



APPENDIX

Industry Statistics – Performance and Production by Cultivar, Region and Markets

	2019/20	2018/19	2017/18	2016/17	2015/16	2014/15	2013/14	2012/13
Distribution to growers/suppliers								
Fruit and service payments (excl loyalty premium)	12.94	11.52	11.53	9.21	9.27	9.57	9.02	9.08
Loyalty premium	0.31	0.30	0.27	0.25	0.24	0.24	0.24	0.24
Total payments per tray	13.25	11.83	11.80	9.46	9.51	9.81	9.26	9.32
Crop Volumes (000's)								
Trays submitted (gross)	150,341	157,715	125,822	148,902	123,763	97,304	87,725	105,580
Trays supplied	148,134	154,058	124,433	145,871	120,145	95,683	86,510	102,860
Trays sold	145,223	148,843	123,246	137,748	117,094	95,187	86,094	101,313
Trays sold as a percentage of trays supplied	98.0%	96.6%	99.0%	94.4%	97.5%	99.5%	99.5%	98.5%
General Statistics								
Production per hectare (trays submitted)	11,650	12,373	9,913	11,838	10,157	8,662	8,016	8,610
Producing hectares	12,905	12,747	12,692	12,578	12,185	11,233	10,944	12,263
Orchard Gate Return per hectare (average)	107,142	96,033	79,361	68,868	60,758	57,369	49,385	51,153
Number of producers	2,792	2,756	2,405	2,435	2,156	2,540	2,350	2,636
Average number of trays supplied per producer	53,057	55,899	51,739	59,906	47,752	37,670	36,813	39,021
Number of Orchards Registered								
0 – 2 hectares	738	717	774	791	807	834	802	855
2 – 5 hectares	1,540	1,575	1,509	1,508	1,499	1,428	1,458	1,483
5 – 10 hectares	693	702	607	589	568	515	487	573
Over 10 hectares	211	207	165	161	147	128	126	146
Total (KPINS)	3,182	3,201	3,055	3,049	3,021	2,905	2,873	3,057

	2019/20	2018/19	Variance
Zespri global kiwifruit sales	3.140 billion	2.944 billion	7%
Export earnings (New Zealand grown)	2.272 billion	2.106 billion	8%
New Zealand-grown fruit and service payments	1.962.5 million	1,821.8 million	8%
New Zealand-grown Orchard Gate Return (OGR) per hectare	\$107,142 (average)	\$96,033 (average)	12%
- Green	\$67,295	\$63,622	6%
- Organic Green	\$63,734	\$73,350	13% (negative)
- Sungold	\$161,660	\$145,991	11%
- Green14	\$43,550	\$44,549	2% (negative)
Zespri global volume (trays sold)	164.4 million	167.2 million	2% (negative)
New Zealand-grown	145.3 million	148.8 million	2% (negative)
Non-New Zealand-grown	19.1 million	18.4 million	4%

Key figures from Zespri's Annual Results 2019-20

NEW ZEALAND INDUSTRY PERFORMANCE

Regional Production Analysis - NZ Grown Kiwifruit - Trays Supplied to Zespri - FOBS

	2019/20		2018/19		2017/18		2016/17	
Tray Equivalents (TEs) supplied to Zespri (FOBS)	Producing Hectares	TE Supplied per ha	Producing Hectares	TE Supplied per ha	Producing hectares	TE Supplied Per ha	Producing hectares	TE supplied per ha
Zespri Green Kiwifruit								
Northland	100	6,835	106	8,498	109	5,779	113	9,559
Auckland	256	7,175	262	9,974	273	7,719	272	9,502
Bay of Plenty								
Katikati	830	8,960	859	9,882	940	7,678	966	11,972
Ōpōtiki	444	10,834	455	11,315	457	8,917	464	11,758
Tauranga	1,066	9,773	1,087	12,014	1,086	9,193	1,116	12,533
Te Puke	3,190	11,058	3,292	12,380	3,419	9,641	3,508	13,088
Waihi	132	7,771	138	9,858	100	6,569	100	8,701
Whakatāne	331	8,369	366	10,541	402	7,728	439	9,889
Waikato	204	9,113	203	9,076	200	8,339	204	9,664
Poverty Bay	44	6,801	52	7,745	54	8,366	54	5,828
Hawke's Bay	41	6,916	45	7,358	43	6,620	45	7,290
Lower North Island	69	9,062	70	9,291	70	8,696	65	7,056
South Island	208	6,519	223	7,258	229	5,663	258	7,246
Total producing hectares	6,915		7,158		7,382		7,604	-
Average TE supplied per hectare		9,932		11,320		8,812	-	11,933

