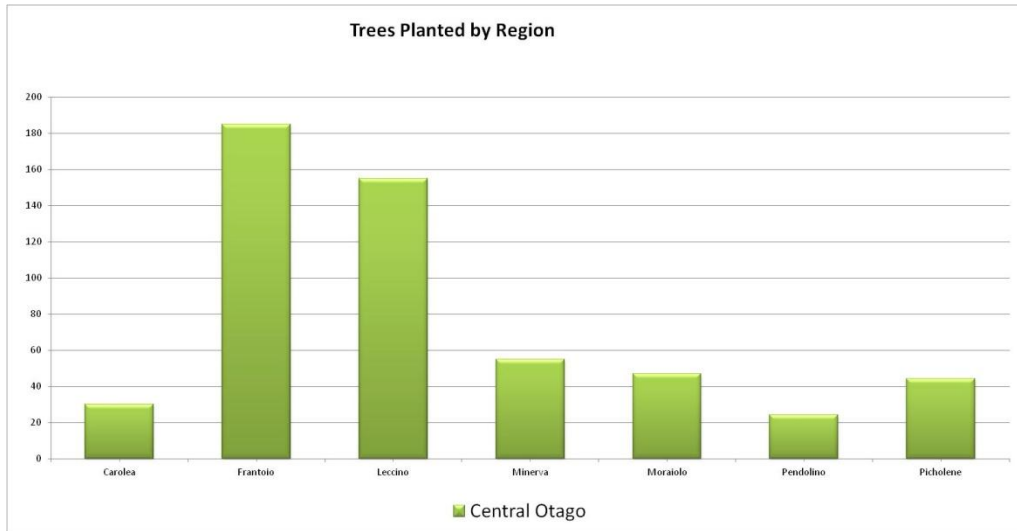


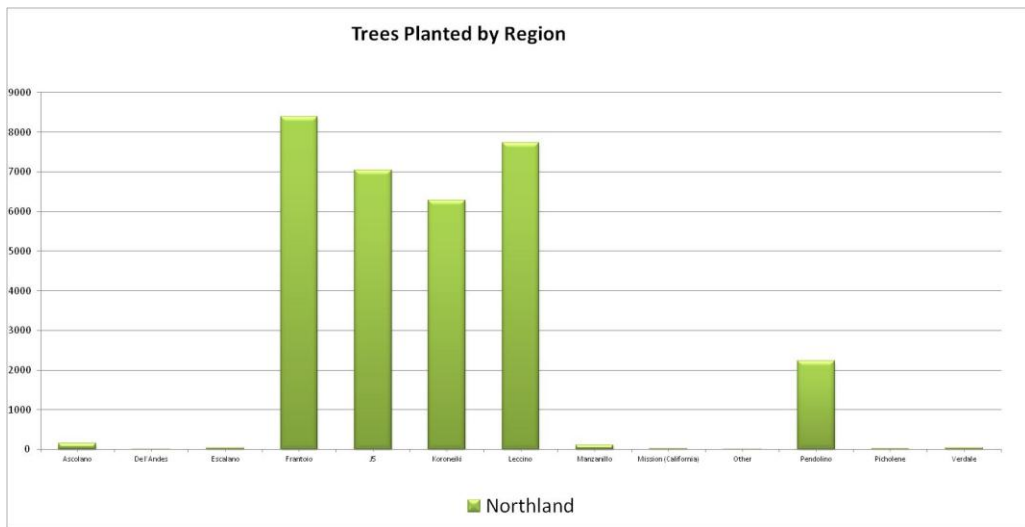
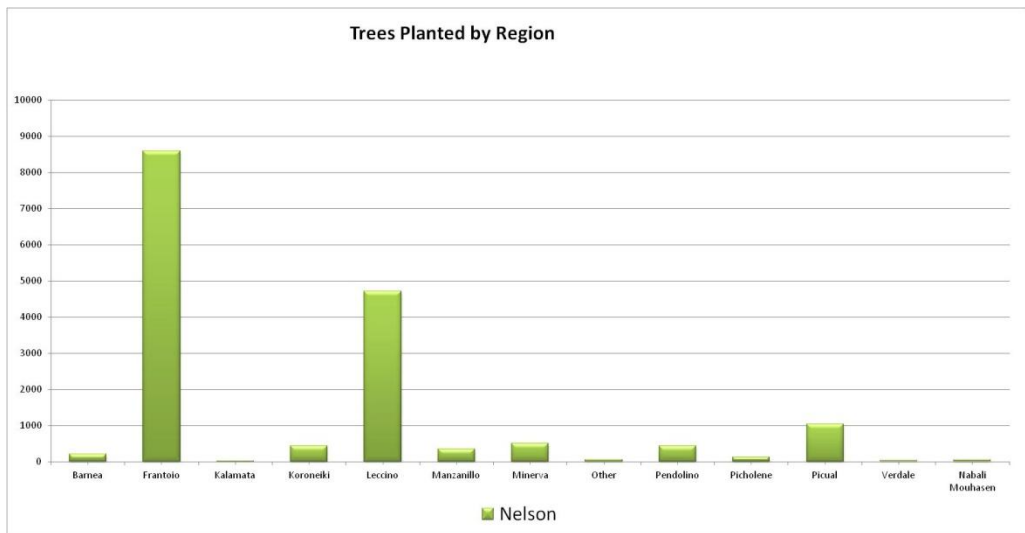
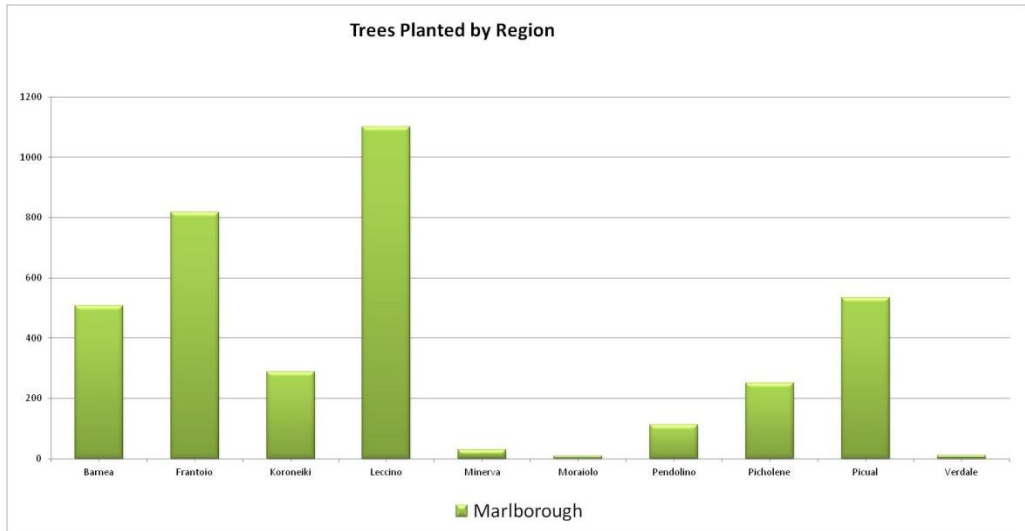
Figure 5 Ten Most Planted Cultivars

