

## Down To Earth Research

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# Hort Innovation

## Grower Sentiment Survey Report March 2021

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Hort Innovation and DTER would like to thank all survey respondents for assisting with this study.

We appreciate the time and effort taken to provide a considerable amount of data and information.

# Executive Summary

## Background and methodology

- The Grower Sentiment Survey (previously referred to as the Stakeholder Sentiment Survey) explores grower stakeholders' perception of Hort Innovation's performance as investors in Research, Development and Marketing (RD&M) as well as the organisation's engagement with industry and information products and services. The data collected is a key initiative in Hort Innovation's monitoring of its performance and informs KPIs identified in its Strategic Plan.
- Information was captured via Computer Assisted Telephone Interviews (CATI) with 401 growers randomly selected from Hort Innovation's Customer Relationship Management (CRM) database.
- Quotas were set to stratify the sample so results were not disproportionately affected by conducting too many interviews in one industry. Data has been aggregated into industry cluster to allow for robust statistical comparison in this survey as well as longitudinally.
- On typical measurements involving the entire sample, the standard error at the 95% confidence level is approximately  $\pm 4.4\%$ . Additionally, a good response rate (69%; completes versus refusals) ensures a high level of confidence in results.

## Knowledge of Hort Innovation activities

- Most respondents again say they have a *fair* to *considerable* knowledge of Hort Innovation's activities. However, compared to 2017, *considerable* knowledge is significantly more widespread.
- As expected, *fair* to *considerable* knowledge is more widespread among Hort Innovation members than non-members.

## Grower engagement and interaction

- Hort Innovation has interacted with more than 8 in 10 respondents over the past 2 years. However, COVID-19 disruptions appear to have resulted in significantly fewer respondents having face to face interaction with Hort Innovation staff than in 2017

and as a result, significantly fewer respondents overall have interacted with the organisation (82%, was 87% in 2017).

- Industry events either perceived to be funded by Hort Innovation or another organisation are the most nominated source of engagement, but more than 3 in 10 did so face to face and/or through the Strategic Investment Advisory Panel (SIAP) or its members.
- In total, almost 6 in 10 respondents are *satisfied* with Hort Innovation's engagement, most commonly due to keeping growers updated and/or open communication. However, it is notable that *satisfaction* is significantly less widespread than in 2017.
- Without prompting, desire for greater levels of interaction and input, belief feedback is not appropriately actioned and not seeing results or benefits are key drivers of dissatisfaction.

## Hort Innovation information products and services

- On par with 2017, Hort Innovation's information products and services were accessed by almost all (94%) respondents over the past 2 years.
- On average, between 3 and 4 were accessed, most commonly Growing Innovation, Company or Individual Industry Annual Reports, Grower Intel, CEO updates and the website.
- Notably, 80% of those accessing the organisation's extension material have a *fair* to *considerable* knowledge of the organisation's activities, compared to a much lower 33% who did not access the materials.
- Receiving regular information and content addressing industry requirements are key drivers of positivity and as a result, almost two thirds (64%, was 69% in 2017) of respondents are *satisfied* with Hort Innovation's products and services.
- However, preference for more industry specific information, improved reaction to emerging issues and more relevant information are the main reasons for dissatisfaction.

- Consistent with 2017 results, younger growers (aged 18-39) are significantly more likely to access and be *satisfied* with Hort Innovation's extension material than older counterparts.

## Direct benefits from Research, Development, Extension or Marketing (RDE or M)

- The proportion of respondents believing they have benefitted from RDE or M is similar to 2017 (62%, was 60%).
- While there has been a slight rise in attributing benefits to Hort Innovation (45%, up from 40% in 2017), the gap between this result and the proportion benefitting from RDE or M (not specifically through Hort Innovation) is a significant 17 points.
- Hort Innovation members are more likely to believe they have benefitted from RDE or M and to attribute a role in the benefit to Hort Innovation than non-members, but caution is required interpreting results among the latter segment due to very small sample sizes.

## Perception of Hort Innovation's short and long term R&D and marketing investments

- Compared to 2017, a significantly greater proportion of respondents rate Hort Innovation's investments in short term R&D *highly* (62% of those with at least a little knowledge of Hort Innovation activities, up from 50%).
- Similarly, satisfaction is significantly more widespread among temperate and tropical fruit respondents than in 2017.
- However, satisfaction with Hort Innovation's short term R&D investments varies by business size, from 70% among medium sized businesses to a much lower 50% of x-large counterparts.

- Similar to short term, Hort Innovation's long term R&D investments are rated highly by 6 in 10 respondents (who know at least a little about Hort Innovation's activities), but this result is considerably lower than in 2017 (67%).
- In part, this is due to a considerably lower proportion of temperate fruit respondents rating these investments *highly* than in 2017.
- Hort Innovation's investments in marketing are rated *highly* by a similar proportion of respondents to 2017 (47%, was 49% of those paying the marketing levy), but this result is now significantly lower than both short and long term R&D investments.

### Overall satisfaction with Hort Innovation's performance

- Sentiment towards Hort Innovation's overall performance as investors in RDE & M is polarised (50% satisfied, 44% dissatisfied).
- However, respondents from each industry cluster are slightly more likely to be satisfied with Hort Innovation's performance than dissatisfied.
- Benefitting from investments and recognition the organisation plays an important role coordinating RDE and M are key drivers of positivity towards Hort Innovation's performance.
- However, greater grower collaboration and input, including when prioritising marketing and R&D investments and continuing to extend information proving transparency of funding allocation are areas that may increase positivity towards the organisation.

### Confidence in primary industry's future

- Survey results reveal almost 9 in 10 respondents are confident in the future of their main horticultural industry.
- While confidence is relatively widespread across each industry cluster, it varies significantly from 96% among lifestyle respondents to 73% of vegetable counterparts.
- Consistent with industry positivity, an arguably large proportion of respondents are currently expanding their enterprise (45%), compared to less than 1 in 10 (9%) winding down.
- However, expansion is considerably more widespread among medium to x-large businesses than small counterparts, as well as the 18 to 60 age group than those aged older.

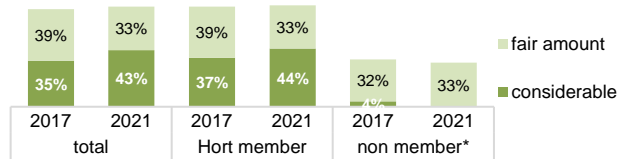
### Conclusions and recommendations

- ❖ Positively, Hort Innovation has extended its information products and services to almost all respondents and despite COVID-19 disruptions, most have interacted with the organisation over the past 2 years. As a result, knowledge of the organisation's activities is widespread, but consistent with 2017, less so among non-members.
- ❖ Despite relatively widespread engagement, there remains a segment of respondents, particularly among those from larger enterprises that would benefit from closer and more frequent interaction and clearly communicated responses to the feedback they provide to Hort Innovation.
- ❖ Perception of Hort Innovation's overall performance is polarized and results suggest there may be an opportunity to create greater awareness of research and marketing achievements to increase attribution of RDE and M benefits to Hort Innovation. Additionally, while satisfaction with short term R&D investments is more widespread than in 2017, there is dissatisfaction with long term and marketing investments among some growers, including those from larger organisations. Closer collaboration, enabling greater input from these segments is likely to be received positively.

# Survey snapshot

## Knowledge of Hort Innovation

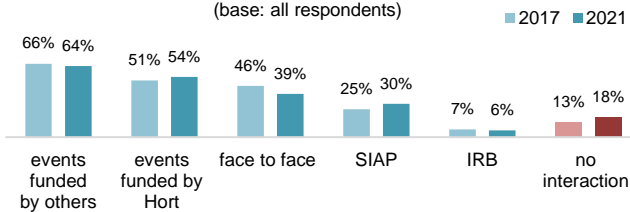
knowledge of Hort Innovation activities (base: all respondents)



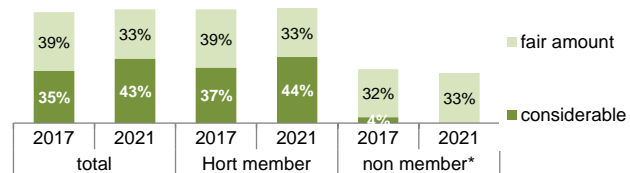
\*caution small sample size

## Grower engagement

method of interaction with Hort Innovation (base: all respondents)



satisfaction with interaction (base: all respondents able to answer)



### Engagement positives:

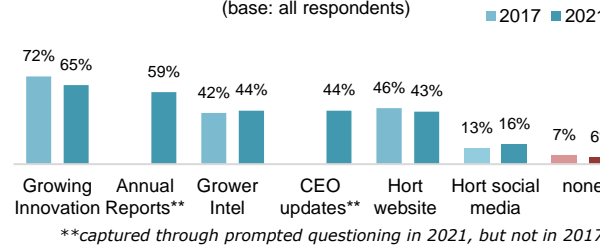
- Keep growers updated (15%)
- Open communication (10%)
- Existing interaction OK (10%)

### Engagement negatives:

- Insufficient interaction (22%)
- Grower feedback not actioned (10%)
- Lack grower consultation (8%)

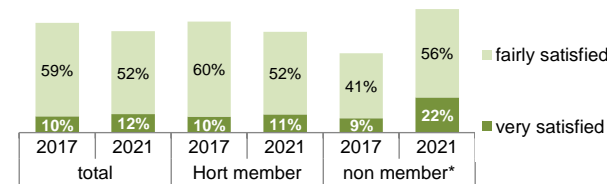
## Information product and service usage

information products and services accessed (base: all respondents)



\*\*captured through prompted questioning in 2021, but not in 2017

satisfaction with information products and services (base: able to answer)



### Reasons for positive rating:

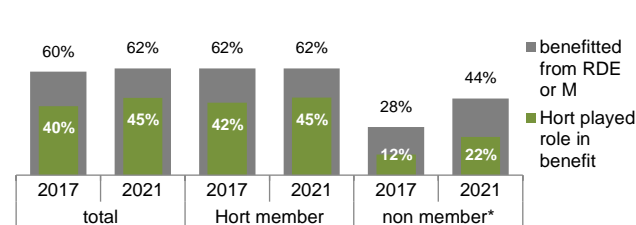
- Regular info provided (28%)
- Address industry needs (15%)
- Keep growers informed (7%)

### Reasons for negative rating:

- Lack relevant info (11%)
- Industry specific info desired (11%)
- Lack reaction to emerging issues (8%)

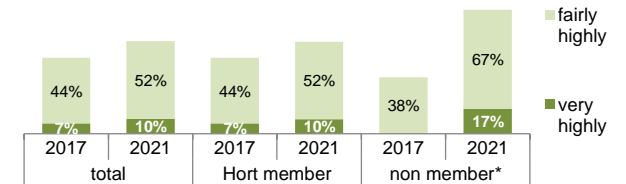
## Perceived direct benefits from RDE&M

RDE or M benefits (base: all respondents)

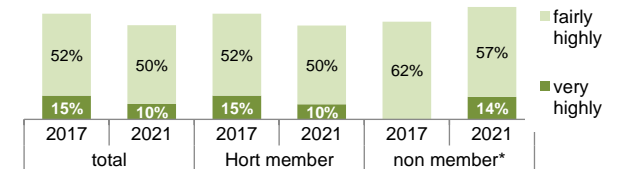


## Perception of Hort RDE&M investments

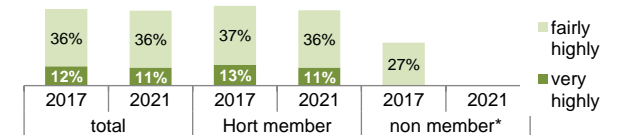
rating Hort Innovation SHORT term R&D (base: aware Hort/able to answer)



rating LONG term R&D for industry (base: aware Hort/able to answer)

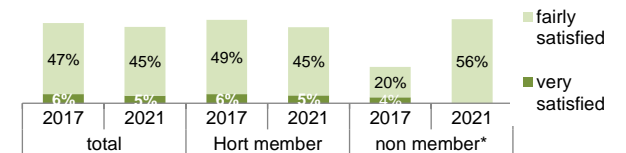


marketing investment and activity rating (base: aware Hort/able to answer/pay marketing levy)



## Satisfaction with Hort's performance

overall satisfaction with Hort Innovation performance (base: all respondents)



### Reasons for positive rating:

- Benefitted RDE or M (13%)
- Coordinate RDE&M (12%)
- Improving/good job (6%)

### Reasons for negative rating:

- Not seeing benefits (14%)
- Insufficient collaboration (13%)
- Disagree with priorities (10%)

## 1. Background, objectives and methodology

### Introduction

Hort Innovation first conducted the Grower Sentiment Survey (previously referred to as the Stakeholder Sentiment Survey) in 2017 to collect benchmark data related to its performance and gather a better understanding of its grower stakeholders.

Improving the services provided to industry continues to be a key imperative for Hort Innovation and to ensure it meets the needs of growers and continues to improve in key areas identified in the organisation's Strategic Plan, a second wave of the Survey was conducted to track the organisation's performance against the baseline results.

The following key areas are covered in this year's survey:

- ❖ Level of awareness and knowledge about Hort Innovation activities
- ❖ Overall performance of Hort Innovation as an investor in horticulture research, development, extension and marketing
- ❖ Growers' perception of Hort Innovation's investments in short and longer term R&D
- ❖ Growers' perception of Hort Innovation marketing investments
- ❖ Perception of Hort Innovation engagement and working with industry
- ❖ Awareness and sentiment towards communication information products and services
- ❖ Impact and benefits felt from Research, Development, Extension and Marketing (RDE&M) investments and Hort Innovation's role, if any, in benefits
- ❖ Confidence in the future of the respondents' main horticulture industry
- ❖ Current phase of enterprise – expanding, steady or winding down
- ❖ Demographics, including age, company turnover etc.

