

Macadamia Annual Investment Plan 2022/23



Industry position

The Australian macadamia industry has expanded significantly over the past four years from 19,000 hectares of macadamia tree plantings in 2017 to present plantings of approximately 33,000 hectares. This has resulted in considerable investment across the industry, including processing.

The greatest growth is demonstrated in and around the Bundaberg region of Queensland where most holdings are medium to large operations. The Northern Rivers region of New South Wales consists mainly of older orchards on small to medium holdings with some new plantings undertaken on green field sites primarily on coastal flood plains. The 2021/22 season saw two major flooding events hit the major growing regions of Northern Rivers and parts of southeast Queensland, which will have a significant impact on production in that region. Nationally, the crop continues to increase 5% to 7% a year with annual production now consistently over 50,000 metric tonnes (@ 10% moisture).

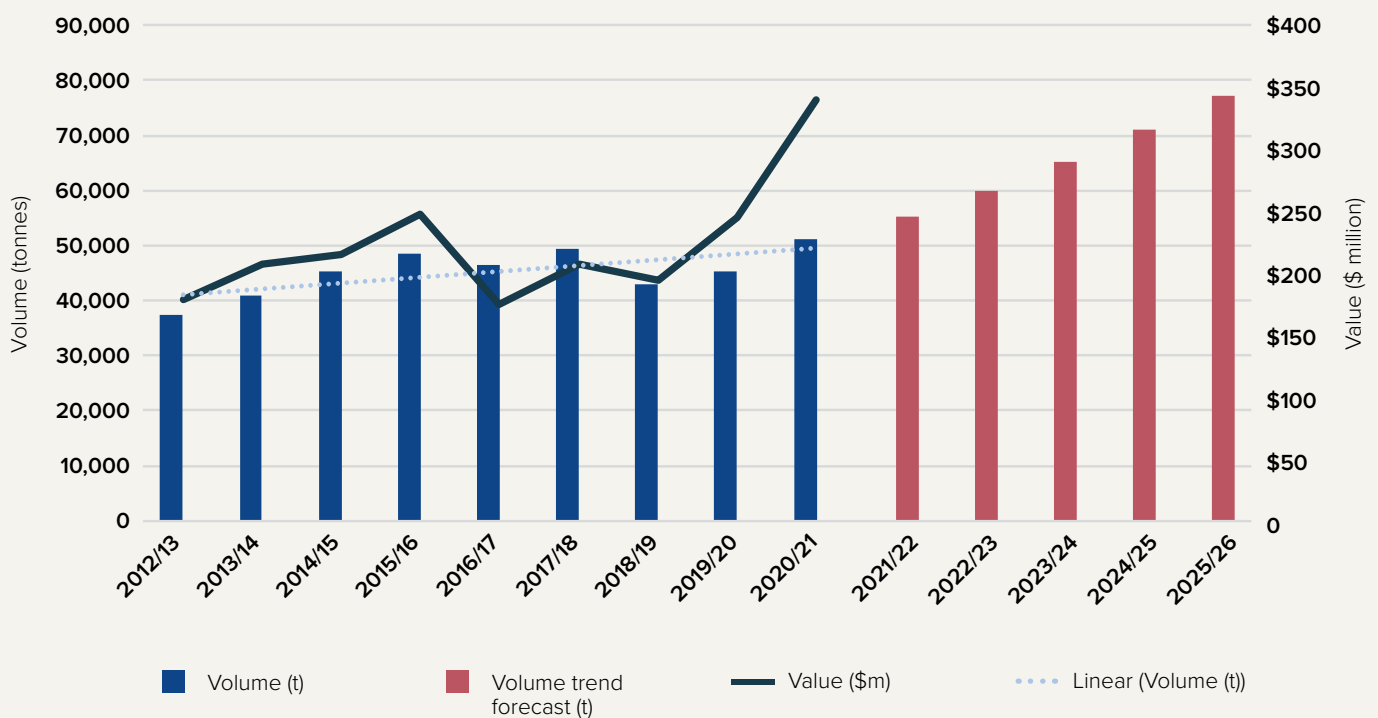
Further background on the macadamia industry and its priorities can be found in the [macadamia Strategic Investment Plan \(SIP\) 2022-2026](#). Further information on industry statistics can be found in the [Australian Horticulture Statistics Handbook](#).