Frantoio is the most planted cultivar in all regions except; Canterbury – Barnea, and Marlborough – Leccino. The following charts show the statistics for trees by region.

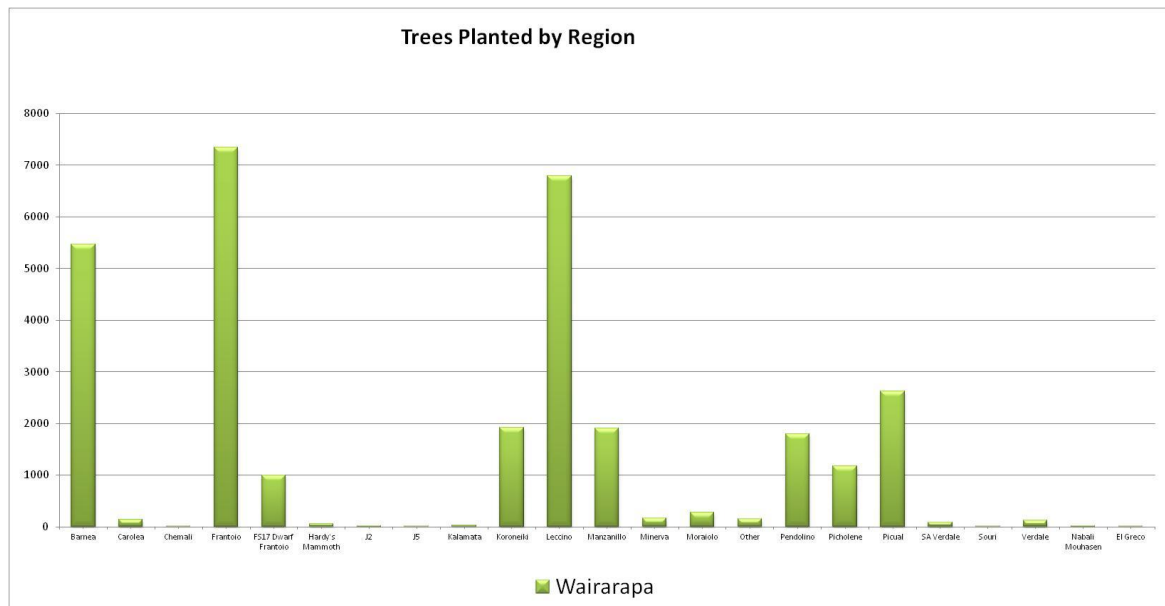
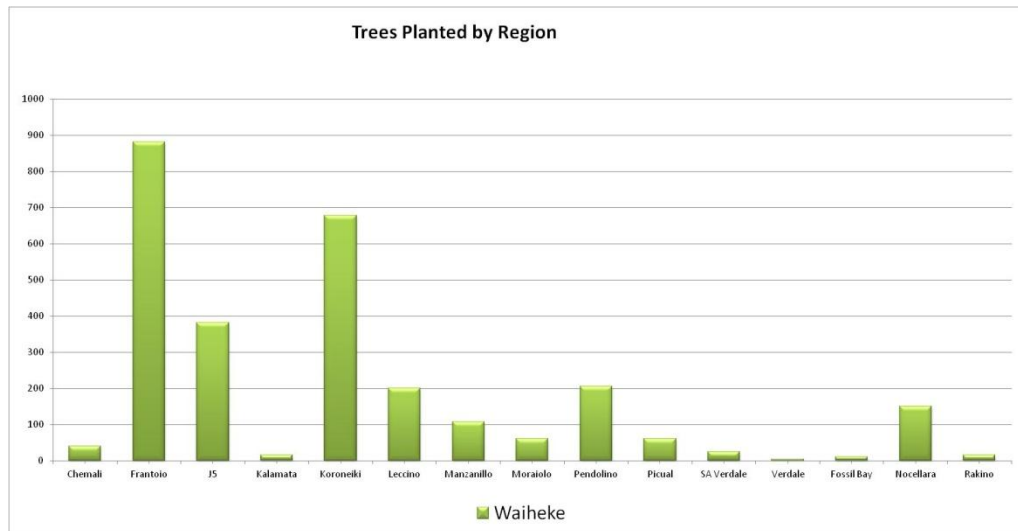
Figure 6 Trees Planted by Region