### Methodology and sampling

- ❖ Computer Assisted Telephone Interviews (CATI) were conducted to collect data for the project. This method ensures that a random sample of growers is selected and stratified sampling techniques can be implemented. Additionally, it provides for accurate future longitudinal comparison of results.
- ❖ In total, 401 growers randomly selected from Hort Innovation's member and CRM databases were interviewed for the survey, consisting of 392 Hort Innovation members and 9 non-members.
- ❖ Interviews were conducted during March 2021, with an average interview length of approximately 16 minutes. There was good co-operation from growers, with a response rate of 69% achieved (interviews versus refusals), while slightly lower than in 2017 (74%), this level of participation provides a high level of confidence in results.

- ❖ Quotas were set for each industry to ensure results were not disproportionately affected by conducting too many interviews in one industry. This methodology meant data did not have to be weighted prior to analysis.
- ❖ Where respondents' businesses covered multiple industries, quotas were filled based on the main product grown.
- ❖ Data has also been aggregated into industry cluster to allow for robust statistical comparison in this survey as well as longitudinally.
- ❖ Sample stratified to remain comparable to 2017.
- ❖ In 2021, representation from all industries aside from Prune was achieved, indicating either random sampling meant no prune growers were contacted or Hort Innovation's database is lacking prune grower representation.

### Standard error and limitations of the data

The sample of horticulture growers participating in the survey was 400. On typical measurements involving the whole sample (where 70% of respondents concur), the standard error at the 95% confidence level is approximately  $\pm 4.4\%$ .

Readers should exercise caution when examining responses for industry categories with relatively small sample sizes (for example berries). The table below summarises the standard error at the 95% confidence level for different sample sizes:

sample base	margin for error
400	$\pm 4.4\%$
300	$\pm 5.1\%$
250	$\pm 5.6\%$
200	$\pm 6.3\%$
150	$\pm 7.3\%$
100	$\pm 9.0\%$
50	$\pm 12.7\%$
30	$\pm 16.4\%$

## 2. Report notes and definitions

### Report notes and definitions

Throughout this report, reference is made to various segments, defined in the table below:

Primary industry cluster	Vegetable	Onion, potato, sweet potato, processing tomato and other vegetable
	Temperate fruit	Apple/pear, cherry, citrus, dried/table grape, dried tree fruit, nashi, olive, prune, summer fruit
	Tropical fruit	Avocado, banana, custard apple, lychee, mango, melon, papaya, passionfruit, persimmon, pineapple
	Lifestyle	Nursery, pyrethrum and turf
	Mushroom	Mushroom
	Nut	Almond, chestnut, macadamia & pistachio
	Berry	Raspberry and blackberry, strawberry and blueberry
Farm phase	Expanding	Respondents from businesses currently in an expansion phase
	Steady, happy	Respondents from businesses in a static phase due to being where it is wanted
	Steady, unable	Respondents from businesses in a static phase due to currently being unable to expand for one reason or another
	Winding down	Respondents from businesses in a winding down phase
Age group	<40 (younger growers)	Growers aged 18-39 years
	40-59	40-59 year old growers
	60+	Growers aged 60 years or older
*	Caution small sample	Sample sizes less than 30, caution interpreting results, data is indicative only
Business size	Small	Respondents from businesses turning over less than \$500,000
	Medium	Respondents from businesses turning over \$500,001 to 2 million dollars
	Large	Respondents from businesses turning over 2 million to 10 million dollars
	Extra large	Respondents from businesses turning over greater than 10 million dollars
Database/sample	Hort Innovation member	Current Hort Innovation member
	Non-member	Not currently a Hort Innovation member (Readers should note there are only non-members included in the sample)

### NFI

Readers will notice '(nfi)' typed after some tabulated responses from survey participants. This means 'no further information' and indicates that respondents could only offer a general response to the question asked and despite interviewers probing carefully (without prompting), more specific details were not forthcoming.

### Sample bases

Throughout this report, bases used for measuring various aspects vary. Readers should note that bases are identified for all report sections, tabulations and charts.

### Statistically significant differences

In this report, statistically significant differences at the 95% confidence level will be highlighted using the terminology *significant* or *considerable*. Where results may appear to be significant but are not, terminology such as *slight* is used.

When comparing data between 2 groups, the proportion required for differences to be significant will vary depending on the sample size and the result. For example, on a sample size of 1200, a 2-point variation between results of 1% and 3% may be significantly different, whereas a 2-point difference at 50% and 52% is not.

### Rounding errors

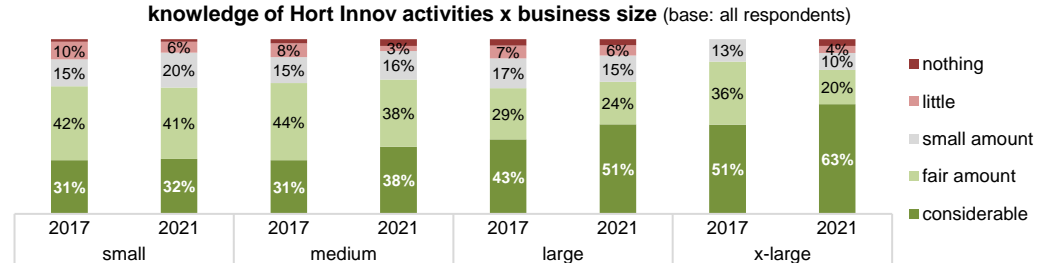
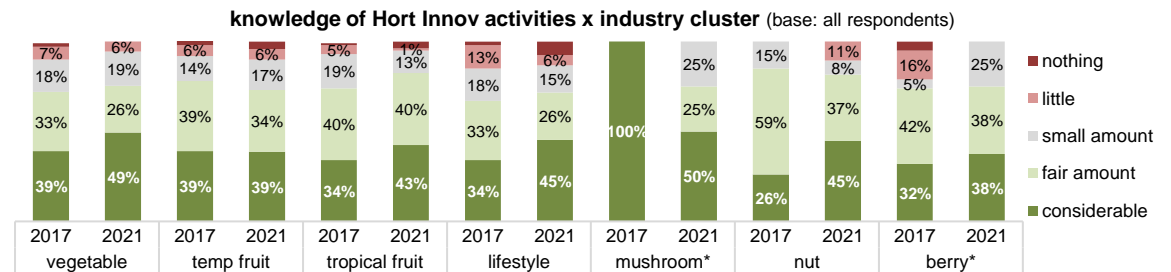
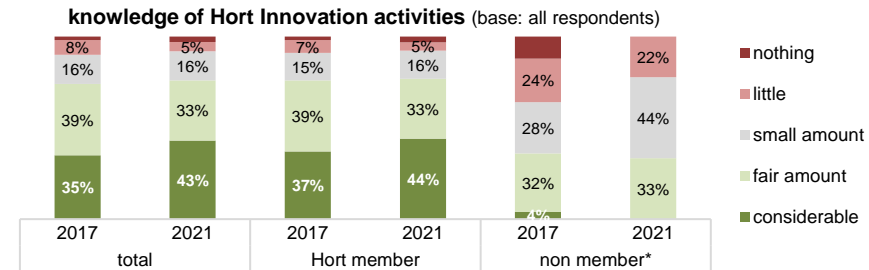
Throughout this report, there are incidences where totals do not exactly match the addition of individual question components, due to data rounding.

### 3. Knowledge of Hort Innovation activities

Questions asked: Q6. Prior to what was just explained, how much would you say you knew about what Hort Innovation actually does?

#### Key findings

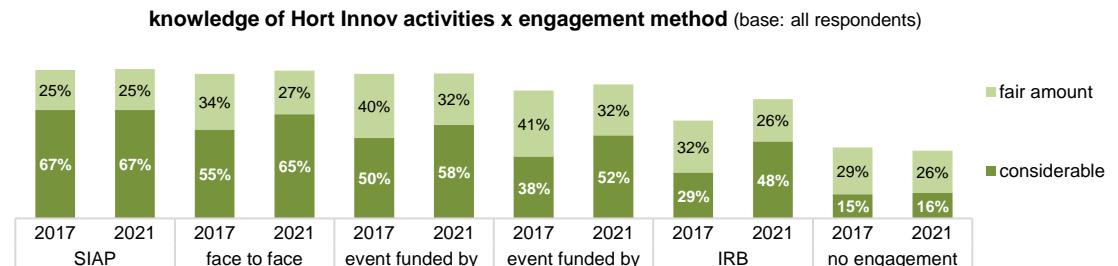
- Since 2017, there has been a slight (not statistically significant) rise in the total proportion of respondents with a *fair* to *considerable* knowledge of Hort Innovation activities (76%, was 74% in 2017).
- However, *considerable* knowledge is a significant 8 points higher (43%, up from 35%).
- Although sample sizes are too small to draw definitive conclusions, as expected, Hort Innovation members are more likely to have *fair* to *considerable* knowledge of Hort Innovation's activities than non-members.
- Notably, respondents from businesses with turnover exceeding \$2 million are significantly more likely to have *considerable* knowledge of Hort Innovation activities than those turning over less (55% and 35% respectively).
- Rating Hort Innovation's performance highly is significantly more widespread among growers with a *fair* to *considerable* knowledge of the organisation's activities than those with less (57% and 30% respectively).



#### Implications

Survey results suggest Hort Innovation's engagement with growers and information products and services are ensuring most members have a fair to considerable knowledge of the organisation's activities.

However, scope remains to increase knowledge among non-members.



knowledge of Hort Innovation activities	% mentioning (base: all respondents)									
	sample			primary industry cluster						
	total (n=401)	Hort member (n=392)	non member* (n=9)	vegetable (n=89)	temp fruit (n=119)	trop fruit (n=80)	lifestyle (n=53)	mushroom* (n=4)	nut (n=38)	berry* (n=16)
A considerable amount	↑ 43%	↑ 44%	0%	49%	39%	43%	45%	50%	45%	38%
A fair amount	33%	33%	33%	26%	34%	40%	26%	25%	37%	38%
A small amount	16%	16%	44%	19%	17%	13%	15%	25%	8%	25%
A very little amount	5%	5%	22%	6%	6%	1%	6%	0%	11%	0%
Nothing at all	3%	3%	0%	0%	4%	4%	8%	0%	0%	0%
Total: considerable/fair amount	76%	77%	33%	75%	73%	83%	72%	75%	82%	75%
Total: small amount/very little/nothing	24%	23%	67%	25%	27%	18%	28%	25%	18%	25%

↑ significant increase since 2017

\*caution small sub sample, data is indicative only

## 4. Engagement and interaction

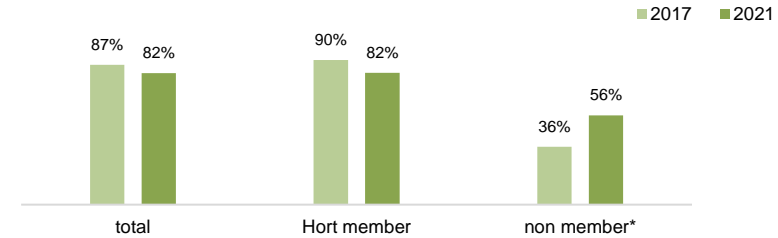
### 4.1 Method of interaction with Hort Innovation

Questions asked: Q7. Over the past 2 years, have you interacted with Hort Innovation through any of the following methods?

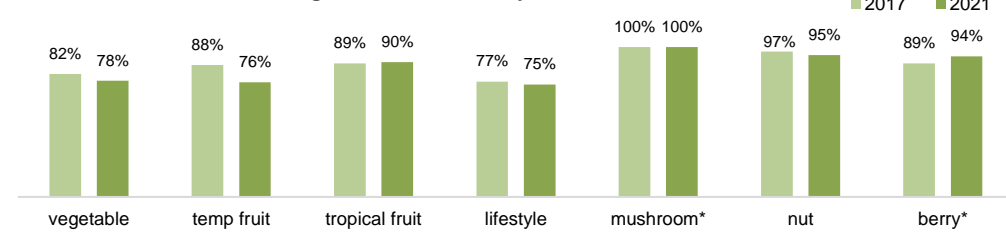
#### Key findings

- While more than 8 in 10 respondents have interacted with Hort Innovation over the past 2 years, this result is considerably lower than in 2017.
- However, significantly fewer respondents having face to face interaction with Hort Innovation suggests that COVID-19 restrictions may have impacted these results.
- In total, the proportion of respondents engaging with Hort Innovation varies by industry cluster, from 95% of nut to a much lower 77% of lifestyle respondents.
- While Hort Innovation interacted via face to face engagement with more than two thirds (67%) of x-large businesses, this result is significantly less widespread among those turning over less than \$10 million (35%).

