



Pistachio Growers' Association

PGA Chill Newsletter Number 4 - 2021 - 22 Season

20th September 2021

The Riverland, despite good chill at the end of August, did not quite reach the 59 Dynamic Units. Most, perhaps all, Riverland growers report applying mitigating oil.

All other growing areas showed sufficient Dynamic Chill Units. However, Sunraysia showed below average hours less than 7°C – this is an alternative model to the Dynamic model. The Dynamic Model was showed by Zhang and Taylor to be more reliable in measuring the chill requirements of Sirora pistachio production in Australia.

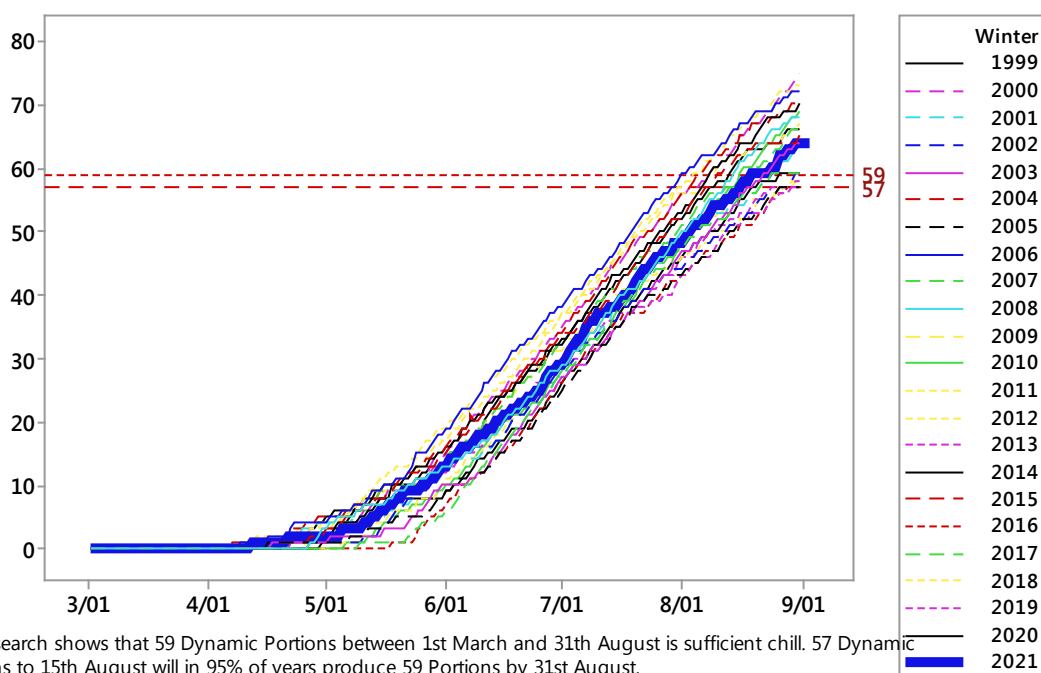
The PGA is continuing the research into chill mitigation treatments, including one plot in the Riverland.

The new PGA Research Officer, Dr Maha Mahadevan will conduct a survey of growers to understand what treatments were applied, and the performance of flowering and nut set in October. This survey will be sent to growers separately.

Hopefully, there has been sufficient chill, and/or sufficient mitigation applied, for a promising record on-crop harvest in Australia as evident from heavy fruit buds for the season.

The PGA would like to thank Dr Jianlu Zhang for his assistance in compiling the chill data for winter 2021.