Appendix Two contains a list of all tree varieties and their numbers for 2012 and 2008.

### Total Trees by Region

Hawke's Bay has the largest number of trees, followed by Auckland, Northland and then Wairarapa. The following chart shows the total number of trees by region.

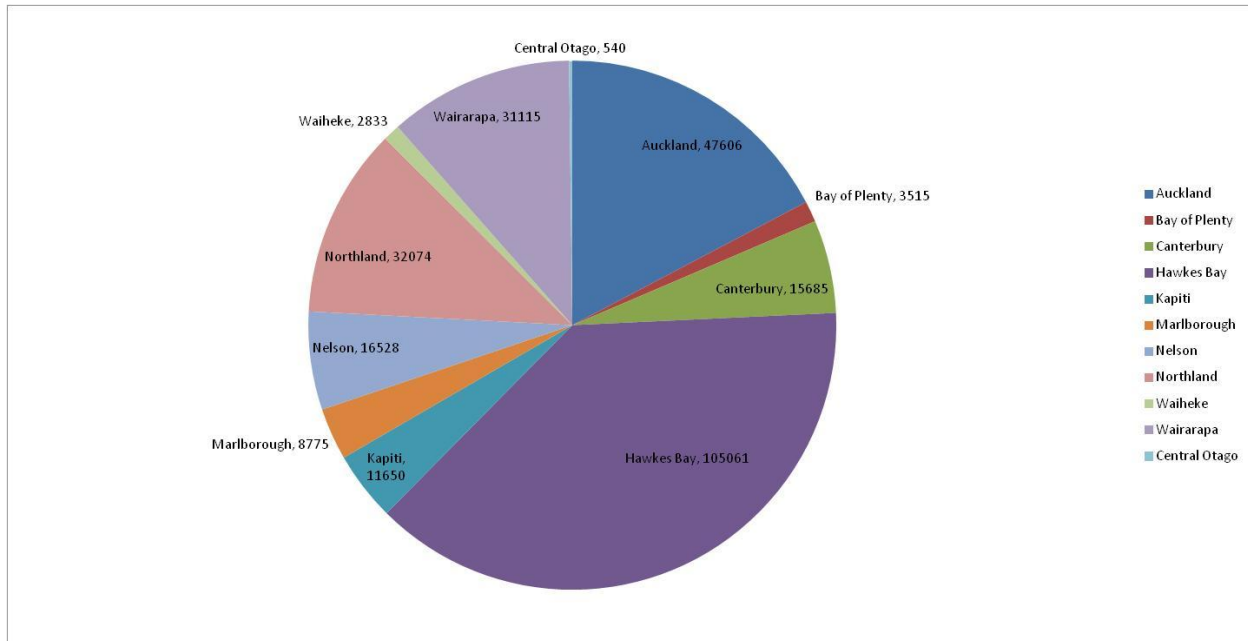


Figure 7 Total Trees by Region

The percentage breakdown of trees by region is as follows for 2012 compared to 2008.