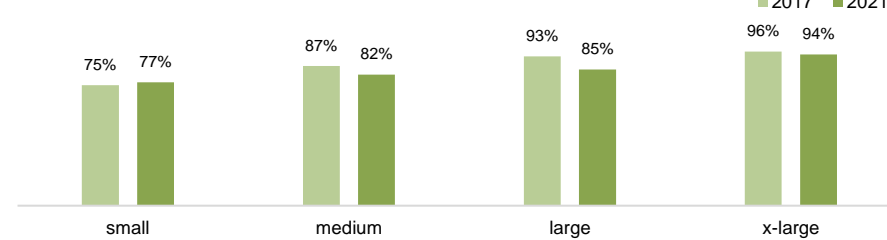
% interacting with Hort Innovation in the previous 2 years (base: all respondents)



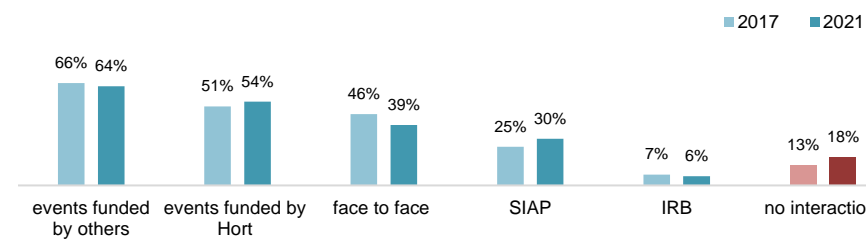
% interacting with Hort x industry cluster (base: all respondents)



% interacting with Hort x business size (base: all respondents)



method of interaction with Hort Innovation (base: all respondents)



#### Implications

Despite COVID-19 challenges, Hort Innovation has interacted with a large proportion of respondents. However, other sections of this Report reveal a desire for greater engagement among a segment of growers.

engagement	% mentioning (base: all respondents)									
	sample			primary industry cluster						
	total (n=401)	Hort member (n=392)	non member* (n=9)	vegetable (n=89)	temp fruit (n=119)	trop fruit (n=80)	lifestyle (n=53)	mushroom* (n=4)	nut (n=38)	berry* (n=16)
Industry events <b>funded by someone else**</b>	64%	65%	33%	55%	61%	66%	64%	75%	87%	63%
Industry events <b>funded by Hort Innovation**</b>	54%	55%	33%	56%	48%	61%	45%	50%	61%	75%
Face to face contact with Hort Innovation staff	↓ 39%	↓ 40%	0%	39%	↓ 30%	49%	34%	50%	50%	44%
Through the SIAP (Strategic Investment Advisory Panels) or SIAP member	30%	31%	22%	24%	32%	36%	25%	50%	37%	31%
Through Industry Representative Body (IRB) †	6%	6%	0%	6%	5%	4%	6%	25%	11%	6%
Via phone †	3%	3%	0%	8%	2%	1%	0%	25%	3%	0%
Can't recall/don't know	0%	↓ 0%	11%	0%	0%	1%	0%	25%	0%	0%
Have not found out anything over past 2 years	↑ 18%	↑ 18%	44%	22%	↑ 24%	10%	25%	0%	5%	6%

↑ significant increase since 2017; ↓ significant decrease since 2017 \*caution small sub sample, data is indicative only \*\*based on respondents' perception of organisation providing funding  
 †nominated via 'other mentions' option at question 7

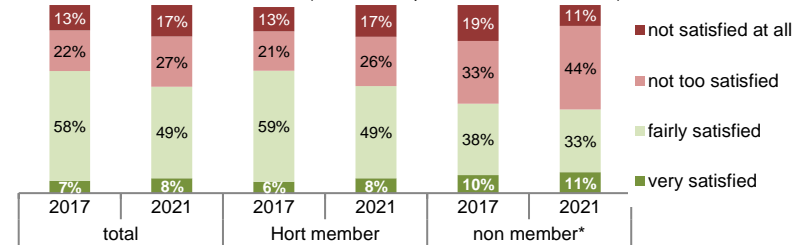
## 4.2 Rating of interaction with Hort Innovation

Questions asked: Q8. Overall how satisfied are you with your interaction with Hort Innovation?

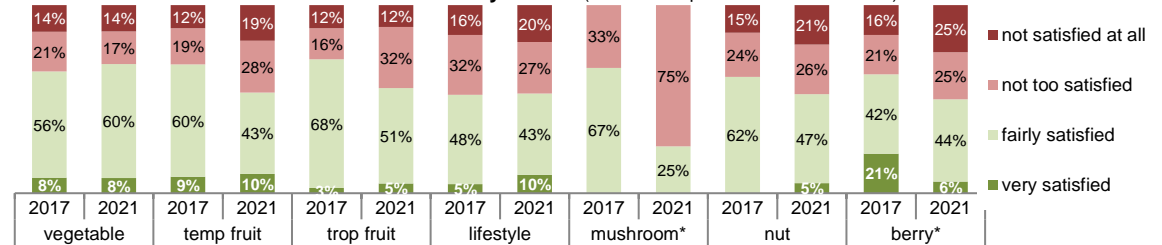
### Key findings

- While respondents remain more likely to be satisfied with Hort Innovation's engagement than not, compared to 2017, satisfaction is significantly less widespread (57% of those able to rate their interaction, down from 65%).
- Notably, tropical and temperate fruit respondents are significantly less likely to be satisfied with Hort Innovation's interaction than in 2017.
- As a result, satisfaction varies by industry cluster, from 69% of those from vegetable industries to a much lower 53% of temperate fruit and nut counterparts.
- Additionally, younger growers (66%) and those aged 40-59 (62%) are significantly more likely to be satisfied with Hort Innovation's engagement than the 60+ age group (48%).

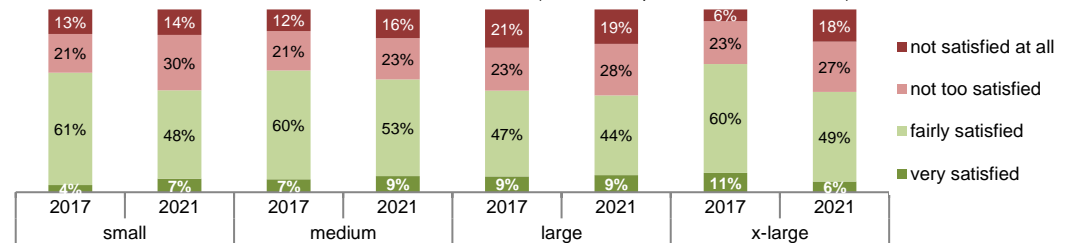
satisfaction with interaction (base: all respondents able to answer)



satisfaction with interaction x industry cluster (base: all respondents able to answer)



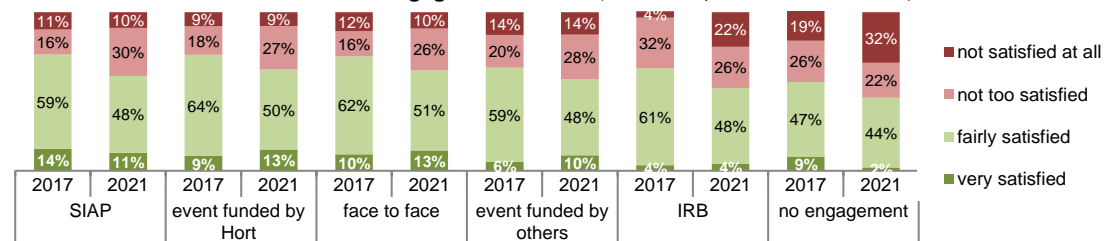
satisfaction with interaction x business size (base: all respondents able to answer)



### Implications

While many growers are satisfied with Hort Innovation's engagement due to open communication and being kept up to date with activities, there is clearly a segment expecting greater interaction with the organisation and for the feedback they provide to be actioned.

satisfaction with interaction x engagement method (base: all respondents able to answer)



engagement rating	% mentioning (base: all respondents able to answer)									
	sample			primary industry cluster						
	total (n=389)	Hort member (n=380)	non member* (n=9)	vegetable (n=86)	temp fruit (n=116)	trop fruit (n=77)	lifestyle (n=51)	mushroom* (n=4)	nut (n=38)	berry* (n=16)
Very satisfied	8%	8%	11%	8%	10%	5%	10%	0%	5%	6%
Fairly satisfied	↓ 49%	↓ 49%	33%	60%	↓ 43%	↓ 51%	43%	25%	47%	44%
Not too satisfied	27%	26%	44%	17%	↑ 28%	32%	27%	75%	26%	25%
Not satisfied at all	17%	17%	11%	14%	19%	12%	20%	0%	21%	25%
Total: satisfied	↓ 57%	↓ 57%	44%	69%	↓ 53%	↓ 56%	53%	25%	53%	50%
Total: not satisfied	↑ 43%	↑ 43%	56%	31%	↑ 47%	↑ 44%	47%	75%	47%	50%

↑ significant increase since 2017; ↓ significant decrease since 2017 \*caution small sub sample, data is indicative only

### 4.3 Reason for rating interaction

Questions asked: Q9. Why do you say that (from Q8)?

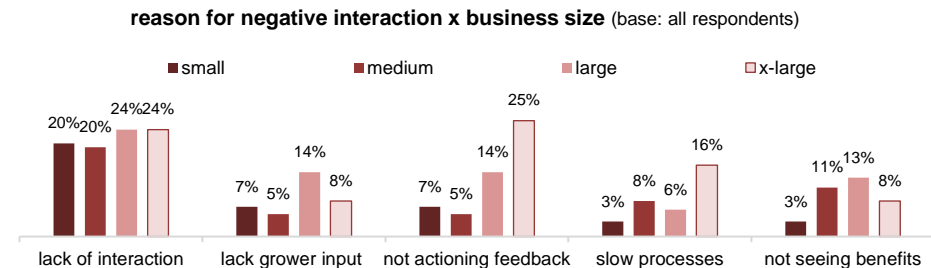
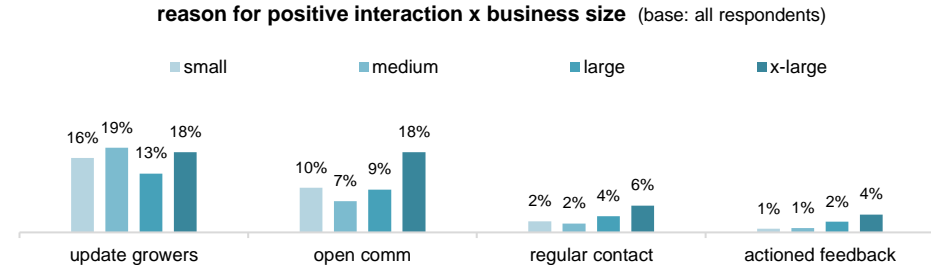
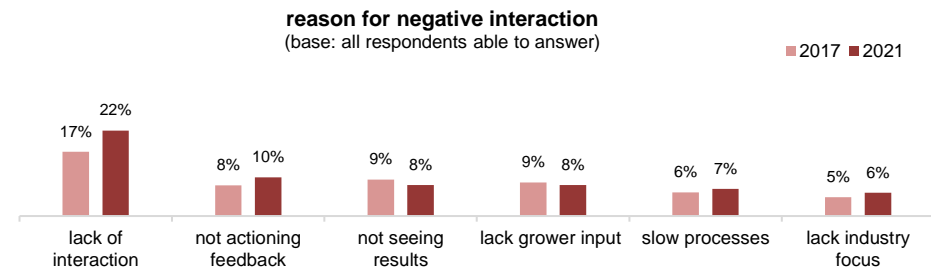
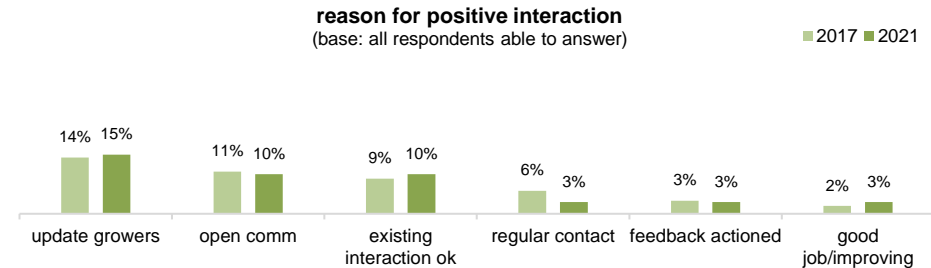
#### Key findings

- Ensuring growers are up to date with Hort Innovation activities, having open communication channels and being content with existing interaction are key drivers (unprompted) for satisfaction with engagement.
- Conversely, negativity is most commonly due to a desire for greater levels of interaction and input, a perception that grower feedback is not actioned and not seeing results or benefits.
- Compared to 2017, tropical fruit respondents are significantly more likely to mention insufficient engagement and a perception that feedback is not being actioned appropriately.
- Belief that Hort innovation is not actioning feedback is significantly more widespread among large and x-large growers than small to medium counterparts.

#### Implications

Survey results suggest that a group of growers, including some from larger enterprises desire more frequent interaction and that feedback they provide has a clearly communicated response.

While the non-member sample size means data is indicative only, consistent with 2017, it appears that attempts to interact with this group may be welcomed.



reason for rating interaction	% mentioning (base: all respondents able to answer)									
	total (n=389)	sample			primary industry cluster					
		Hort member (n=380)	non member* (n=9)	vegetable (n=86)	temp fruit (n=116)	trop fruit (n=77)	lifestyle (n=51)	mushroom* (n=4)	nut (n=38)	berry* (n=16)
<b>Positive mentions</b>										
Keep growers informed/updated	15%	16%	11%	17%	18%	12%	12%	0%	16%	19%
Open communication/good quality interaction	10%	10%	11%	12%	13%	4%	10%	0%	11%	13%
Happy with existing interaction (nfi)	10%	10%	22%	12%	10%	10%	10%	0%	8%	13%
Regular interaction	↓ 3%	↓ 3%	0%	↓ 1%	3%	5%	4%	0%	3%	0%
Doing a good job/improved (nfi)	3%	3%	0%	5%	1%	5%	0%	0%	8%	6%
Acted on feedback/interaction	2%	2%	0%	2%	3%	↓ 0%	0%	0%	0%	6%
<b>Negative mentions</b>										
Insufficient interaction/desire more interaction	22%	↑ 22%	22%	21%	20%	↑ 22%	25%	0%	32%	6%
Don't act on grower feedback	10%	10%	11%	6%	10%	↑ 16%	10%	75%	5%	6%
Not seeing results/benefits	8%	8%	0%	9%	9%	6%	8%	0%	8%	6%
Insufficient consultation/input from growers	8%	8%	0%	7%	9%	10%	2%	0%	8%	13%
Slow reaction/complicated processes	7%	8%	0%	6%	3%	14%	6%	25%	5%	25%
Need greater focus on our industry	6%	5%	22%	9%	3%	4%	8%	50%	3%	0%

↑ significant increase since 2017; ↓ significant decrease since 2017 \*caution small sub sample, data is indicative only