The key challenges for the macadamia industry are: driving demand; adapting to climate change; maintaining social license (reducing chemical use); and improving production efficiencies.

Macadamia production

Macadamia production in nut-in-shell (NIS) volume (tonnes) and value (\$ million) from 2012/13 to 2025/26, showing the predicted production trend for the next five years, can be seen in **Figure 1**. Future performance has been projected based on the Australian macadamia crop forecast by the Australian Macadamia Society (AMS).

FIGURE 1. MACADAMIA PRODUCTION 2012/13 TO 2025/26



*Note: the estimated production volume is not an accurate indicator for the value of statutory levies to be received by Hort Innovation.
Source: Australian Horticulture Statistics Handbook for the year ending 30 June 2021, with predicted production volume based on the Australian macadamia crop forecast by the AMS.*

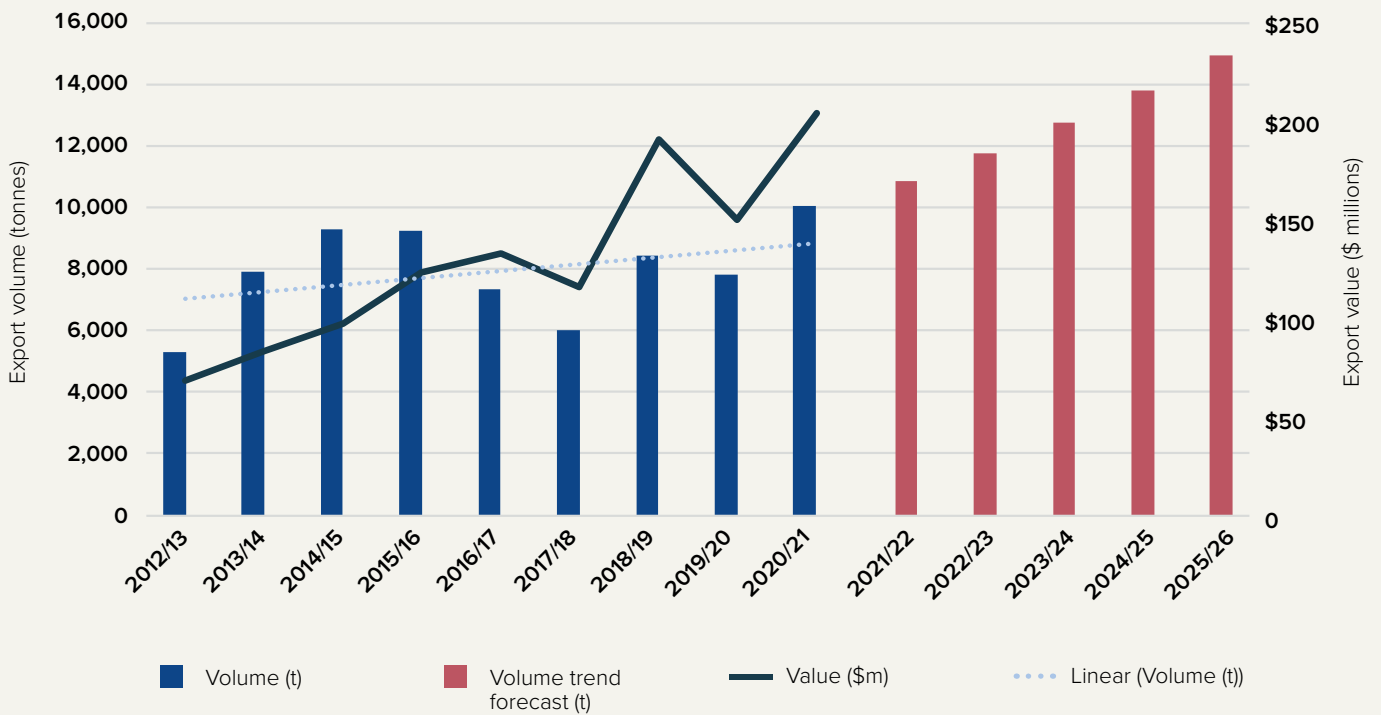
Production trends:

- The Australian macadamia industry is a significant sector of the Australian horticultural industry and Australia’s second most valuable nut product after almonds
- The farm gate value of macadamia production was \$339.1 million in 2020/21
- The industry production value has grown by 90% (\$160.9 million) since 2012/13
- An estimated 51,000 tonnes of macadamias NIS (@3.5% moisture) were produced in 2021.

Macadamia exports

Macadamia industry export volume (kernel tonnes) and value (\$ millions) from 2012/13 to 2025/26, showing expected kernel exports over next three years is 35,415 tonnes, based on the 8-year compound annual growth rate (CAGR), can be seen in **Figure 2**.

FIGURE 2. MACADAMIA KERNEL EXPORTS 2012/13 TO 2025/26

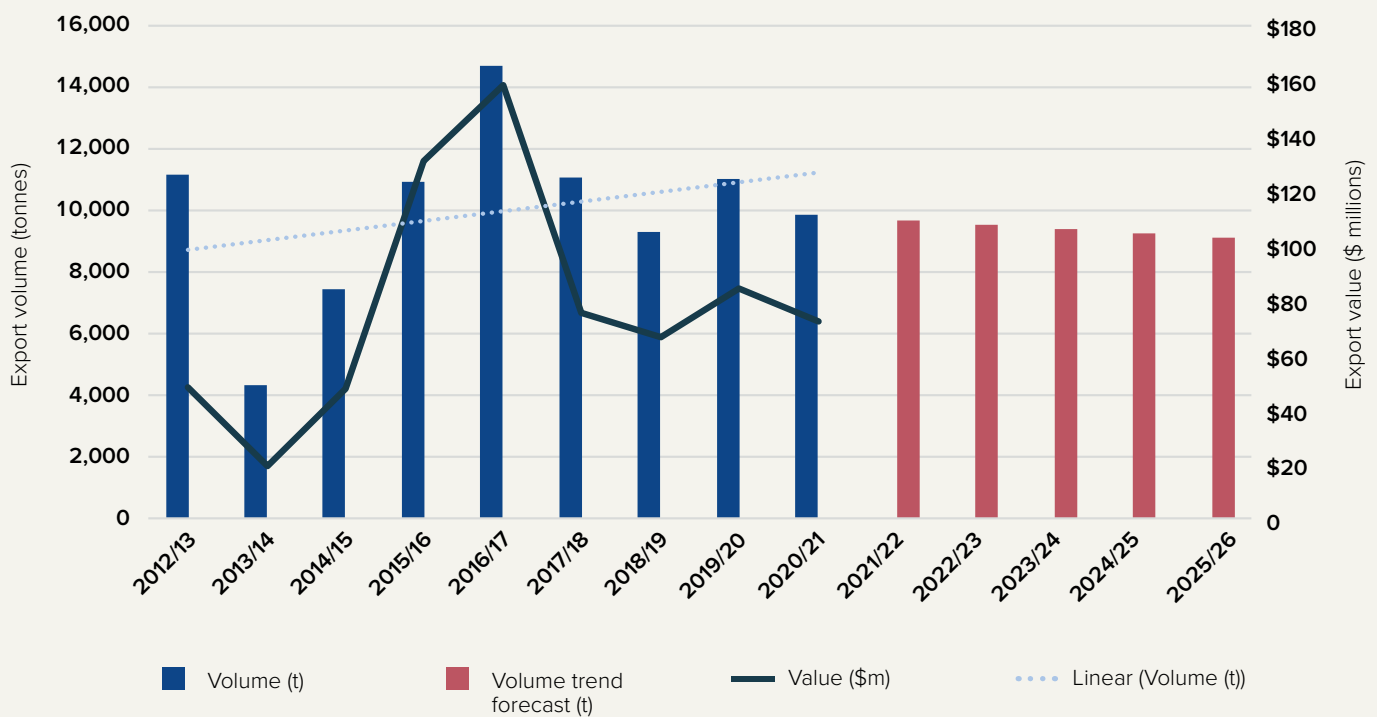


Source: Australian Horticulture Statistics Handbook for the year ending 30 June 2021, with predicted export based on the 8-year compound annual growth rate.