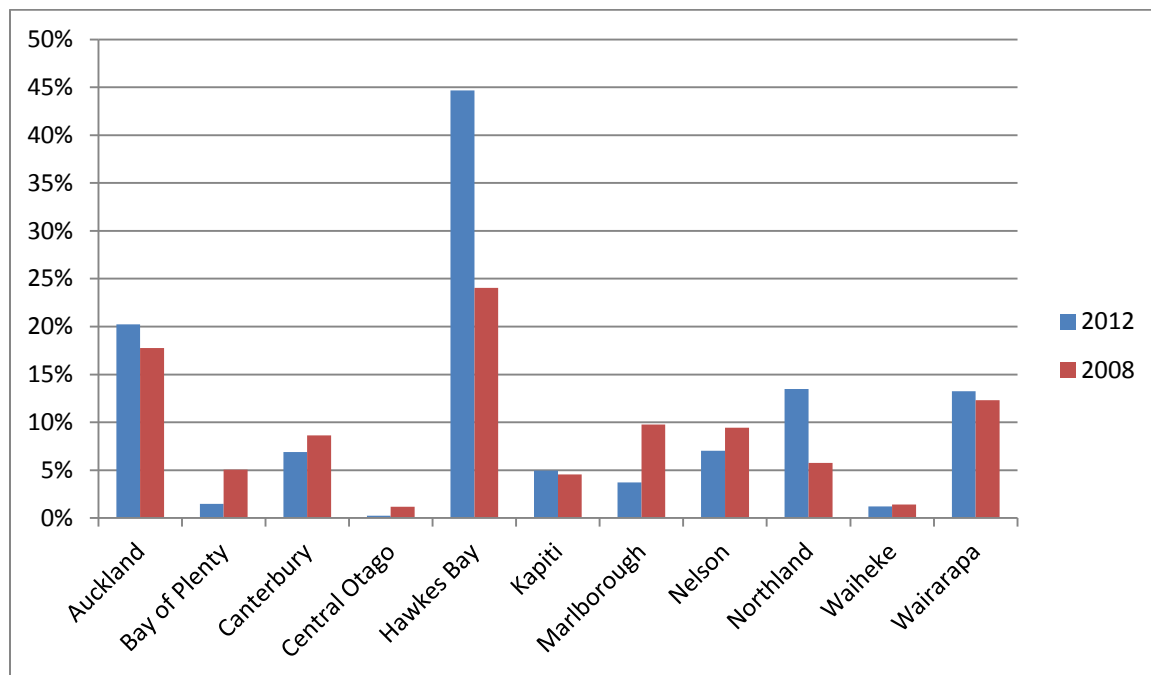


Figure 8 Percentage of Trees by Region

### Grove Size

The grove size generally ranges between 500 and 5,000 trees. The regions that have super large commercial groves in excess of 5,000 trees are Auckland, Hawke's Bay, Marlborough and Nelson. Each of these regions has one very large commercial grove with the exception of Hawke's Bay which has three. The following chart shows by region the number of groves by size.