## 5. Information products and services

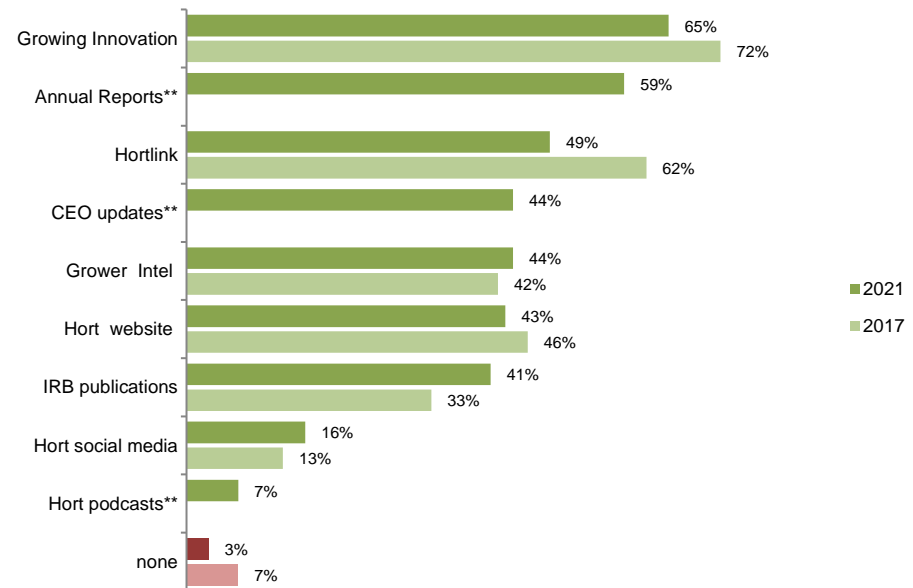
### 5.1 Information products and services accessed

Questions asked: Q10. Which of the following Hort Innovation information products and services have you read, accessed or visited over the past 2 years?\*\*\*

#### Key findings

- Consistent with 2017, almost all respondents (94%, was 93%) accessed Hort Innovation information products and services over the past 2 years and on average, between 3 and 4 were accessed (unable to compare this result to 2017 due to question alteration).
- Notably, the number of sources accessed varies from more than 4 by vegetable and tropical fruit respondents to approximately 3 by nut counterparts and the latter are slightly less likely to be *satisfied* with Hort Innovation's products and services.
- Growing Innovation, Hort Innovation's website, CEO updates and social media are each significantly more likely to be accessed by younger growers than older counterparts.
- Respondents accessing at least 1 Hort Innovation information product and service are considerably more likely to have *fair* to *considerable* knowledge of the organisation's activities than among those not accessing the communications (80% and 33% respectively).

information products and services accessed (base: all respondents)



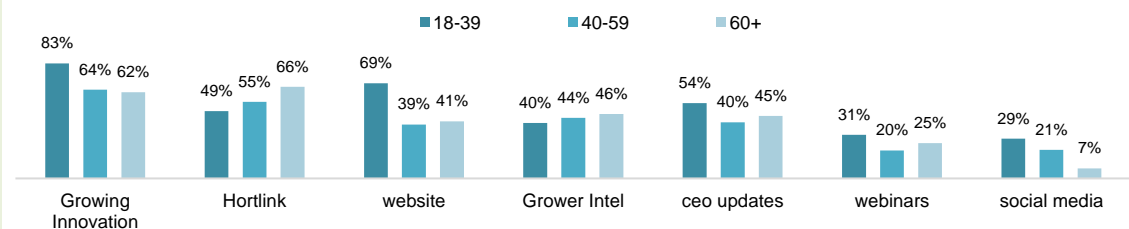
\*\*\*captured through prompted questioning in 2021, but not in 2017

#### Implications

Most respondents have accessed Hort Innovation information products and services and results suggest this is resulting in widespread knowledge of the organisation's activities.

While constraints due to survey length is an issue, future surveys may consider exploring respondent satisfaction with individual products and services.

information products and services accessed x age group (base: all respondents)



product/service accessed	% mentioning (base: all respondents)									
	sample			primary industry cluster						
	total (n=401)	Hort member (n=392)	non member* (n=9)	vegetable (n=89)	temp fruit (n=119)	trop fruit (n=80)	lifestyle (n=53)	mushroom* (n=4)	nut (n=38)	berry* (n=16)
Growing Innovation	↓ 65%	↓ 64%	89%	67%	66%	63%	70%	100%	↓ 47%	69%
Company Annual Report or Individual Industry Annual Reports**	59%	59%	33%	53%	63%	63%	58%	75%	53%	56%
Hortlink (no longer in production)***	49%	50%	11%	53%	50%	46%	49%	75%	45%	50%
Grower Intel industry alerts	44%	45%	11%	47%	42%	54%	36%	50%	42%	38%
Read updates from the CEO via email**	44%	44%	33%	38%	38%	53%	57%	50%	47%	31%
Hort Innovation website	43%	42%	67%	45%	38%	45%	43%	75%	42%	50%
Other IRB publications†	↑ 41%	↑ 42%	22%	36%	42%	48%	36%	25%	50%	38%
Hort Innovation webinars**	24%	23%	33%	35%	28%	16%	15%	25%	11%	31%
Hort Innovation social media/twitter/etc.	16%	15%	44%	↑ 26%	13%	15%	15%	25%	3%	19%
Hort Innovation podcasts**	7%	7%	22%	11%	5%	8%	8%	0%	3%	6%
None	6%	6%	0%	6%	6%	8%	4%	0%	11%	0%

↑ Significant increase since 2017; ↓ significant decrease since 2017 \*caution small sub sample, data is indicative only †nominated via 'other mentions', published by the IRB, but likely with significant Hort Innovation funding  
 \*\*significance testing not conducted (prompted in 2021, but not 2017) \*\*\*significance testing not conducted, no longer in production

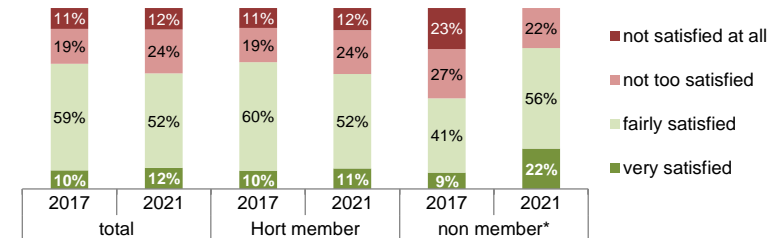
## 5.2 Satisfaction with information products and services

Questions asked: Q11. Overall how satisfied are you with Hort Innovation's information products and services?

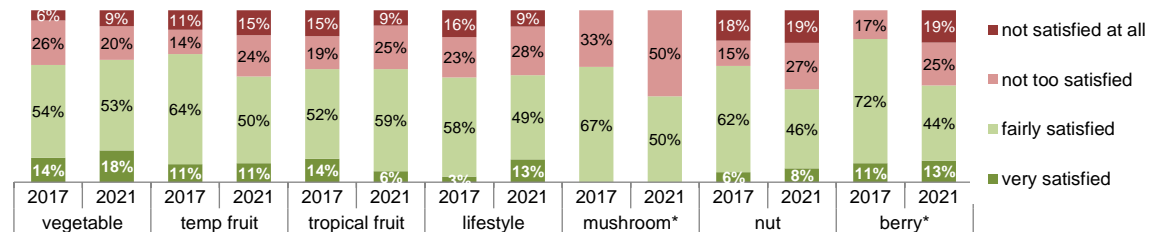
### Key findings

- Similar to 2017 results, 64% of all respondents (able to answer) are *fairly* to *very* satisfied with Hort Innovation's information products and services.
- However, Hort Innovation members are significantly less likely to be satisfied than in 2017 (63%, down from 70%).
- Notably, younger respondents are considerably more likely to be satisfied than those aged 40+ (86% and 62% respectively).
- Similarly, *satisfaction* varies by industry cluster, from 71% of vegetable respondents to a much lower 54% from nut industries.
- Compared to 2017, temperate fruit growers are significantly less likely to be *satisfied* with Hort Innovation's products and services and results in the next section suggest this is due to lack of reaction to emerging issues and relevant information.

satisfaction with information products and services (base: able to answer)



satisfaction with information products and services x industry cluster (base: able to answer)

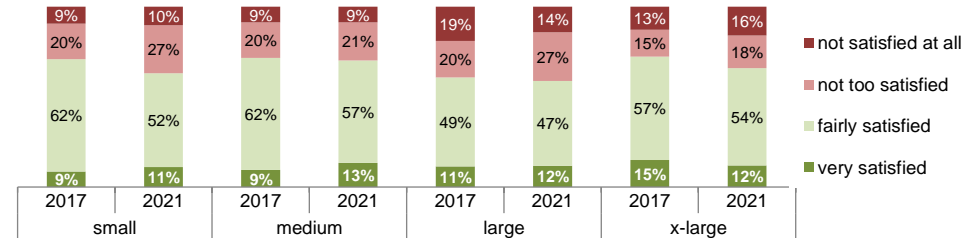


### Implications

Encouragingly, most younger respondents access and are satisfied with Hort Innovation's products and services.

However, satisfaction is less widespread than in 2017 among members and there may be an opportunity to improve these results through ensuring responses to emerging issues are communicated.

satisfaction with information products and services x business size (base: able to answer)



rating of information products/services	% mentioning (base: respondents able to answer)									
	sample			primary industry cluster						
	total (n=395)	Hort member (n=386)	non member* (n=9)	vegetable (n=87)	temp fruit (n=117)	trop fruit (n=79)	lifestyle (n=53)	mushroom* (n=4)	nut (n=37)	berry* (n=16)
Very satisfied	12%	11%	22%	18%	11%	6%	↑ 13%	0%	8%	13%
Fairly satisfied	52%	↓ 52%	56%	53%	50%	59%	49%	50%	46%	44%
Not too satisfied	24%	24%	22%	20%	24%	25%	28%	50%	27%	25%
Not satisfied at all	12%	12%	0%	9%	15%	9%	9%	0%	19%	19%
Total: satisfied	64%	↓ 63%	78%	71%	↓ 62%	66%	62%	50%	54%	56%
Total: not satisfied	36%	37%	22%	29%	↑ 38%	34%	38%	50%	46%	44%

↑ significant increase since 2017; ↓ significant decrease since 2017 \*caution small sub sample, data is indicative only

### 5.3 Reason for rating information products and services

Questions asked: Q12. Why do you say that (from Q11)?

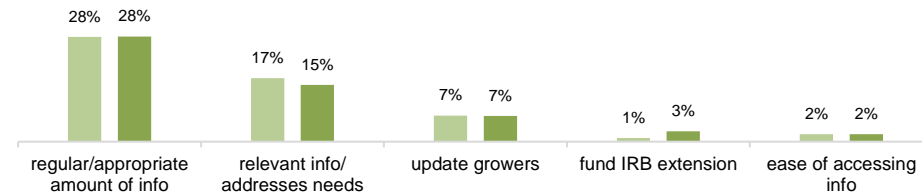
#### Key findings

- Consistent with 2017, receiving an appropriate or regular amount of information, relevant content addressing industry requirements and ensuring growers are kept up to date are key factors driving satisfaction with Hort Innovation products and services.
- Of note, compared to 2017, vegetable growers are significantly more likely to be positive due to a regular amount of information received, whereas those from nut are considerably less so.
- Similarly, compared to older counterparts, a slightly higher proportion of younger respondents are satisfied due to regular information received (40%, compared to 27% of those aged 40+) and belief relevant content addressing industry needs is provided (37%, versus 13% aged 40+).
- While only 1 in 10 growers perceive Hort Innovation information to lack relevancy and/or adequately respond to emerging issues, these concerns are significantly more widespread than in 2017.

reason for rating info products/services positively

(base: all respondents able to answer)

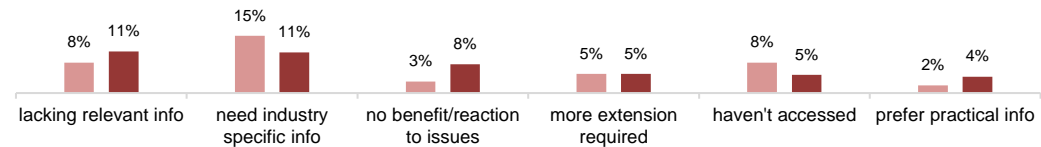
2017 2021



reason for rating info products/services positively

(base: all respondents able to answer)

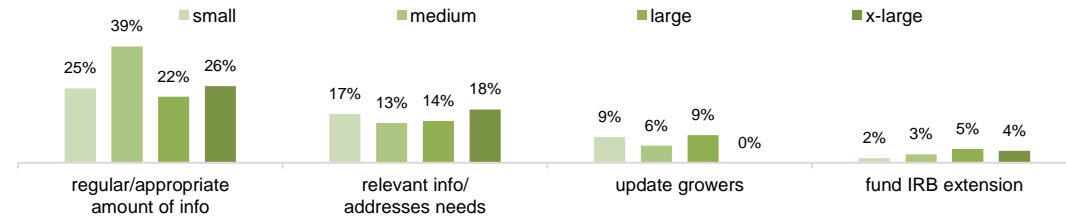
2017 2021



reason for positive rating x business size

(base: all respondents)

small medium large x-large



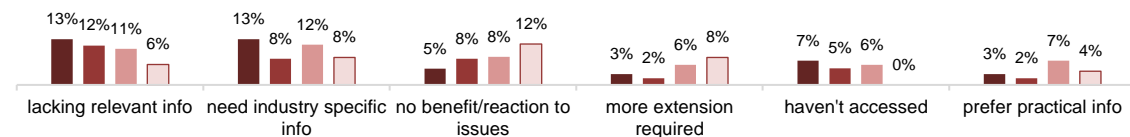
#### Implications

Results suggest Hort Innovation's information products and services continue to be sent with appropriate frequency and content that addresses industry needs, but further investigation exploring the needs among those aged 40+ may be beneficial.

reason for negative rating x business size

(base: all respondents)

small medium large x-large



reason for rating products and services	% mentioning (base: all respondents)									
	total (n=395)	sample			primary industry cluster					
		Hort member (n=394)	non member* (n=9)	vegetable (n=87)	temp fruit (n=117)	trop fruit (n=79)	lifestyle (n=53)	mushroom* (n=4)	nut (n=37)	berry* (n=16)
<b>Positive mentions</b>										
Provide regular information/good amount of information	28%	28%	11%	↑ 39%	29%	30%	25%	25%	↓ 5%	13%
Provide relevant information/address relevant industry issues	15%	15%	44%	14%	14%	11%	15%	25%	↑ 24%	31%
Keep growers us up to date	7%	7%	0%	6%	6%	8%	11%	0%	8%	0%
Fund IRB who extend information products/services	↑ 3%	↑ 3%	11%	1%	3%	5%	0%	0%	8%	0%
Ease of accessing/finding information	2%	3%	0%	0%	2%	3%	4%	0%	0%	13%
<b>Negative mentions</b>										
Lack of relevant information	↑ 11%	↑ 11%	11%	11%	↑ 11%	10%	9%	0%	11%	19%
Require more industry specific information	11%	11%	0%	8%	9%	8%	21%	25%	16%	6%
Lack of reaction to emerging issues/no benefits	↑ 8%	↑ 7%	22%	5%	↑ 8%	↑ 11%	8%	0%	8%	6%
Greater focus on extension/collaboration with growers	5%	5%	0%	7%	5%	4%	4%	0%	3%	13%
Don't know products existed/haven't received anything	5%	5%	0%	5%	7%	1%	8%	0%	3%	6%
Prefer more practical information/summarised information	↑ 4%	4%	11%	2%	5%	4%	8%	25%	3%	0%