	2019/20		2018/19		2017/18		2016/17	
Tray Equivalents (TEs) supplied to Zespri (FOBS)	Producing Hectares	TE Supplied per ha	Producing hectares	TE Supplied Per ha	Producing hectares	2016/17	Producing hectares	TE supplied per ha
Zespri Organic Green Kiwifruit								
Northland	-	-	-	-	-	-	-	-
Auckland	1	2,626	1	5,364	1	2,614	1	5,856
Bay of Plenty								
Katikati	30	6,095	30	9,061	30	6,593	31	9,208
Ōpōtiki	21	7,092	21	7,493	22	5,786	22	8,616
Tauranga	174	6,599	182	8,604	203	6,033	210	8,652
Te Puke	37	7,924	38	8,775	42	6,979	38	10,408
Waihi	22	5,077	22	6,589	19	3,964	20	4,219
Whakatāne	4	3,178	4	4,594	4	4,197	4	5,323
Waikato	147	6,047	148	6,885	151	5,310	151	6,536
Poverty Bay	0	2,728	1	4,042	1	3,676	2	4,637
Hawke's Bay	-	-	-	-	-	-	-	-
Lower North Island	2	3,763	2	4,439	2	5,552	2	6,524
South Island	-	-	-	-	-	-	21	4,516
Total producing hectares	437		448		475		502	-
Average TE supplied per hectare		6,386		7,863		8,812	-	7,841

	2019/20		2018/19		2017/18		2016/17	
Tray Equivalents (TEs) supplied to Zespri (FOBS)	Producing Hectares	TE Supplied per ha	Producing hectares	TE Supplied Per ha	Producing hectares	TE supplied per ha	Producing hectares	TE supplied per ha
Zespri Gold and Organic Gold Kiwifruit (Hort16A)								
Northland	-	-	11	8,615	11	8,615	52	12,721
Auckland	-	-	-	-	-	-	1	5,822
Bay of Plenty	-	-						
Katikati	-	-	-	-	-	-	-	-
Ōpōtiki	-	-	-	-	-	-	-	-
Tauranga	-	-	-	-	-	-	-	-
Waihi	-	-	-	-	-	-	-	-
Whakatāne	-	-	-	-	-	-	-	-
Waikato	-	-	-	-	-	-	1	9,394
Poverty Bay	-	-	-	-	-	-	48	9,245
Hawke's Bay	-	-	2	-	2	7,793	12	11,484
Lower North Island	-	-	-	-	-	-	-	-
South Island	-	-	17	-	17	10,647	47	9,349
Total producing hectares	-		30		30		161	-
Average TE supplied per hectare		-		-		9,689	-	10,561

	2019/20		2018/19		2017/18		2016/17	
Tray Equivalents (TEs) supplied to Zespri (FOBS)	Producing Hectares	TE Supplied per ha	Producing hectares	TE Supplied Per ha	Producing hectares	TE supplied per ha	Producing hectares	TE supplied per ha
Zespri SunGold and Organic SunGold (Gold3)								
Northland	368	11,0738	356	12,327	319	8,044	189	9,069
Auckland	227	12,865	214	12,143	206	10,701	187	8,928
Bay of Plenty								
Katikati	537	13,421	497	13,531	525	11,299	501	12,302
Ōpōtiki	543	14,132	520	13,827	506	12,172	478	11,028
Tauranga	500	13,133	476	14,100	437	12,320	413	12,484
Te Puke	2,085	14,228	1,811	13,744	1,655	12,390	1,516	12,746
Waihi	105	11,887	92	12,811	53	9,168	51	11,027
Whakatāne	274	12,074	240	11,931	211	13,211	206	11,175
Waikato	197	11,239	192	10,712	183	7,937	157	7,029
Poverty Bay	267	12,321	244	11,937	208	9,740	146	8,728
Hawke's Bay	156	12,559	152	10,840	149	8,263	131	6,815
Lower North Island	1	11,093	2	5,955	2	7,799	2	5,349
South Island	224	14,897	200	14,135	176	8,693	139	9,635
Total producing hectares	5,483		4,996		4,630		4,116	-
Average TE supplied per hectare		13,443		13,216		11,292	-	11,366