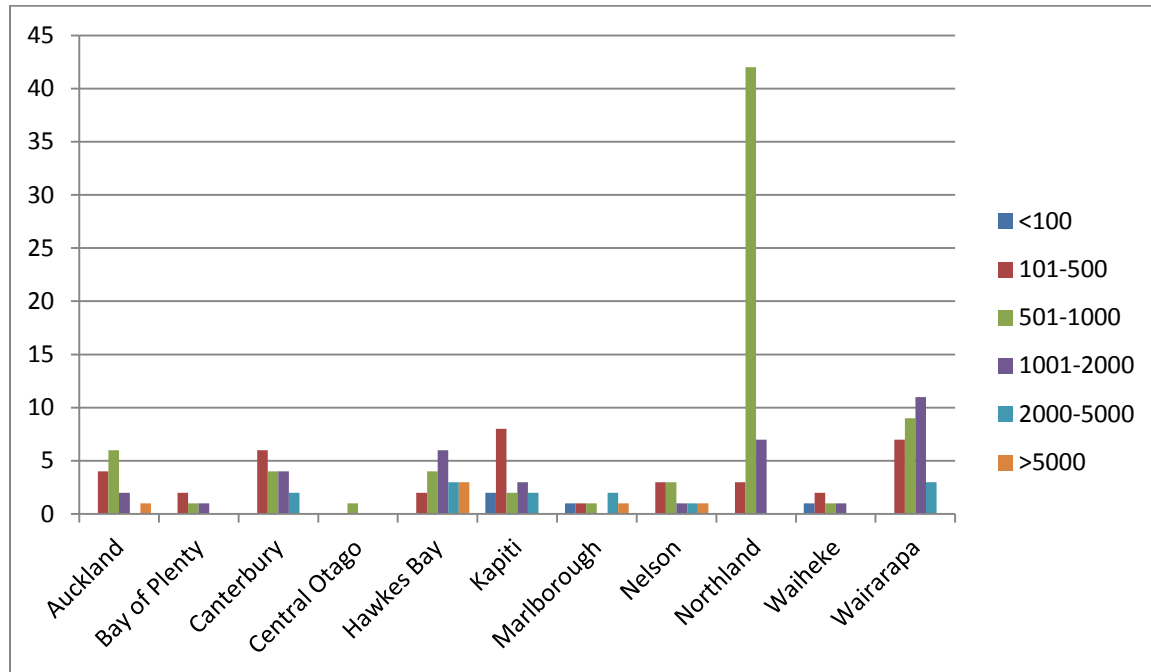


Figure 9 Grove Size by Number by Region

The chart also shows that Northland has by far the most groves with 52, followed by Wairarapa with 30, Hawke's Bay with 18 and Canterbury with 16.

The majority of groves, 43%, have between 501 and 1,000 trees. The next ratio is 101 – 500 with 22% and 1,001 – 2,000 with 21%. The following chart shows the total number of groves by size.

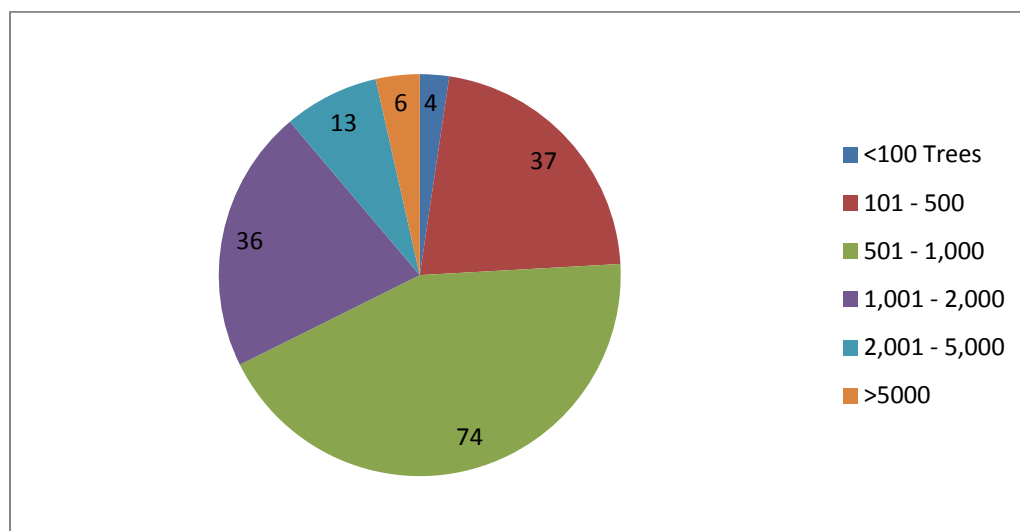


Figure 10 Number of Groves by Size

The following chart shows the super large commercial groves by region.