Macadamia exports continued

Macadamia industry export volume (NIS tonnes) and value (\$ millions) from 2012/13 to 2025/26, showing expected NIS exports over next three years is 28,592 tonnes, based on the 8-year CAGR, can be seen in **Figure 3**.

FIGURE 3. MACADAMIA NIS EXPORTS 2012/13 TO 2025/26



Source: Australian Horticulture Statistics Handbook for the year ending 30 June 2021, with predicted export based on the 8-year compound annual growth rate.

Export trends:

- Macadamia nuts are the only Australian native food crop that has seen significant commercial growth for local and export markets
- Australia exported 19,883 tonnes of macadamia nuts (9,833 tonnes NIS and 10,050 tonnes kernels) in 2020/21.

From this high-level analysis, the following insights have been made:

- The Australian macadamia industry is export oriented. Around 80% of production is destined for the international market, with three-quarters of this total originates from Queensland
- Australia exported 9,833 tonnes of macadamias NIS and 10,050 tonnes of macadamia kernels in 2020/21
- Australia imported 379 tonnes of macadamias NIS in 2020/21
- Asian countries were the leading importers of macadamias from Australia, with China accounting for 36% of exports and Japan for 19%
- After a period of declining export (2018/19 and 2019/20), net macadamia international trade increased by nearly 10% in the year ending 2020/21.

Investment advice and consultation

The macadamia Annual Investment Plan (AIP) 2022/23 was presented to the macadamia Strategic Investment Advisory Panel (SIAP) (**Table 1**) in November 2021.

TABLE 1. MACADAMIA SIAP

Name	Organisation
Chris Searle	Stahmann FarmsMacAvo Consulting
Andrew Pearce	Macadamias Direct
Henrik Christiansen	Fitzroy River Plantations
Shane Mulo	Department of Agriculture and Fisheries, Queensland
Tim Salmon	Australian Macadamia Management
Lindsay Bryen	LJ & EP Bryen