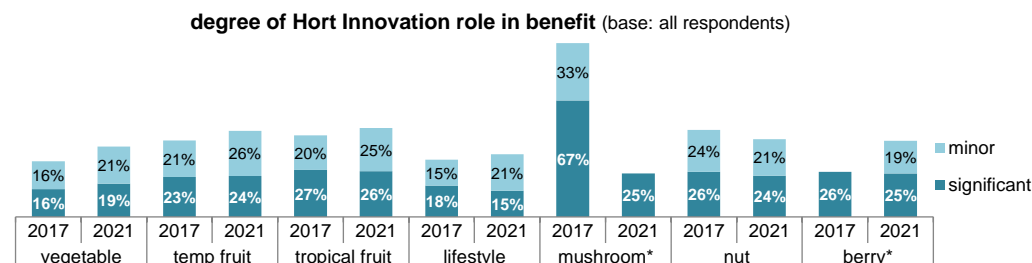
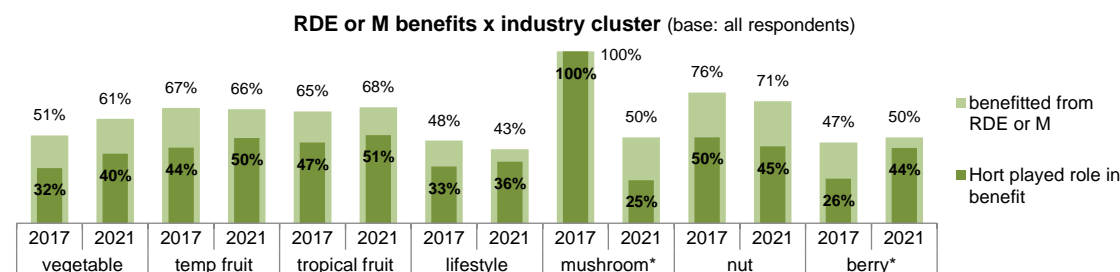
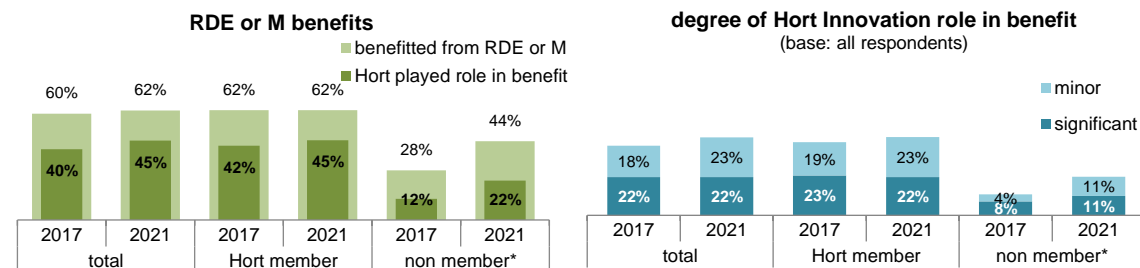
↑ significant increase since 2017; ↓ significant decrease since 2017 \*caution small sub sample, data is indicative only

## 6. Direct benefits felt from horticulture industry Research Development Extension or Marketing (RDE or M)

Question asked: Q16. Do you feel you have directly benefited from any research, development, extension or marketing activities over the past 5 years?  
Q17. Did Hort Innovation play a role in achieving any of these direct benefits from RDE or marketing?

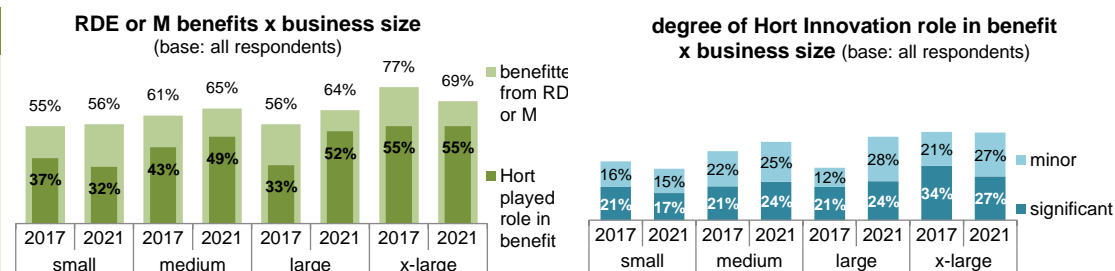
### Key findings

- Consistent with 2017, approximately 6 in 10 (62%, was 60%) respondents say they have directly benefitted from RDE or M.
- However, there has been a slight increase in the proportion who believe Hort Innovation had a role in the benefit (45% of all respondents, was 40% in 2017).
- As a result, the gap between the 2 metrics narrowed from 20 points to 17, but the differential varies significantly by industry cluster (7 points among lifestyle to 26 among nut).
- Perception of directly benefitting from RDE or M varies significantly between the following segments:
  - 71% of nut and 68% of tropical fruit to 43% among lifestyle growers
  - Respondents with *fair* to *considerable* knowledge of Hort Innovation (69%) versus 39% with a *small amount* to *none*
  - 79% of those *satisfied* with Hort Innovation's performance versus 45% of those *dissatisfied*
- Similarly, attributing a role to Hort Innovation in the benefit varies among the following segments:
  - 53% of those with *fair* to *considerable* knowledge of Hort Innovation activities, versus 19% with a *small amount* to *none*
  - Tropical fruit compared to lifestyle respondents (51% and 36% respectively)
  - Respondents with turnover exceeding \$10 million (55%) to 32% among those with turnover less than \$500,000.



### Implications

Scope remains to increase the proportion of growers attributing RDE or M benefits to Hort Innovation, particularly among lifestyle growers and small businesses.



direct benefit felt/Hort Innovation role	% mentioning (base: all respondents)									
	sample			primary industry cluster						
	total (n=401)	Hort member (n=392)	non member* (n=9)	vegetable (n=89)	temp fruit (n=119)	trop fruit (n=80)	lifestyle (n=53)	mushroom* (n=4)	nut (n=38)	berry* (n=16)
Directly benefitted from RDE or M	62%	62%	44%	61%	66%	68%	43%	50%	71%	50%
No benefit	33%	33%	44%	34%	27%	30%	47%	50%	29%	44%
Unsure	5%	5%	11%	6%	7%	3%	9%	0%	0%	6%
Hort Innovation had <b>significant</b> role	22%	22%	11%	19%	24%	26%	15%	25%	24%	25%
Hort Innovation had <b>minor</b> role	23%	23%	11%	21%	26%	25%	21%	0%	21%	19%
Hort Innovation had <b>no</b> role	8%	8%	0%	10%	8%	8%	2%	25%	8%	6%
Unsure/can't say Hort Innovation's role	9%	9%	22%	10%	9%	9%	6%	0%	18%	0%
Total: Hort Innovation had role in benefit	45%	45%	22%	40%	50%	51%	36%	25%	45%	44%

\*caution small sub sample, data is indicative only

## 7. Satisfaction with RD&M investment

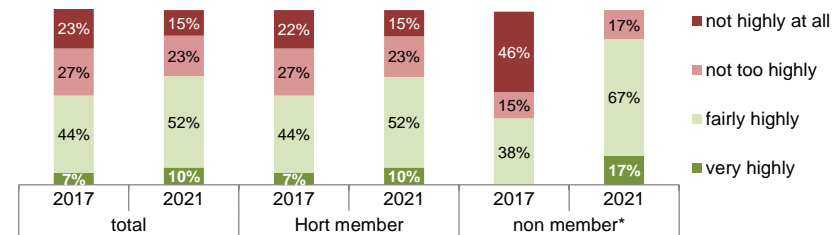
### 7.1 Rating short term research and development

Questions asked: Q13. In your opinion, how would you rate Hort Innovations investments for your SHORT term gains?

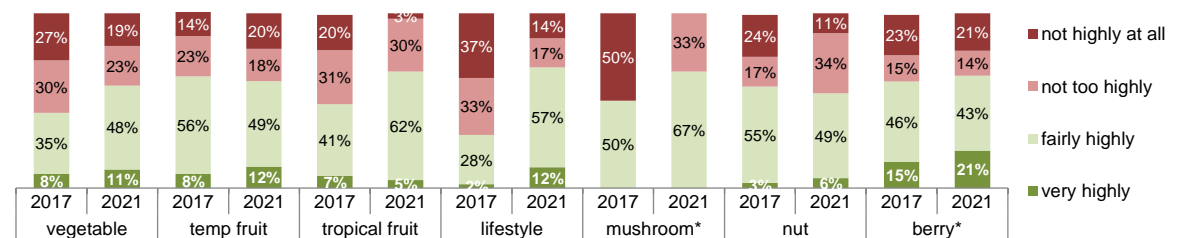
#### Key findings

- Hort Innovation's investments in short term R&D are rated *highly* by a significantly greater proportion of respondents than in 2017 (62% of those knowing at least *a little* about Hort Innovation up from 50%).
- Notably, temperate, tropical fruit and lifestyle respondents are considerably more likely to rate short term R&D investment *highly* than in 2017.
- Notably however, this result varies considerably by business size, from 50% of xx-large to 70% of medium counterparts.

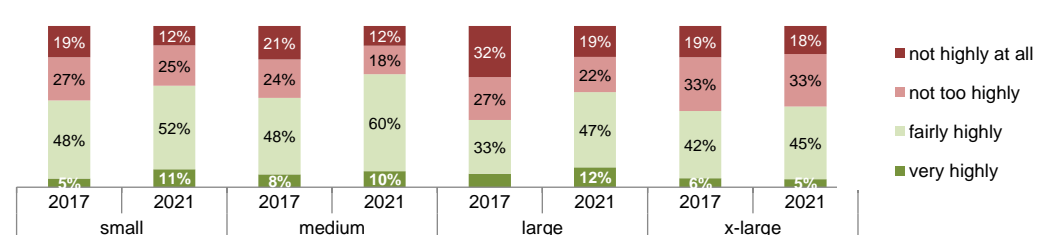
rating Hort Innovation short term R&D (base: respondents aware Hort/able to answer)



rating Hort Innovation short term R&D x cluster (base: aware Hort/able to answer)



rating Hort Innovation short term R&D x business size (base: aware Hort Innov/able to answer)



#### Implications

Positively, survey results suggest growth in satisfaction with Hort Innovation's short term R&D investments, but there remains an opportunity to improve sentiment among x-large business, who may desire greater consultation from Hort Innovation.

rating of short term R&D investment	% mentioning (base: respondents aware Hort activities and able to answer)									
	sample			primary industry cluster						
	total (n=333)	Hort member (n=327)	non member* (n=6)	vegetable (n=75)	temp fruit (n=98)	trop fruit (n=66)	lifestyle (n=42)	mushroom* (n=3)	nut (n=35)	berry* (n=14)
Very highly	10%	10%	17%	11%	12%	5%	↑ 12%	0%	6%	21%
Fairly highly	↑ 52%	↑ 52%	67%	48%	49%	↑ 62%	↑ 57%	67%	49%	43%
Not too highly	23%	23%	17%	23%	18%	30%	17%	33%	34%	14%
Not highly at all	↓ 15%	15%	0%	19%	20%	↓ 3%	↓ 14%	0%	11%	21%
Total: highly	↑ 62%	↑ 62%	83%	59%	↑ 61%	↑ 67%	↑ 69%	67%	54%	64%
Total: not highly	↓ 38%	↓ 38%	17%	41%	↓ 39%	↓ 33%	↓ 31%	33%	46%	36%

↑ significant increase since 2017; ↓ significant decrease since 2017 \*caution small sub sample, data is indicative only

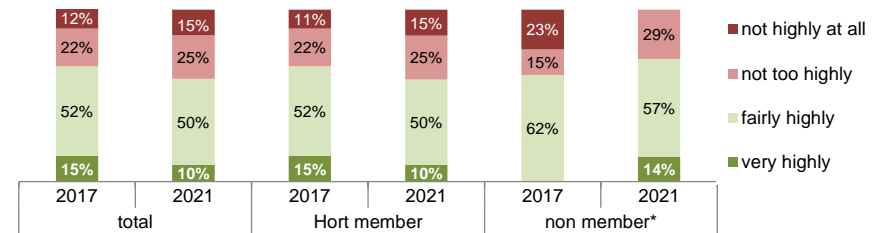
## 7.2 Rating long term research and development for the horticulture industry

Questions asked: Q14. In your opinion, how highly would you rate Hort Innovation's investments for the LONG term benefit of the horticulture INDUSTRY?

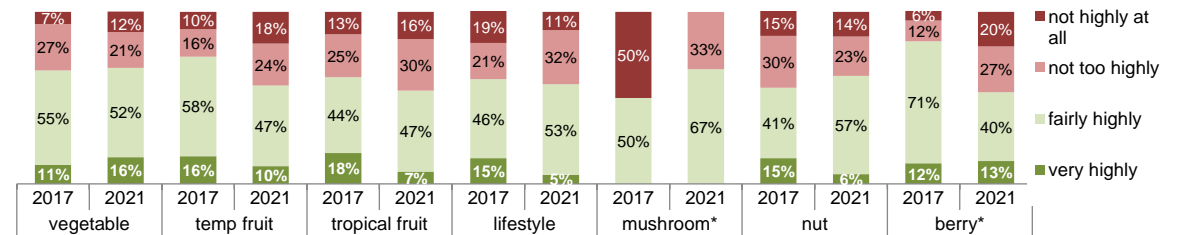
### Key findings

- Rating Hort Innovation's investments in long term R&D *highly* is considerably less widespread than in 2017 (60% of those knowing at least *a little* about Hort Innovation's activities, down from 67%).
- Notably, this result is reflected among temperate fruit respondents (57%, down from 74% in 2017).
- While not quite statistically significant, it is notable, large to x-large growers are slightly less likely to be satisfied with Hort Innovation long term R&D than in 2017 (53%, down from 63%).