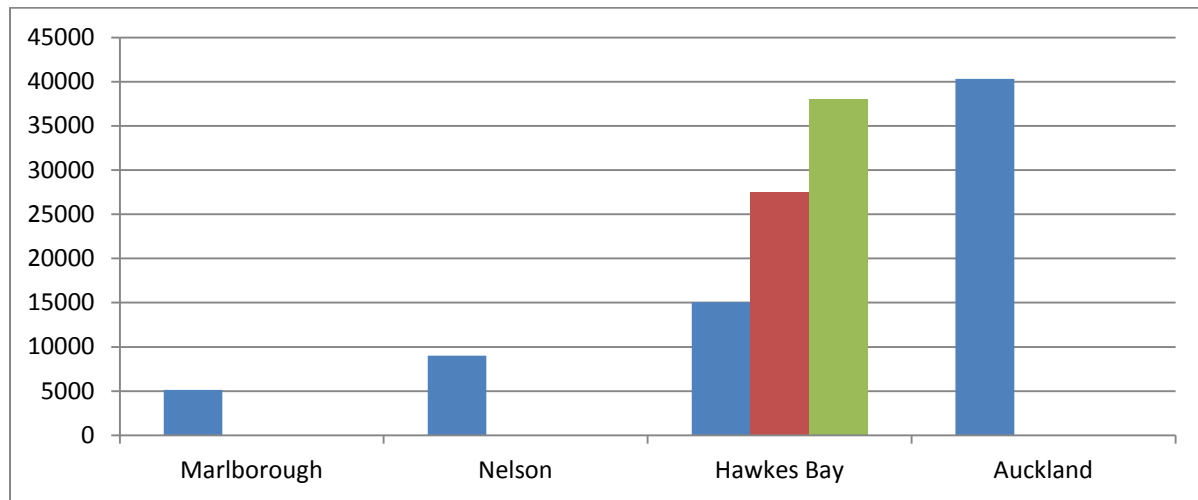


Figure 11 Large Commercial Groves

### *Irrigated*

Less than 40% of respondent groves are irrigated, with 51 across the country compared with 110 or 55% in the 2008 survey. Regions where more than half the groves are currently irrigated are Canterbury – 62%, Hawke's Bay – 53%, Kapiti – 59%. In 2008 additionally with more than 50% were Central Otago, Marlborough and Wairarapa. The following chart shows the number of irrigated groves in 2012 and 2008 compared with the total number of responses received in 2012, by region.

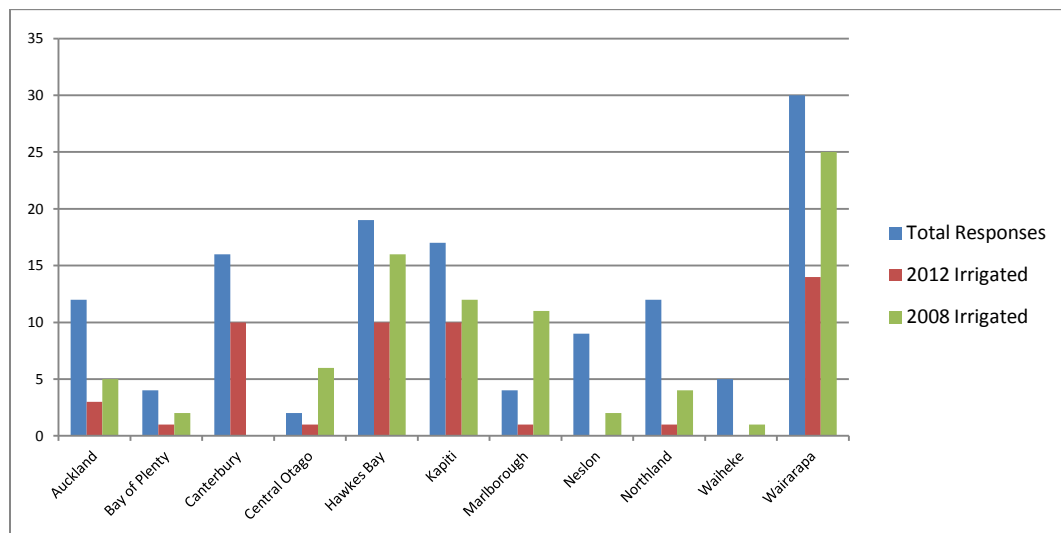


Figure 12 Irrigated Groves

### Organic

Less than 10% of respondent groves are organic, with a total of 13 across the country in 2012 compared with 44 or 22% in the 2008 survey. Four regions returned no organic groves in 2012 although all regions showed organic groves in 2008. The region with the current highest ratio is Marlborough with 60%. The following chart shows the number of organic groves in 2012 and 2008 compared with the total number of responses received in 2012, by region.

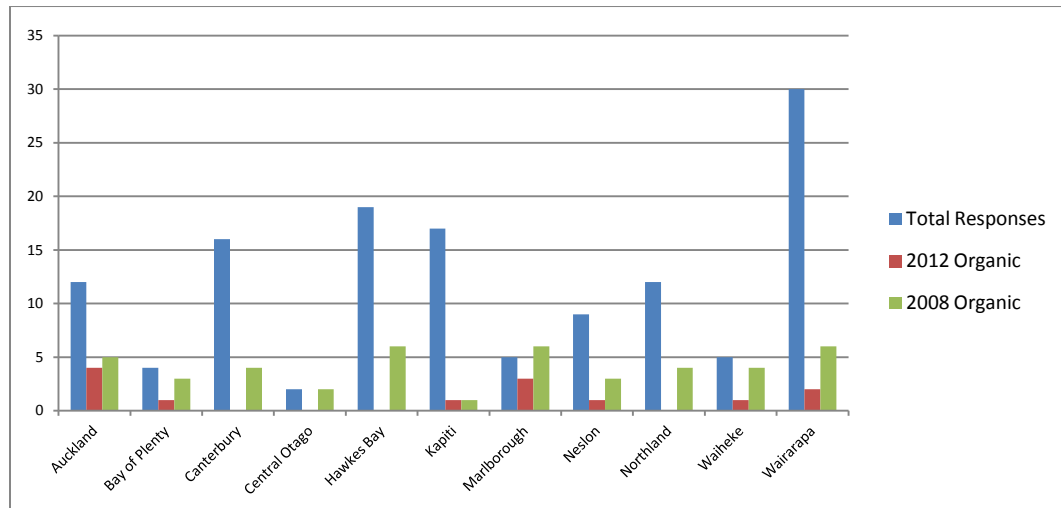


Figure 13 Organic Groves

### Land Contour

Slightly more than half of the olive groves are located on flat land, with 30% on undulating and 18% on hilly land. The following chart shows the land contour of olive groves by region.