The investment process

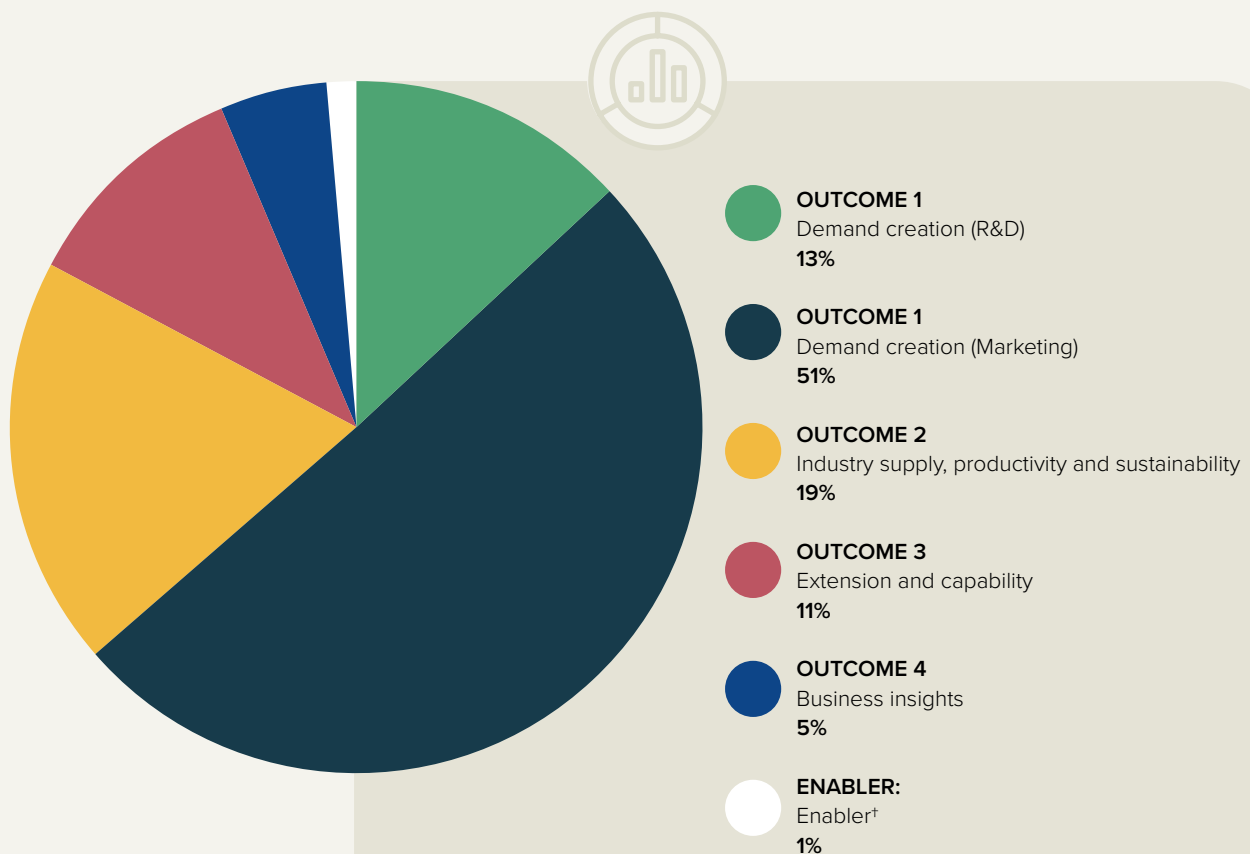
Investments specific to the Macadamia Fund are guided by the industry's SIP and AIP. The SIP provides an overarching roadmap for industry to follow, and the AIP details how levy dollars will be spent each year to achieve industry goals.

Learn about how Hort Innovation makes investment decisions, and the process for making investments on our website [here](#), or watch a video about how investment decisions are made at the macadamia 'fund management' page on our website [here](#).

Current investments

The macadamia SIP details the industry's strategic goals centred around four outcome areas: demand creation; industry supply, productivity and sustainability; extension and capability; and business insights. Under each of those outcomes, there are industry-specific strategies and key performance indicators (KPIs) that provide guidance on how the macadamia industry will work towards achieving the outcomes. **Figure 3** below identifies forecasted investment expenditure in each of the SIP outcome areas for 2022/23.

FIGURE 3. COMMITTED EXPENDITURE FOR MACADAMIA SIP INVESTMENTS 2022/23



* Enabler: projects that support the broader delivery of the industry's project investments. Examples of enabler projects include annual reporting and monitoring and evaluation capacity.

Table 2 indicates the current invested projects for 2022/23 that are aligned to the respective outcomes and strategies for the Macadamia Fund. More information is available on the Hort Innovation website about the projects that have a hyperlink. A full report on the Macadamia Fund can be found in the [macadamia Annual Report 2020/21](#), and the Annual Report 2021/22 will be published late October this year [here](#).