	2019/20		2018/19		2017/18		2016/17	
Tray Equivalents (TEs) supplied to Zespri (FOBS)	Producing Hectares	TE Supplied per ha	Producing hectares	TE Supplied Per ha	Producing hectares	TE supplied per ha	Producing hectares	TE supplied per ha
Zespri Sweet Green Kiwifruit (Green14)								
Northland	-	-	1	5,809	1	3,401	1	7,210
Auckland	14	2,894	18	4,196	14	5,238	14	6,256
Bay of Plenty								
Katikati	9	4,718	8	5,871	11	7,377	15	8,571
Ōpōtiki	5	7,353	8	8,003	12	7,790	14	9,758
Tauranga	1	7,380	4	7,254	6	5,845	8	6,899
Te Puke	17	7,778	59	6,944	80	7,711	88	9,148
Waihi	-	-	-	-	-	-	-	-
Whakatāne	7	5,674	17	6,863	18	7,550	20	5,984
Waikato	8	6,248	11	5,032	15	5,428	18	5,686
Poverty Bay	-	-	3	5,298	4	6,985	4	6,072
Hawke's Bay	7	5,920	8	3,682	8	4,415	8	4,363
Lower North Island	2	3,181	4	2,602	4	6,486	4	3,679
South Island	-	2,789	2	4,013	2	2,789	1	6,506
Total producing hectares	70	-	145		175		195	-
Average TE supplied per hectare		5668		6,150		6,925	-	7,813

Production area and trays supplied of kiwifruit varieties by region over the past four seasons.



GLOSSARY

Zespri Variety names:

Business Name	Abbreviation	EDI variety code	Sub-brand name	Legal variety name
Gold 3	G3	GA	SunGold	ZESY002
Green 14	G14	HE	Sweet Green	ZESH004
Hayward	HW	HW	Green	Hayward
Red 19	R19	RS	Zespri Red	ZES008
Hort 16 A		GK	Zespri Gold	
Gold 9	G9		Zespri Charm	ZESY003

Terms and Definitions

Term	Definition
5-Year Outlook	Annual document outlining Zespri's strategies for each category for the next 3 years and beyond.
12-month supply	Sourcing kiwifruit globally, for supply to Zespri customers and consumers year-round.
Allophanic Soil	Crumbly, free draining soil with limited natural fertility.
Apical dominance	The growing shoot tip inhibits the growth of lateral or axillary buds.
Bio-stimulants	Include diverse formulations of compounds, substances and micro-organisms that are applied to plants or soils to improve crop vigour, yields, quality and tolerance to stresses.
Black seeds	The number of mature black seeds in a fruit. It is used as a measure of maturity.
Botrytis	A pathogenic fungus that causes grey mould and storage diseases in kiwifruit.
Brix	Percentage of sugar by weight (grams per 100mL water) in juice of kiwifruit.
CA	Controlled Atmosphere – regulating the O ₂ and CO ₂ levels, as well as temperature and humidity of sealed storage facilities; slows down ripening (effectively putting fruit into hibernation) and improves firmness of stored fruit.
Checkpoint	Process/check undertaken at wharf – fruit is electronically scanned as it is loaded onto the vessel.
Chlorosis	Condition in which leaves produce insufficient chlorophyll so may be pale, yellow or yellow-white. Often a symptom of phytotoxicity.
Collaborative Marketer	KNZ approved kiwifruit exporter from NZ (other than Zespri).
CPS	Crop Protection Standard – Set of rules for agrichemical use, determined by Zespri, which ensures fruit meets legal requirements of export markets as well as customer and consumer requirements for food safety and sustainability.
Cultivar	New variety produced by selective breeding.
Dioecious	Having separate male and female plants.
DM	Dry Matter – calculated as the ratio of dry to fresh weight. DM = Dry weight ÷ fresh weight. Dry weight constituents include carbohydrates, proteins, acids and minerals.