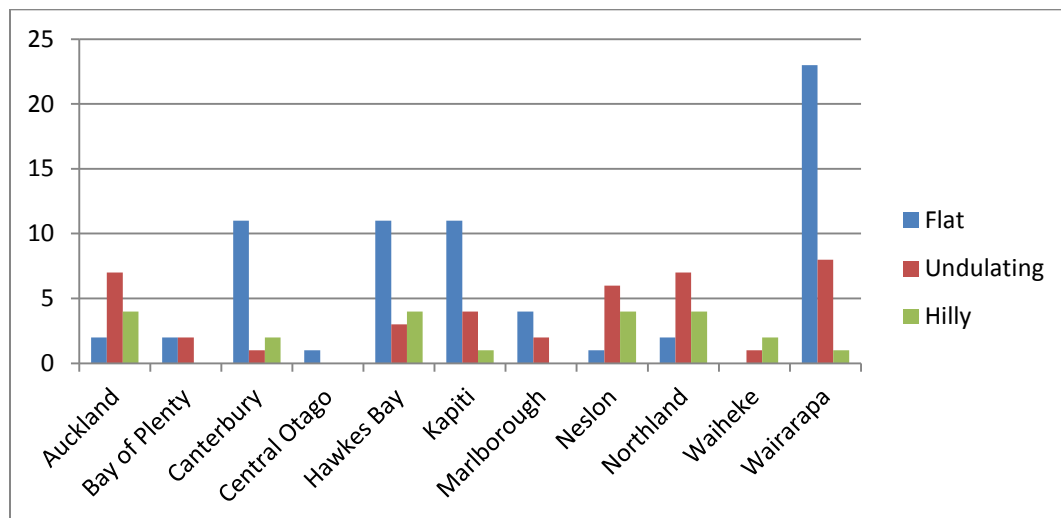


Figure 14 Land Contour by Region

### Harvest Methods

Initially respondents were asked to indicate whether they harvested by hand or mechanical means. It became quickly apparent that harvest methods needed to be clarified for mechanical and subsequent forms showed hand, hand-held shakers, and machine. The most popular form of harvesting is using hand held harvesters with 46%, only slightly ahead of machine harvesting with 42%. Only 12% of respondents use hand harvesting and this may well be for table olives or very small groves. The following chart shows the harvest methods by region.

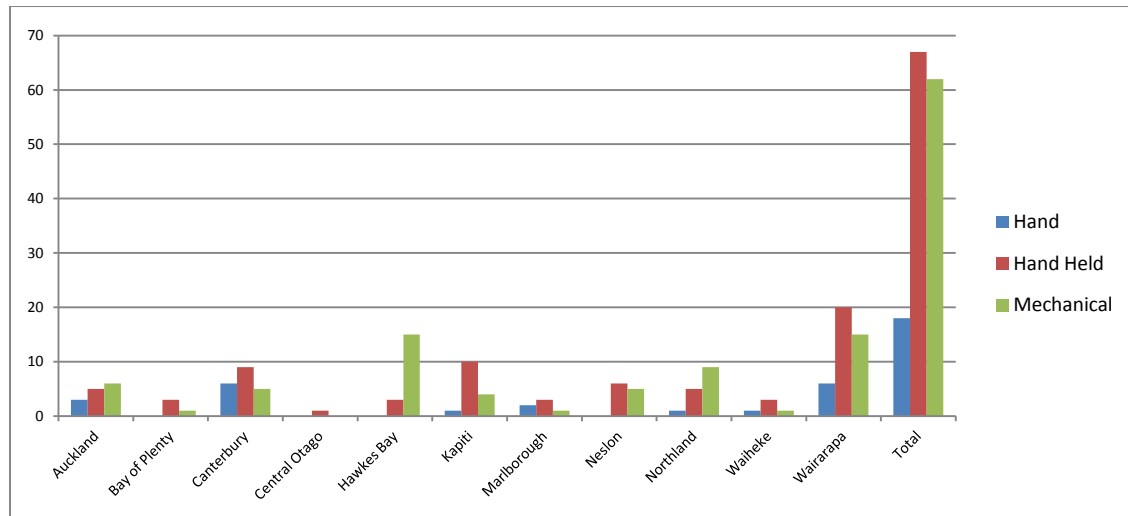


Figure 15 Harvest Methods

### Production Type

Of the 170 groves, 2 are not harvesting yet. Some 24 groves harvest for table olives as well as oil. The following chart shows the production type across the regions.