TABLE 2. CURRENT INVESTED PROJECTS IN THE MACADAMIA FUND

Outcome	Strategy	Project code	Project title	Delivery partner	Start date	End date	Life of project value
1. Demand creation	1. Export markets	MC19503 ^M	Macadamia consumer campaign for China and Taiwan	Havas Media Taiwan Sheng Zhong Marketing Consultancy (Shanghai) Co.	17/08/20	31/07/22	\$934,493
1. Demand creation	1. Export markets	MC19504 ^M	Macadamia consumer digital campaigns (Japan and South Korea)	Sopexa Japon K.K.	11/12/20	30/09/22	\$889,310
1. Demand creation	1. Export markets	MC19506 ^M	Macadamia trade content development	Ink Spiller Communications	4/08/20	31/07/22	\$351,900
1. Demand creation	1. Export markets	ST21007	Australian horticulture international demand creation	Kantar Insights Australia	3/06/22	31/03/23	\$9,750
1. Demand creation	1. Export markets 2. Consumer demand	MC19507 ^M	Australian macadamias trade public relations	Lansky Enterprises	31/01/21	31/12/22	\$470,320
1. Demand creation	2. Consumer demand	MC18507 ^M	Australian macadamia marketing manager	Australian Macadamia Society	8/08/19	31/05/24	\$1,474,060
1. Demand creation	2. Consumer demand	MC19502 ^M	Macadamia consumer campaign for Australia	Go Future Media	4/08/20	30/09/22	\$447,067
1. Demand creation	2. Consumer demand	MC19505 ^M	Australian Macadamia marketing coordinator and project management services	Terrapin Estates	8/03/21	30/09/22	\$180,283
1. Demand creation	2. Consumer demand	MC16513 ^M	Macadamia marketing project	Ink Spiller Communications	1/12/17	30/06/23	\$474,280
1. Demand creation	2. Consumer demand	MC21506 ^M	Australian macadamia brand positioning and innovation platforms	Fifty-five 5	6/05/22	1/07/22	\$100,000
1. Demand creation	2. Consumer demand	MC21504 ^M	Macadmia marketing support Services	Australian Macadamia Society	31/01/23	31/07/24	\$611,418
2. Industry supply, productivity and sustainability	1. Resource efficiency	MC19001	Macadamia grower guide	Department of Regional NSW	7/09/21	28/02/24	\$253,289
2. Industry supply, productivity and sustainability	1. Resource efficiency 6. Integrated pest and disease management	MC21001	An integrated disease management approach for the Australian macadamia Industry	University of Queensland	29/06/22	10/04/27	\$1,192,063

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CURRENT INVESTED PROJECTS (continued)

Outcome	Strategy	Project code	Project title	Delivery partner	Start date	End date	Life of project value
2. Industry supply, productivity and sustainability	11. Pollination	MT21008	National bee pest surveillance program: transition program	Plant Health Australia	3/12/21	15/12/24	\$67,190
2. Industry supply, productivity and sustainability	2. New genetics	MC16000	Innovative rootstocks for the future Australian macadamia industry	Department of Agriculture and Fisheries, Queensland	22/03/17	15/12/22	\$255,241
2. Industry supply, productivity and sustainability	2. New genetics	MC17006	Macadamia regional variety trials series four	Developing Plant Industries; Sassafras Nuts; Department of Agriculture and Fisheries, Queensland	15/11/18	30/08/26	\$1,241,243
2. Industry supply, productivity and sustainability	2. New genetics	MC19000	National macadamia breeding and evaluation program	University of Queensland	20/11/19	23/12/24	\$2,279,879
2. Industry supply, productivity and sustainability	6. Integrated pest and disease management	MC16018	Macadamia integrated disease management	University of Queensland	20/11/17	30/06/23	\$1,300,000
2. Industry supply, productivity and sustainability	8. Regulatory support	MT20007	Regulatory support and response co-ordination	AKC Consultancy	2/08/21	1/07/24	\$25,257
2. Industry supply, productivity and sustainability	8. Regulatory support	MC16002	Macadamia industry minor use program	Hort Innovation	1/07/22	30/06/23	\$1,850
2. Industry supply, productivity and sustainability 3. Extension and capability	6. Integrated pest and disease management 1. Extension capability	MC21000	An integrated systems-based approach for pest management in Australian macadamia	Macquarie University	26/06/22	1/06/27	\$1,600,645
3. Extension and capability	1. Extension capability	MC21002	Macadamia industry communications program	Australian Macadamia Society	26/06/22	1/05/27	\$1,030,125
3. Extension and capability	1. Extension capability 2. Engagement to innovate	MC20000	Macadamia industry innovation and adoption	Australian Macadamia Society	14/03/21	28/02/26	\$2,099,951
4. Business insights	1. Consumer insights	MT21003	Consumer demand spaces for horticulture	Kantar Insights Australia	17/01/22	15/07/22	\$15,956
4. Business insights	1. Consumer insights	MT21004	Consumer behavioural data program	Nielsen Connect Australia	29/03/22	20/11/26	\$73,820
4. Business insights	1. Consumer insights	MT21201	Pilot program – consumer usage and attitude and Brand Tracking	Fifty-five 5	22/04/22	31/07/22	\$2,540
4. Business insights	1. Consumer insights	MC20502	International insights data	Nielsen Connect Australia	25/06/21	30/07/22	\$196,649