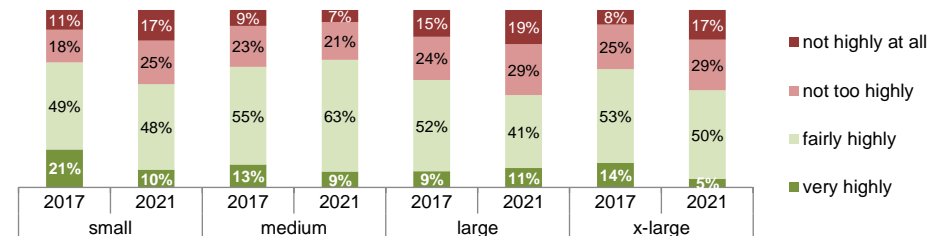
rating long term R&D for industry (base: all respondents aware Hort/able to answer)



rating long term R&D for industry x industry cluster (base: respondents aware Hort/able to answer)



rating long term R&D for industry x business size (base: aware Hort/able to answer)



### Implications

While 6 in 10 respondents are satisfied with Hort Innovation's long term R&D investments, there is discontent among some growers, including from large to x-large businesses who may desire greater input into these longer term strategies.

rating of long term R&D investment	% mentioning (base: respondents aware Hort activities and able to answer)									
	sample			primary industry cluster						
	total (n=338)	Hort member (n=331)	non member* (n=7)	vegetable (n=77)	temp fruit (n=98)	trop fruit (n=70)	lifestyle (n=38)	mushroom* (n=3)	nut (n=35)	berry* (n=15)
Very highly	10%	↓ 10%	14%	16%	10%	7%	5%	0%	6%	13%
Fairly highly	50%	50%	57%	52%	47%	47%	53%	67%	57%	40%
Not too highly	25%	25%	29%	21%	24%	30%	32%	33%	23%	27%
Not highly at all	15%	15%	0%	12%	18%	16%	11%	0%	14%	20%
Total: highly	↓ 60%	60%	71%	68%	↓ 57%	54%	58%	67%	63%	53%
Total: not highly	40%	40%	29%	32%	↑ 43%	46%	42%	33%	37%	47%

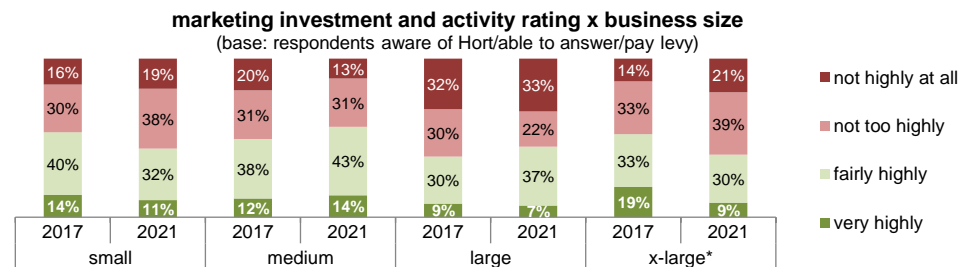
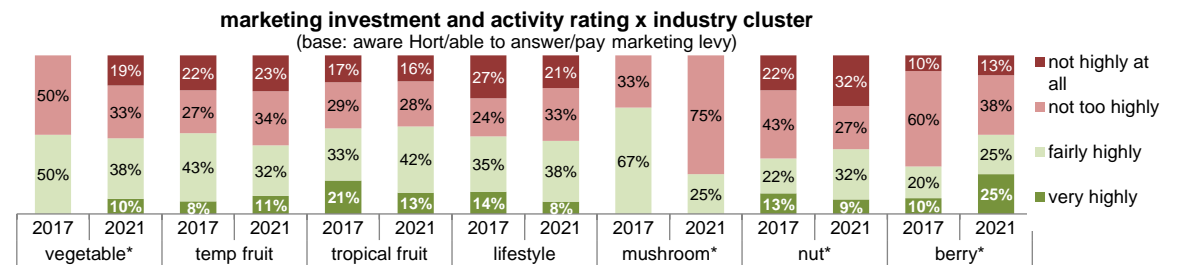
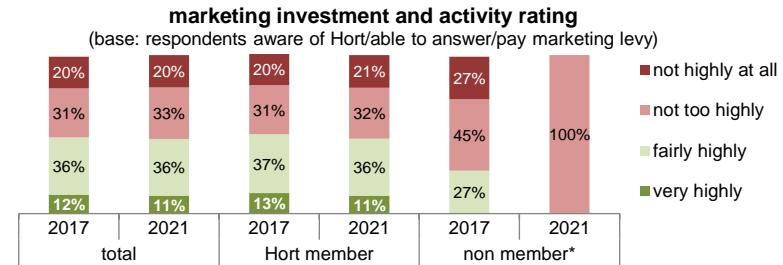
↑ significant increase since 2017; ↓ significant decrease since 2017 \*caution small sub sample, data is indicative only

### 7.3 Rating of Hort Innovation marketing activities and investments

Questions asked: Q15. In your opinion, how highly would you rate Hort Innovations marketing activities and investments?

#### Key findings

- Among those paying a marketing levy, almost half (47% able to answer) rate Hort Innovation’s marketing investments and activities *highly*, no real change from 2017 - 49%.
- This result however, is significantly lower than the proportion rating short and long term R&D investments *highly*.
- Similarly, respondents with turnover exceeding \$2 million are significantly more likely to rate Hort Innovation’s marketing investments *not highly* than *highly* (57% and 43% respectively).
- While tropical fruit respondents are more likely to rate Hort Innovation’s marketing *highly* than *not highly*, they are the only industry cluster to do so.
- Although small sample sizes means that caution is required interpreting data, it is notable that Hort Innovation’s marketing investments are rated *highly* by 5 of the 24 apple and pear respondents.
- Conversely, of the 12 banana respondents able to rate Hort Innovation’s marketing investments, two thirds rate it *very* to *fairly highly*.



#### Implications

Perception of Hort Innovation’s marketing investments is clearly polarised.

Where possible, ensuring marketing achievements are extended to growers may be beneficial.

rating of marketing activities/investment	% mentioning (base: respondents aware Hort activities/able to answer/pay marketing levy)									
	sample				primary industry cluster					
	total (n=249)	Hort member (n=248)	non member* (n=1)	vegetable <sup>†</sup> (n=21)	temp fruit (n=88)	trop fruit (n=67)	lifestyle (n=39)	mushroom* (n=4)	nut* (n=22)	berry* (n=8)
Very highly	11%	11%	0%	10%	11%	13%	8%	0%	9%	25%
Fairly highly	36%	36%	0%	38%	32%	42%	38%	25%	32%	25%
Not too highly	33%	32%	100%	33%	34%	28%	33%	75%	27%	38%
Not highly at all	20%	21%	0%	19%	23%	16%	21%	0%	32%	13%
Total: highly	47%	47%	0%	48%	43%	55%	46%	25%	41%	50%
Total: not highly	53%	53%	100%	52%	57%	45%	54%	75%	59%	50%

<sup>†</sup>Includes marketing levy paying respondents from potato/onion/sweet potato industries

\*caution small sub sample, data is indicative only

## 8. Overall satisfaction with Hort Innovation's performance

### 8.1 Satisfaction with Hort Innovation's performance

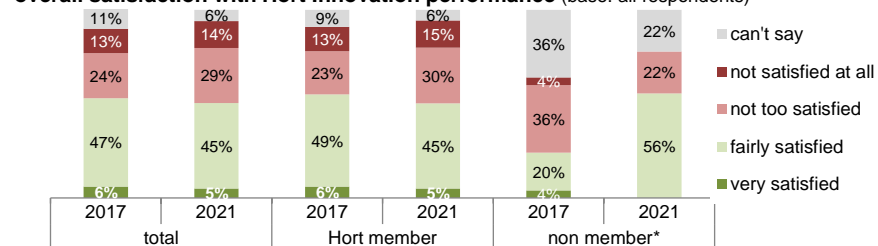
Question asked: Q18. How would you rate your overall satisfaction with Hort Innovation's role as investors in Horticultural research, development and extension?

If from industry paying marketing levy: Q18. How would you rate your overall satisfaction with Hort Innovation's role as investors in Horticultural research, development, extension and marketing?

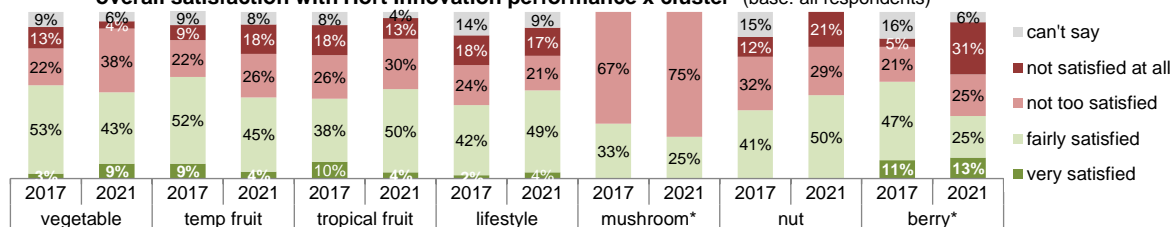
#### Key findings

- While overall satisfaction with Hort Innovation's performance as investors in Research, Development, Extension and Marketing (RDE&M) is similar to 2017 (50%, was 53%), dissatisfaction is significantly more widespread (44%, was 37%).
- Respondents from each industry cluster are slightly more likely to be *satisfied* with Hort Innovations performance than dissatisfied, but it is notable that dissatisfaction is significantly more widespread among temperate fruit growers than in 2017.
- Overall satisfaction with Hort Innovation's performance varies significantly by business size (from 56% of small to medium businesses to a much lower 43% of large to x-large counterparts).
- Additionally, satisfaction with Hort Innovation's performance correlates with the following:
  - Attributing a role in RDE & M benefits to Hort Innovation
  - Fair to considerable knowledge of the organisation's activities
  - Rating marketing activities highly
  - Rating short term R&D highly
  - Rating long term R&D for industry highly
  - Satisfaction with interaction
  - Satisfaction with information products and services

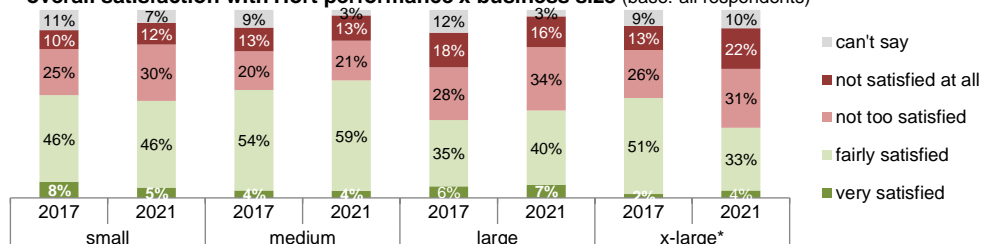
overall satisfaction with Hort Innovation performance (base: all respondents)



overall satisfaction with Hort Innovation performance x cluster (base: all respondents)



overall satisfaction with Hort performance x business size (base: all respondents)



#### Implications

Currently, sentiment towards Hort Innovation's performance is polarised. The following section of this report highlights opportunities for Hort Innovation to improve collaboration with growers, particularly among large businesses.

Additionally, creating greater awareness of research and marketing achievements is likely to be beneficial.

rating of Hort Innovation's performance	% mentioning (base: all respondents)									
	total (n=401)	sample			primary industry cluster					
		Hort member (n=392)	non member* (n=9)	vegetable (n=89)	temp fruit (n=119)	trop fruit (n=80)	lifestyle (n=53)	mushroom* (n=4)	nut (n=38)	berry* (n=16)
Very satisfied	5%	5%	0%	9%	4%	4%	4%	0%	0%	13%
Fairly satisfied	45%	45%	56%	43%	45%	50%	49%	25%	50%	25%
Not too satisfied	29%	↑ 30%	22%	↑ 38%	26%	30%	21%	75%	29%	25%
Not satisfied at all	14%	15%	0%	4%	↑ 18%	13%	17%	0%	21%	31%
Can't say	6%	6%	22%	6%	8%	4%	9%	0%	0%	6%
Total: satisfied	50%	50%	56%	52%	49%	54%	53%	25%	50%	38%
Total: not satisfied	↑ 44%	↑ 44%	22%	43%	↑ 44%	43%	38%	75%	50%	56%

↑ significant increase since 2017; ↓ significant decrease since 2017 \*caution small sub sample, data is indicative only

## 8.2 Reasons for satisfaction with Hort Innovation performance

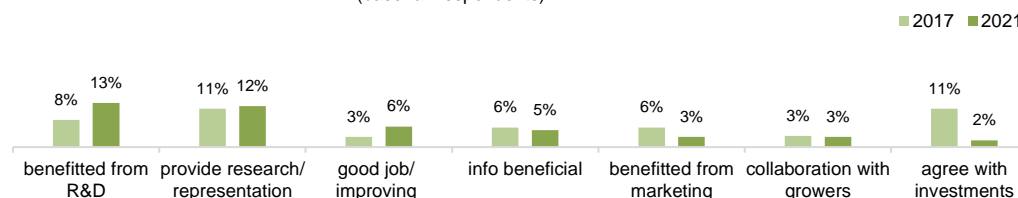
Question asked: Q19. Why do you say that (from Q18)?