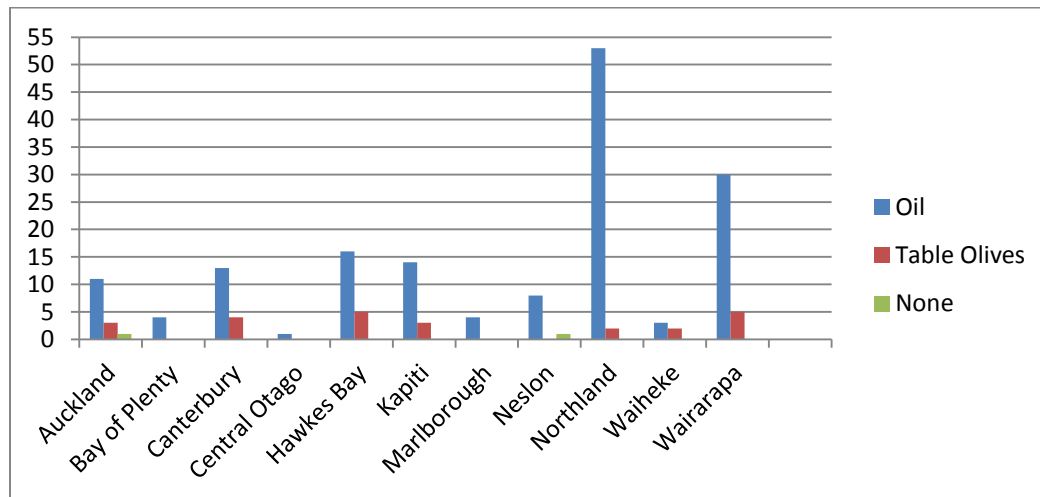


Figure 16 Production Type by Region

## **Other Outcomes**

The Grove Census also provided an opportunity to show members their information held on file. This resulted in many changes being notified as well as provision of missing information.

## **Future**

Responses continue to be received by Olives New Zealand. The Olive Grove Census is therefore a 'work in progress' and will continue to be updated as more responses are received.

It is planned to update the database annually with trees planted and removed. It would also be valuable to collect other information, for example on pests, problems, sprays used, weed control.

## Appendix One Olives New Zealand Grove Census Form

# Olives New Zealand Grove Census



### Owner Information from database

Olives NZ Member ☐

ONZ Region:

Trading Name:

Membership No.

Brand Names:

Owner Names:

Phone:

Email Address:

Mobile:

Postal Address:

Physical Address:

### Geographical Data (Optional)

Google Earth or your SatNav should help with this information

GPS coordinates:

Longitude

Latitude

Altitude

### Grove Information

Tree Variety	Year Est.	Quantity	Tree Variety	Year Est.	Quantity	Total Trees
						0

Tick as appropriate

☐ Irrigated

☐ Organic

Land Contour:

☐ Flat

☐ Undulating

☐ Hilly

Harvest Method:

☐ Hand

☐ Hand-held Shakers

☐ Machine

Production Type:

☐ Oil

☐ Table Olives

### Notes

#### OFFICE USE

☐ Processed

☐ Xero

☐ Master

☐ Web

☐ Email

Sponsored by



GEA Westfalia Separator NZ Ltd.



## Appendix Two – Tree Varieties

Variety	2012	2008
Allenton	180	
Ascolano		433
Barnea	33,937	30,415
Barouni		92
Calletier		10
Carolea	2880	2696
Chemali	356	413
De l'Andes	15	
El Greco	14	26
Escalano	40	
Fossil Bay	10	
Frantoio	72,751	68,021
FS17 Dwarf Frantoio	1300	2120
Hardy's Mammoth	51	81
J2	330	895
J5	8590	6997
Kadesh	2	7
Kalamata	8687	8452
Koroneiki	18,651	12,945
Large Crete	20	
Leccino	56,986	59,993
Leccio del Corno	150	143
Manzanillo	21,020	12,760
Maurino	703	363
Minerva	2581	5089
Mission (California)	25	155
Moraiolo	562	786
Nabali Mouhasen	245	541
Nasco	23	
Nocellara	150	100
Nocholaro de Bellie	100	
Olivastro		159
Other	2317	2647
Pendolino	8589	15,027
Picholene	7138	13,367
Picual	25,424	29,841
Rakino	15	6
SA Verdale	211	628
Sevillano	47	53
Sourani	54	453
Souri	6	119
Tamaki		20
Tawera	85	
UC13A6	2	17
Uovo de Piccione	23	56
Verdale	1077	790