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CURRENT INVESTED PROJECTS (continued)

Outcome	Strategy	Project code	Project title	Delivery partner	Start date	End date	Life of project value
4. Business insights	1. Consumer insights	MT21202	Consumer usage and attitude tracking – FY22/23	Fifty-five 5	30/06/22	31/07/23	\$13,172
4. Business insights	1. Consumer insights	MC17005	The effect of macadamia nuts on cardimnetabolic risk factors	Loma Linda University	24/08/18	30/06/23	\$331,488
4. Business insights	3. Benchmarking	MC18002	Benchmarking the macadamia industry 2019-2021	Department of Agriculture and Fisheries, Queensland	8/05/19	30/09/22	\$528,759
Enabler [†]	Enabler [†]	MT21015	Horticulture impact assessment program 2020/21 to 2022/23	Ag Econ	6/05/22	30/11/24	\$20,810
Enabler [†]	Enabler [†]	MC22910	Grower advice and consultation	Hort Innovation	1/07/22	30/06/23	\$45,000

[†] Enabler: projects that support the broader delivery of the industry's project investments. Examples of enabler projects include annual reporting and monitoring and evaluation capacity.

^M Indicates marketing levy investment.

Key for project codes:

Project codes starting with MC are funded by the macadamia levy only

Project codes starting with MT are funded by multiple industries, including with macadamia levy contribution

Project codes starting with ST are strategic co-investment, including with macadamia levy contribution

Financial statements

View the current and most up-to-date financial statements for the Macadamia Fund on the Hort Innovation website [here](#).

Recommended investments in 2022/23

The macadamia SIAP met on 17 November 2021 to discuss, provide advice on, and prioritise recommendations on R&D investment for 2022/23 that are listed in order of priority in **Table 3**. Links to the meeting summaries can be found below. The macadamia SIAP met on 9 March and 6 May 2022 to consider the Macadamia Marketing Plan for 2023/24 and this is still under consideration (**Table 4**).

SIAP meeting summaries:

Macadamia R&D SIAP meeting on 17 November 2021: [Download summary](#)

TABLE 3. MACADAMIA SIAP RECOMMENDATIONS FOR 2022/23

Priority	Investment	Outcome	Strategy
1	An integrated systems-based approach for pest management in Australian macadamia	2. Supply, productivity and sustainability	6. Integrated pest and disease management
2	Macadamia industry integrated disease management program	2. Supply, productivity and sustainability	6. Integrated pest and disease management
3	Macadamia industry communications program	3. Extension and capability	1. Extension capability
4	Macadamia benchmarking 2022-2025	4. Business insights	3. Benchmarking
5	Macadamia crop forecasting 2023-2025	2. Supply, productivity and sustainability	4. Data baseline
6	Improving control of fruit- and banana-spotting bug	2. Supply, productivity and sustainability	6. Integrated pest and disease management
7	Macadamia industry economic contribution – Superseded with Economic contribution of Australian horticulture	4. Business insights	3. Benchmarking
8	Nut Biosecurity Plan review	2. Supply, productivity and sustainability	6. Integrated pest and disease management

TABLE 4. MACADAMIA SIAP MARKETING RECOMMENDATIONS FOR 2022/23 (CURRENTLY UNDER CONSIDERATION)

Priority	Investment	Outcome	Strategy
1	Macadamia Marketing Plan 2023/24	1. Demand creation	2. Consumer demand

Note: Wherever possible, investments will be aligned to form multi-industry projects, and all investments are subject to funding availability. If investments do not occur in this financial year, then they will be reconsidered and reprioritised for the macadamia AIP 2023/24.

Find out more information on the Macadamia Fund
at www.horticulture.com.au/macadamia

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