### Key findings

- Without prompting, key factors driving satisfaction with Hort Innovation's performance are belief the organisation is required to coordinate RDE&M, benefits received from R&D Programs and belief the organisation does a good job or is improving.
- Notably, the 2 latter reasons are mentioned by a considerably greater proportion of respondents than in 2017.
- Conversely, a perceived lack of benefits, including from marketing investments, insufficient grower collaboration and extension as well as disagreement with investment priorities are key reasons for dissatisfaction.
- Compared to 2017, a significantly greater proportion of respondents mention lack of extension, belief funds are not spent efficiently and need for greater transparency of funding allocation.
- Notably, key reasons for dissatisfaction among large to x-large growers include lack of collaboration, not seeing benefits, bureaucratic processes and belief funds are not allocated efficiently.

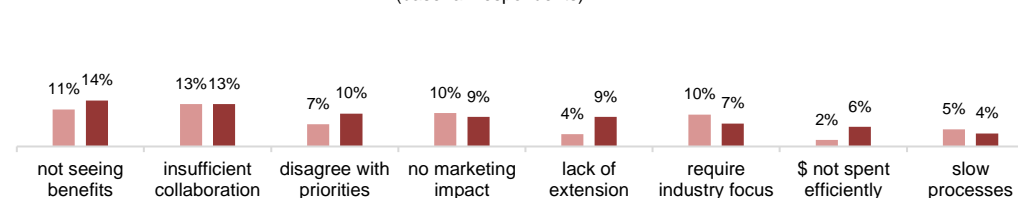
### reason for satisfaction with overall performance

(base: all respondents)



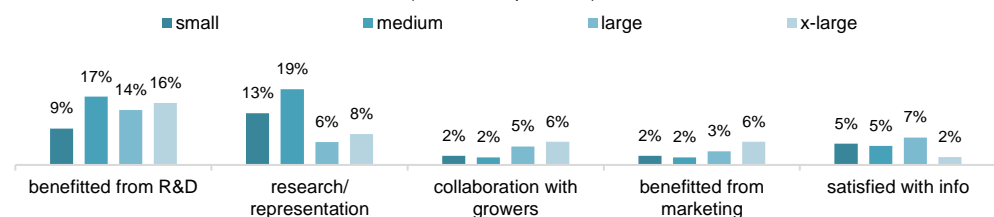
### reason for dissatisfaction with overall performance

(base: all respondents)



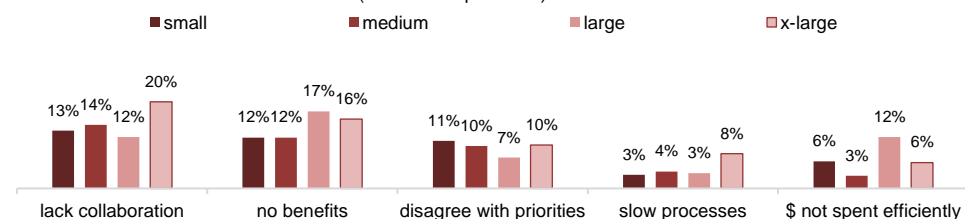
### reason for satisfaction with overall performance x business size

(base: all respondents)



### reason for dissatisfaction with overall performance x business size

(base: all respondents)



### Implications

While many respondents are positive towards Hort Innovation's overall performance due to benefitting from investments and recognition the organisation plays an important role, there is opportunity to improve sentiment through greater collaboration with growers and continuing to extend information that clarifies funding allocation and investment achievements.

reason for rating of Hort Innovation's performance	% mentioning (base: all respondents)									
	total (n=401)	sample			primary industry cluster					
		Hort member (n=392)	non member* (n=9)	vegetable (n=89)	temp fruit (n=119)	trop fruit (n=80)	lifestyle (n=53)	mushroom* (n=4)	nut (n=38)	berry* (n=16)
<b>Positive mentions</b>										
Benefitted from research/programs	↑ 13%	↑ 13%	22%	16%	14%	9%	11%	50%	8%	19%
Coordinate research/marketing/representation of industry	12%	11%	22%	11%	12%	11%	11%	0%	↑ 18%	0%
Doing a good job/improving (nfi)	↑ 6%	↑ 6%	0%	7%	8%	6%	4%	0%	5%	0%
Satisfied with information provided	5%	5%	11%	9%	4%	1%	6%	0%	3%	6%
Good collaboration/communication with growers	3%	3%	0%	4%	3%	3%	2%	0%	8%	0%
Benefitted from marketing	3%	3%	0%	1%	4%	4%	0%	0%	0%	6%
<b>Negative mentions</b>										
Not seeing benefits/results	14%	14%	0%	18%	↑ 15%	13%	13%	0%	5%	19%
Total: Greater collaboration with industry required	13%	14%	11%	10%	10%	18%	↑ 21%	0%	13%	19%
Greater consultation with growers	12%	12%	11%	9%	9%	15%	↑ 19%	0%	13%	19%
Greater collaboration with IRBs	2%	2%	0%	2%	2%	3%	2%	0%	0%	0%
Disagree with research/investment priorities	10%	10%	11%	10%	10%	10%	6%	0%	13%	13%
Marketing has little impact/insufficient marketing	9%	9%	0%	9%	9%	10%	6%	25%	11%	0%
Lack of extension/informing growers of research outcomes	↑ 9%	↑ 9%	11%	6%	11%	5%	8%	50%	16%	6%
Require more industry specific info/activities	7%	7%	11%	4%	6%	↓ 6%	15%	0%	8%	6%
Money not spent efficiently	↑ 6%	↑ 6%	0%	↑ 9%	↑ 8%	5%	4%	0%	5%	0%
Slow processes with research/programs/grants/etc	4%	5%	0%	2%	1%	8%	8%	0%	11%	6%
Need greater clarity of how levy is spent	↑ 4%	↑ 4%	0%	3%	6%	6%	0%	0%	3%	6%

↑ significant increase since 2017; ↓ significant decrease since 2017 \*caution small sub sample, data is indicative only

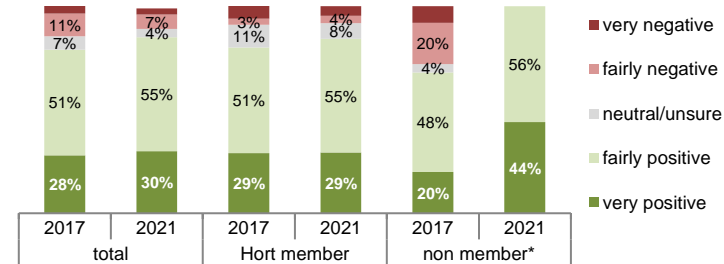
## 9. Confidence in industry future

Questions asked: Q24. Overall, how do you feel about the future of the (primary industry from Q1) industry?

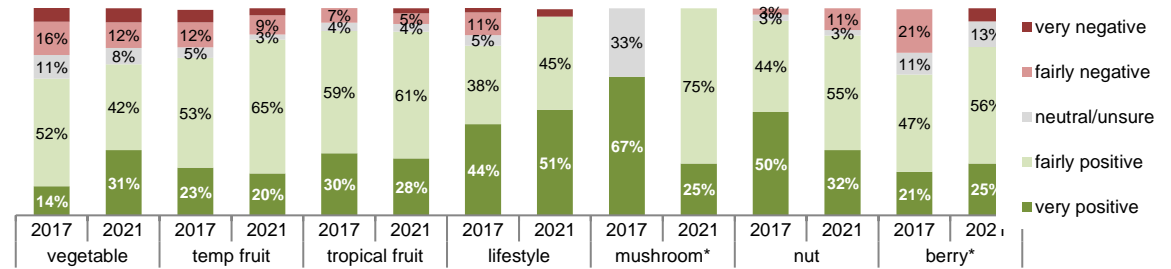
### Key findings

- Nationally, confidence in the future of respondents' main industry is widespread and is a significant 6 points higher than in 2017 (85%, was 79%)
- Notably, lifestyle respondents are significantly more likely to be confident towards the future of their main industry than in 2017.
- As a result, despite confidence being significantly more likely to be very positive than in 2017, vegetable respondents are considerably less likely to be confident than lifestyle (96%), temperate (85%) and tropical (89%) fruit counterparts.
- Respondents expanding their enterprise are significantly more likely to be confident in the future their main industry than those in a steady or winding down phase.

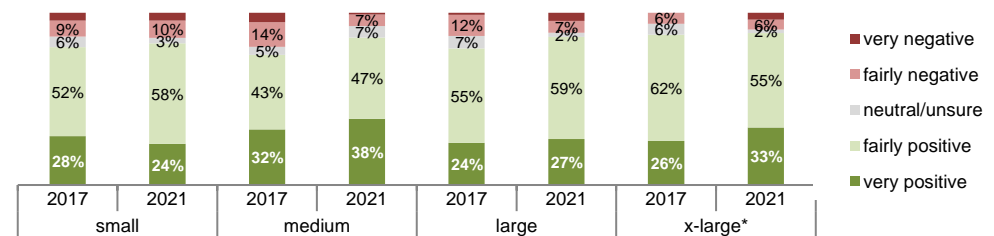
confidence in primary industry's future (base: all respondents)



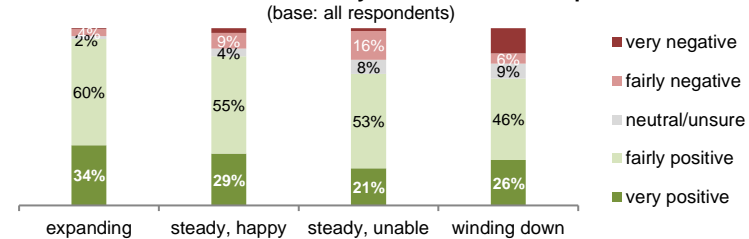
confidence in primary industry's future x industry cluster (base: all respondents)



confidence in main industry's future x business size (base: all respondents)



confidence in main industry's future x business phase (base: all respondents)



### Implications

Confidence in the future of horticultural industries is widespread and this appears to be encouraging some respondents to expand their enterprises.

confidence level	% mentioning (base: all respondents)									
	total (n=401)	sample			primary industry cluster					
		Hort member (n=392)	non member* (n=9)	vegetable (n=89)	temp fruit (n=119)	trop fruit (n=80)	lifestyle (n=53)	mushroom* (n=4)	nut (n=38)	berry* (n=16)
Very positive	30%	29%	44%	↑ 31%	20%	28%	51%	25%	32%	25%
Fairly positive	55%	55%	56%	42%	65%	61%	45%	75%	55%	56%
Fairly negative	7%	8%	0%	12%	9%	5%	↓ 0%	0%	11%	0%
Very negative	3%	4%	0%	7%	3%	3%	0%	0%	0%	6%
Neutral/unsure	4%	5%	0%	8%	3%	4%	4%	0%	3%	13%
Total: positive	↑ 85%	84%	100%	73%	85%	89%	↑ 96%	100%	87%	81%
Total: negative	11%	11%	0%	19%	13%	8%	↓ 0%	0%	11%	6%

↑ significant increase since 2017; ↓ significant decrease since 2017 \*caution small sub sample, data is indicative only

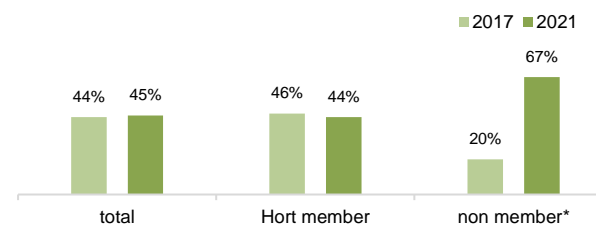
## 10. Enterprise phase

Questions asked: Q20. How would you describe the phase your enterprise is currently in?

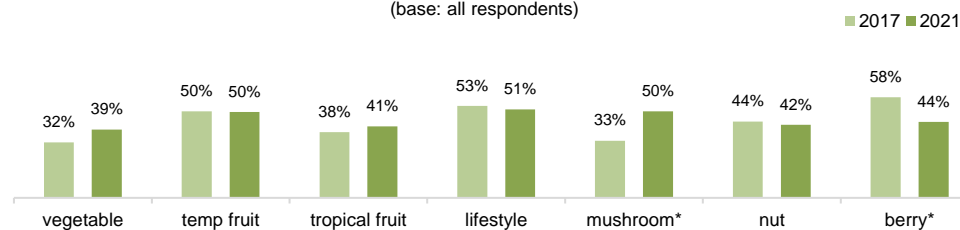
### Key findings

- Most respondent businesses are either in an expansion (45%) or steady (44%) phase of operation, but approximately 1 in 10 (9%) are winding down.
- Notably, the latter result is significantly less widespread among lifestyle respondents than in 2017 (2%, was 11%).
- The proportion of respondents expanding their enterprise does not vary significantly by industry cluster.
- However, it is considerably more widespread among medium to x-large businesses than small counterparts.
- Similarly, respondents aged younger than 60 are more likely than those older to be expanding their enterprise.

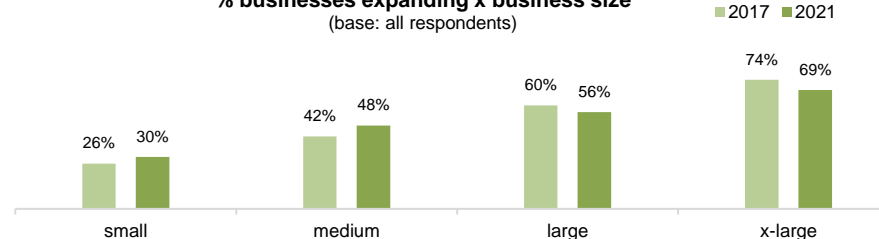
% businesses expanding (base: all respondents)



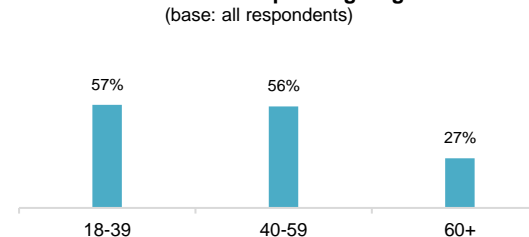
% businesses expanding x industry cluster (base: all respondents)



% businesses expanding x business size (base: all respondents)



% businesses expanding x age (base: all respondents)



### Implications

Encouragingly, expansion is reasonably widespread across all industry clusters, but consistent with non-horticultural agriculture, larger enterprises are more likely to be growing.