EDI	Electronic Data Interface – supply chain information transferred from Post-harvest operators to Zespri.
Exudates	Fluid leaking from Psa infected vines from cankers or wounds; may be red/orange or white, may appear as dried stains rather than fresh.
FOBS	Free On Board Ship – a trade term, Zespri takes ownership of the fruit when it is loaded on a vessel.
Fruit and Service Payments	Payments made by Zespri for supply of fruit. Fruit payments (submit and progress payments) and service payments are in place to incentivise the supply of kiwifruit with desired characteristics to gain the best sales return.
Global GAP	Global Produce Working Group code for Good Agricultural Practice – set of criteria under which fruit is produced, audited annually. Growers must have Global GAP certification for Zespri to accept their fruit into inventory.
Gold3	Gold cultivar commercialised by Zespri in 2010, otherwise known as Sungold. Replaced ZespriGold (Hort16A) that was susceptible to Psa. Has PVR protection; growers must purchase license to be able to grow it.
Gold9	Gold cultivar commercialised by Zespri in 2010, otherwise known as ZespriCharm. It was decommercialised due to faults in its storage ability and physical appearance.
Green14	Green cultivar commercialised by Zespri in 2010, otherwise known as SweetGreen. Sweeter fruit than the traditional green Hayward. Has PVR protection; growers must purchase license to be able to grow it.
Hayward	Green cultivar, predominant variety since the 1960s.
Hort16A	Gold cultivar commercialised by Zespri in 2000, otherwise known as ZespriGold. Hort16A was highly susceptible to Psa and was replaced by Gold3.
IAC	Industry Advisory Council – made up of representatives of Zespri, Growers and Supply Entities; manage issues relating to the supply contract – the treatment of and payment of fruit and matters with material financial implications for growers.
ISG	Industry Supply Group – made up of representatives Zespri, Growers and Supply Entities; manage decisions relating to the supply chain process – quality assurance and rules around labelling, packaging and the export of kiwifruit.
IT	International Tray – single layer packaging tray for fruit (size 18-36), 3.6kg.
KISP	Kiwifruit Industry Strategy Project – long term plan developed by industry representatives to achieve market, strategic and financial goals for the benefit of NZ Growers.
Kiwistart	Period early in Harvest (ISO weeks 11/12 to 18/19, although dates vary with variety and can change depending on maturity) for which a premium is paid for fruit submitted, as an incentive to ensure supply of kiwifruit early in the season.
Kiwigreen	Zespri’s Integrated Pest Management programme for pest and disease control, uses environmentally responsible production methods to ensure minimal/nil chemical residues.
KNZ	Kiwifruit New Zealand – industry regulator who give Zespri the mandate to be the vehicle for the SPE. Also allows other exporters to trade NZ grown kiwifruit outside of Australasia via collaborative marketing agreements.
KPIN	Kiwifruit Property Identification Number – a unique ID that every orchard must have. Allows traceability of fruit.
KVH	Kiwifruit Vine Health – independent industry body responsible for biosecurity.
M2	Modular Double – packaging tray with 2 layers of fruit (Green and Gold).
MB	Modular Bulk – loose fill packaging for fruit, 10kg net fruit weight (Green).

ML	Modular Loose – loose fill packing for fruit, 6.8kg net fruit weight (Gold).
MRL	Maximum Residue Level – every agricultural compound used in food production has a maximum residue level set. Each country determines its own MRLs.
MTP	Maximum Taste Payment – Determined by Zespri each year for each variety (amount per tray). Growers receive a taste payment - a portion of the MTP per tray depending on their TZG and size profile.
MTS	Minimum Taste Standard – Zespri initiative used to optimise taste, sets minimum DM levels for crops to be exported.
NSS	Non-Standard Supply – fruit that does not meet Zespri’s Class 1 standard i.e., small or below MTS. Sold on local market, processed or used for stock food.
OGR	Orchard Gate Return – Net Income a grower receives (Income from Zespri less Cost of Post-Harvest).
Osmoregulation	Process of maintaining internal balance between water and dissolved materials (electrolytes) regardless of environmental conditions.
Phenology	Study of the timing of biological events in the lifecycle of plants and animals such as bud break, flowering, maturity, dormancy.
Phloem	Transport tissue in vascular plants; conducts sugars and other metabolic products downwards from the leaves.
Phytosanitary	Verification (in terms of inspection or provision of a certificate) that plants or plant products are free from quarantine pests or diseases.
Phytotoxicity	Toxic effect by a compound on plant growth; range from delayed growth, misshapen leaves or fruit, discoloured or dead spots on leaves, to death of the plant.
PLU	Price Look Up – identification number affixed to produce (by fruit sticker) to make check-out and inventory control easier.
Psa	<i>Pseudomonas syringae</i> pv. <i>actinidiae</i> – bacterial disease that affects kiwifruit vines.
Psa-V	Indicates the virulent strain of the bacteria that exists in New Zealand.
Post-Harvest	Packhouse and cool-store operations.
Sclerotinia	A pathogenic fungus that causes fruit loss from diseased fruitlets, fruit scarring and field rot in kiwifruit.
Size profile	Fruit range in size from size 16 to size 46. Size is relative to weight, so fruit sizes correspond to the number of fruit that can fit into a 3.6kg tray (IT). Size profile is the number of trays of each size grade in a crop.
SPE	Single Point of Entry – use of one exporter rather than multiple exporters e.g., Zespri holds the SPE for the NZ Kiwifruit industry.
TE	Tray Equivalent – unit of volume measurement based on a single layer tray (IT).
TZG	Taste Zespri Grade – Figure calculated from the dry matter of fruit at each size profile in the crop. Used for calculating the taste payment a grower receives.
Xylem	Transport tissue in vascular plants; conducts water from the roots to the shoots and leaves.
Zespri	Zespri International Ltd (ZIL) – Limited liability company owned by current and past kiwifruit growers; the world’s largest marketer of Kiwifruit.
ZGL	Zespri Group Limited – Parent company of which ZIL is the operating subsidiary.
ZGS	Zespri Global Supply – program under which Zespri grows fruit in Italy, France, Japan, South Korea and Australia to ensure 12-month supply to retailers.