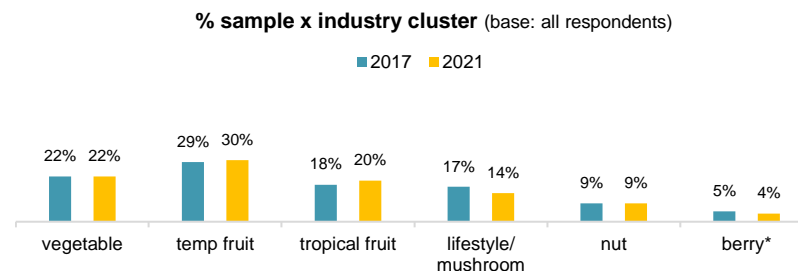
phase	% mentioning (base: all respondents)									
	total (n=401)	sample			primary industry cluster					
		Hort member (n=392)	non member* (n=9)	vegetable (n=89)	temp fruit (n=119)	trop fruit (n=80)	lifestyle (n=53)	mushroom* (n=4)	nut (n=38)	berry* (n=16)
Expanding	45%	44%	67%	39%	50%	41%	51%	50%	42%	44%
Steady, happy	28%	28%	22%	30%	22%	28%	32%	25%	34%	44%
Steady, unable	15%	16%	11%	20%	13%	18%	↑ 13%	25%	16%	6%
Winding down	9%	9%	0%	7%	13%	11%	↓ 2%	0%	3%	6%
Temporary holding/contracting due to COVID-19	2%	2%	0%	3%	3%	3%	2%	0%	0%	0%

↑ significant increase since 2017; ↓ significant decrease since 2017 \*caution small sub sample, data is indicative only

## 11. Respondent profile

### Key findings

- In total, the sample represents 36 of the 37 industries that Hort Innovation manages investments on behalf of (prune unrepresented due to lack of sample).
- Consistent with the inaugural survey, the 2021 sample represents a good range of business sizes (based on turnover).
- The average age of grower respondents is 55, slightly higher than in 2017 (54).
- In 2019-20, 58% of respondent businesses' turnover was less than \$2 million and 34% greater than \$2 million (7% refused or unsure of turnover).



### Implications

Survey results suggest that random sampling has been effective in providing similar samples for both the 2017 and 2021 surveys.

demographics	% mentioning (base: all respondents)									
	sample			primary industry cluster						
	total (n=401)	Hort member (n=392)	non member* (n=9)	vegetable (n=89)	temp fruit (n=119)	trop fruit (n=80)	lifestyle (n=53)	mushroom* (n=4)	nut (n=38)	berry* (n=16)
<b>Age</b>										
18-39	↓ 9%	9%	22%	↓ 10%	4%	↓ 5%	17%	25%	0%	38%
40-59	53%	52%	67%	60%	55%	54%	57%	50%	42%	6%
60+	39%	32%	11%	30%	41%	41%	26%	25%	58%	56%
Average age	55	55	46	↑ 53	57	56	52	47	62	51
<b>Turnover</b>										
\$200,000 to \$500,000	32%	32%	33%	22%	35%	36%	19%	25%	58%	25%
\$500,001 to 1 million	11%	11%	11%	10%	13%	13%	13%	0%	11%	0%
1 million to 2 million	15%	15%	11%	17%	14%	18%	19%	0%	8%	0%
2 million to 10 million	21%	21%	22%	25%	23%	15%	30%	0%	13%	25%
Greater than 10million	13%	13%	0%	19%	11%	10%	4%	50%	11%	31%
Refused	7%	7%	22%	7%	4%	9%	15%	25%	0%	19%
<b>Gender</b>										
Male	80%	81%	33%	85%	82%	75%	74%	50%	89%	75%
Female	20%	19%	67%	15%	18%	25%	26%	50%	11%	25%

↑ significant increase since 2017; ↓ significant decrease since 2017 \*caution small sub sample, data is indicative only

## 12. Main industry

main industry	% mentioning (base: all respondents)									
	total (n=401)	sample		primary industry cluster						
		Hort member (n=392)	non member* (n=9)	vegetable (n=89)	temp fruit (n=119)	trop fruit (n=80)	lifestyle (n=53)	mushroom* (n=4)	nut (n=38)	berry* (n=16)
Vegetable	15%	15%	0%	67%	0%	0%	0%	0%	0%	0%
Nursery	8%	9%	0%	0%	0%	0%	64%	0%	0%	0%
Apple & Pear	7%	7%	11%	0%	24%	0%	0%	0%	0%	0%
Macadamia	7%	7%	0%	0%	0%	0%	2%	0%	74%	0%
Avocado	7%	7%	0%	0%	0%	34%	0%	0%	0%	0%
Citrus	7%	7%	0%	0%	23%	0%	0%	0%	0%	0%
Cherry	5%	5%	0%	0%	16%	0%	0%	0%	0%	0%
Banana	3%	4%	0%	0%	0%	18%	0%	0%	0%	0%
Olive	3%	3%	0%	0%	10%	0%	0%	0%	0%	0%
Table grape	3%	3%	11%	0%	10%	0%	0%	0%	0%	0%
Turf	3%	3%	0%	0%	0%	0%	23%	0%	0%	0%
Mango	3%	3%	11%	0%	0%	14%	0%	0%	0%	0%
Summerfruit	3%	3%	11%	0%	9%	0%	0%	0%	0%	0%
Potato - fresh	2%	3%	0%	11%	0%	0%	0%	0%	0%	0%
Persimmon	2%	2%	0%	0%	0%	10%	0%	0%	0%	0%
Strawberry	2%	2%	11%	0%	0%	0%	0%	0%	0%	50%
Dried grape	2%	2%	0%	0%	6%	0%	0%	0%	0%	0%
Onion	1%	2%	0%	7%	0%	0%	0%	0%	0%	0%
Potato - value added/processing	1%	2%	0%	7%	0%	0%	0%	0%	0%	0%
Sweet potato	1%	2%	0%	7%	0%	0%	0%	0%	0%	0%
Almond	1%	1%	0%	0%	0%	0%	0%	0%	13%	0%
Lychee	1%	1%	0%	0%	0%	6%	0%	0%	0%	0%
Blueberry	1%	1%	0%	0%	0%	0%	0%	0%	0%	25%
Mushroom	1%	1%	11%	0%	0%	0%	0%	100%	0%	0%
Passionfruit	1%	1%	0%	0%	0%	5%	0%	0%	0%	0%
Pineapple	1%	1%	0%	0%	0%	5%	0%	0%	0%	0%
Raspberry and blackberry	1%	1%	11%	0%	0%	0%	0%	0%	0%	25%
Custard apple	1%	1%	0%	0%	0%	4%	0%	0%	0%	0%
Chestnut (n=2)	0%	1%	0%	0%	0%	0%	0%	0%	5%	0%
Dried treefruit (n=2)	0%	1%	11%	0%	2%	0%	0%	0%	0%	0%
Melons (n=2)	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%
Papaya (n=2)	0%	1%	0%	0%	0%	3%	0%	0%	0%	0%
Pyrethrum (n=2)	0%	1%	0%	0%	0%	0%	4%	0%	0%	0%
Pistachio (n=1)	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%
Processing Tomato (n=1)	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%

## Appendix: Computer Assisted Telephone Interviews questionnaire

- Q1. To begin with, what is the main horticultural industry your business is involved in?
- Q2. Is there any other horticultural products your business produces?
- Q3. Could I please have the postcode of your main farm?
- Q4. Does your business have farms in other postcodes?  
 Yes ----- 1  
 No ----- 2
- Q5. Are you? *Read out*  
 A current member of Hort Innovation----- 1  
 A lapsed member ----- 2  
 Never a member of Hort Innovation ----- 3
- Q6. Prior to what was just explained, how much would you say you knew about what Hort Innovation actually does? *Read out, single response*  
 A considerable amount ----- 1  
 A fair amount ----- 2  
 A small amount ----- 3  
 A very little amount ----- 4  
 Nothing at all ----- 5
- Q7. Over the past 2 years, have you interacted with Hort Innovation through any of the following methods?  
 Face to face contact with your Regional Extension Manager, Industry Strategic Partner or Investment Manager, previously known as your industry relationship and fund manager or other  
 Hort Innovation staff ----- 1  
 Industry events, including workshops, field days, conferences, webinars etc.. etc. funded by Hort Innov ----- 2  
 Industry events, including workshops, field days, conferences, webinars etc. funded by someone else ----- 3  
 Through the SIAP (Strategic Investment Advisory Panels), Project Reference Groups or Expert Advisory Panels (EAPs) ----- 4  
 In any other ways? (other specify)----- 5  
 Can't recall/don't know (DK) ----- 6  
 Have not found out anything over past 2 years ----- 7
- Q8. Overall how satisfied are you with your interaction with Hort Innovation?  
 Very satisfied ----- 1  
 Fairly satisfied ----- 2  
 Not too satisfied ----- 3  
 Not satisfied at all ----- 4
- Q9. Why do you say that (from Q8)
- Q10. Which of the following Hort Innovation information products and services have you read, accessed or visited over the past 2 years? Have you...*Read out, rotate. in grower section of Hort Innovation website) ----- 1*  
 Read the monthly e-newsletter called Growing Innovation ----- 2  
 Received industry alerts on the 'latest' for specific commodities through *Grower Intel*----- 3  
 Accessed Hort Innovation website - horticulture.com.au -----4  
 Accessed Hort Innovation webinars-----9  
 Accessed Hort Innovation podcasts----- 10  
 Accessed Hort Innovation social media -----5  
 Read updates from the CEO via email -----8  
 Company Annual Report or Individual Industry Annual Reports ----- 11  
 Any other industry publications or products and services? (specify) -----6  
 None ----- 7
- Q11. Overall how satisfied are you with Hort Innovation's information products and services?  
 Very satisfied ----- 1  
 Fairly satisfied ----- 2  
 Not too satisfied-----3  
 Not satisfied at all-----4
- Q12. Why do you say that (from Q11)  
 Hort Innovation invests in short term research and development to improve productivity and profitability through improved pest and disease management, soil and water management, post-harvest practices, data and insights and other activities.
- Q13. In your opinion, how would you rate Hort Innovations investments for your SHORT term gains? *Read out...*  
 Very highly ----- 1  
 Fairly highly ----- 2  
 Not too high ----- 3  
 Not high at all ----- 4  
 Can't say / don't know ----- 5
- Hort innovation also invests in longer term research and development through plant breeding, biotechnology, emerging technology and other activities.
- Q14. In your opinion, how highly would you rate Hort Innovations investments for the LONG term benefit of the horticulture INDUSTRY? *Read out...*  
 Very highly ----- 1  
 Fairly highly ----- 2  
 Not too high ----- 3  
 Not high at all ----- 4  
 Can't say / don't know ----- 5

If know something about Hort Innovation AND marketing levy paying industry:

Additionally, Hort Innovation aims to increase benefits to growers through investing in domestic and export development and marketing campaigns and other activities encouraging people to buy, eat, grow and enjoy more horticultural products.

Q15. In your opinion, how highly would you rate Hort Innovations marketing activities and investments? *Read out...*

- Very highly ----- 1
- Fairly highly ----- 2
- Not too high ----- 3
- Not high at all ----- 4
- Can't say / don't know ----- 5

ASK all

Q16. Do you feel you have directly benefited from any research, development, extension or marketing activities over the past 5 years? (*interviewer note: this relates to any R&D undertaken in the industry, not just Hort Innovation activities*)

- Yes ----- 1 continue
- No ----- 2 go to Q18
- Not sure ----- 3 go to Q18

Q17. Did Hort Innovation play a role in achieving any of these direct benefits from RDE or marketing? *prompt to classify if yes*

- Yes, a significant role ----- 1
- Yes, but a minor role ----- 2
- No ----- 3
- Not sure ----- 4

Ask all

If NOT paying marketing levy

Q18. How would you rate your overall satisfaction with Hort Innovation's role as investors in Horticultural research, development and extension... *Read out*

- Very satisfied ----- 1
- Fairly satisfied ----- 2
- Not too satisfied ----- 3
- Not satisfied at all ----- 4
- Can't say / don't know ----- 5

If Paying marketing levy:

How would you rate your overall satisfaction with Hort Innovation's role as investors in Horticultural research, development extension and marketing... *Read out*

- Very satisfied ----- 1
- Fairly satisfied ----- 2
- Not too satisfied ----- 3
- Not satisfied at all ----- 4
- Can't say / don't know ----- 5

Q19. Why do you say that (from Q18)

Ask all

Lastly, I have a couple of questions about you and your enterprise and then we are finished.

Q20. How would you describe the phase your enterprise is currently in? Is it ... *Read out*

- An expansion phase ----- 1
- A steady phase because it is pretty much where you want it to be ----- 2
- A steady phase because you are unable to expand at the moment ----- 3
- A winding down phase ----- 4

Q21. Overall, how do you feel about the future of the (insert primary levy industry from Q1) industry? Would you say you feel ... (*read out*)

- Very positive ----- 1
- Fairly positive ----- 2
- Fairly negative ----- 3
- Very negative ----- 4
- Do not read* Neutral ----- 5
- Do not read* Unsure ----- 6

Q22. And just for classification purposes, can you please tell me your age?

Q23. Also, just for classification purposes, can you please indicate your enterprise's turnover for the 2016-17 financial year? Was it?... *read out...*

- \$200,000 or less ----- 1
- \$200,000 to \$500,000 ----- 2
- \$500,001 to 1 million ----- 3
- 1 million to 2 million ----- 4
- 2 million to 3 million ----- 5
- 3 million to 4 million ----- 6
- 4 million to 5 million ----- 7
- 5 million to 10 million ----- 8
- 10 million to 20 million ----- 9
- Greater than 20 million ----- 10

Q24. Record gender

- Male ----- 1
- Female ----- 2

Q25. Would you like someone from Hort Innovation to contact you to discuss anything about your industry?

- Yes ----- 1
- No ----- 2

Q26. If yes, check name and phone number of respondent.