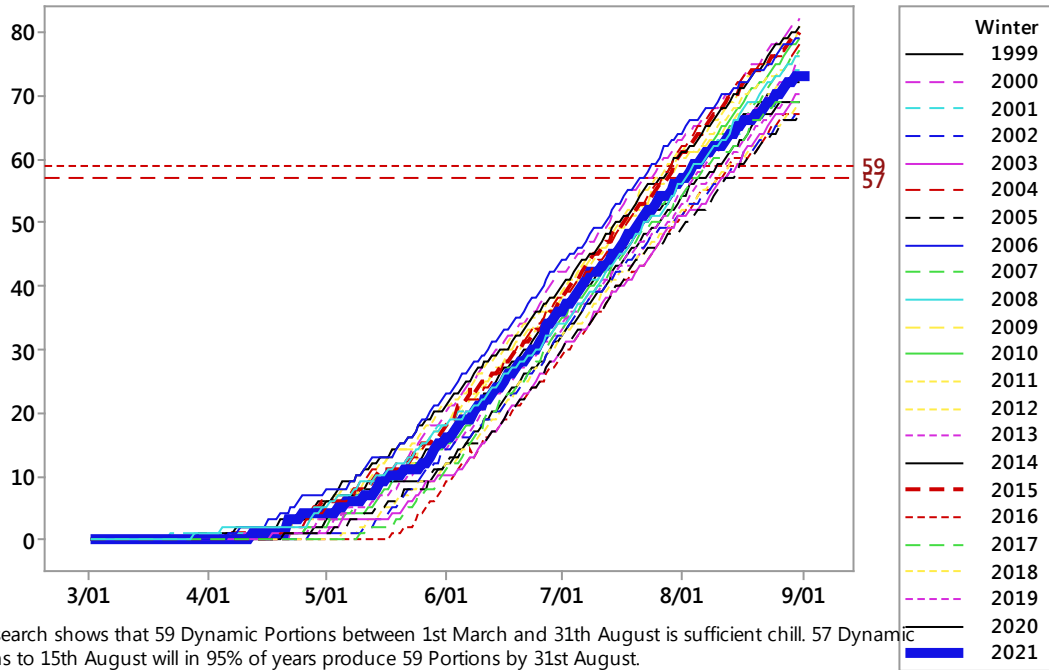
Mildura



PGA research shows that 59 Dynamic Portions between 1st March and 31st August is sufficient chill. 57 Dynamic Portions to 15th August will in 95% of years produce 59 Portions by 31st August.

MILDURA: 64 portions on the 31st of August.

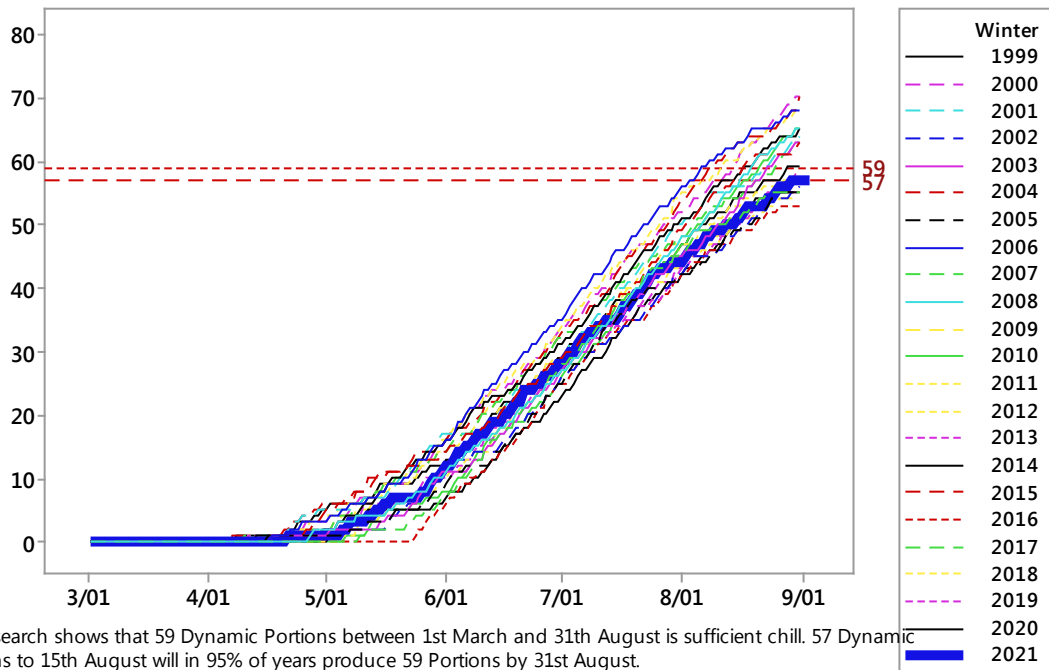
Swan Hill



PGA research shows that 59 Dynamic Portions between 1st March and 31st August is sufficient chill. 57 Dynamic Portions to 15th August will in 95% of years produce 59 Portions by 31st August.

SWAN HILL: 73 portions on the 31st of August.

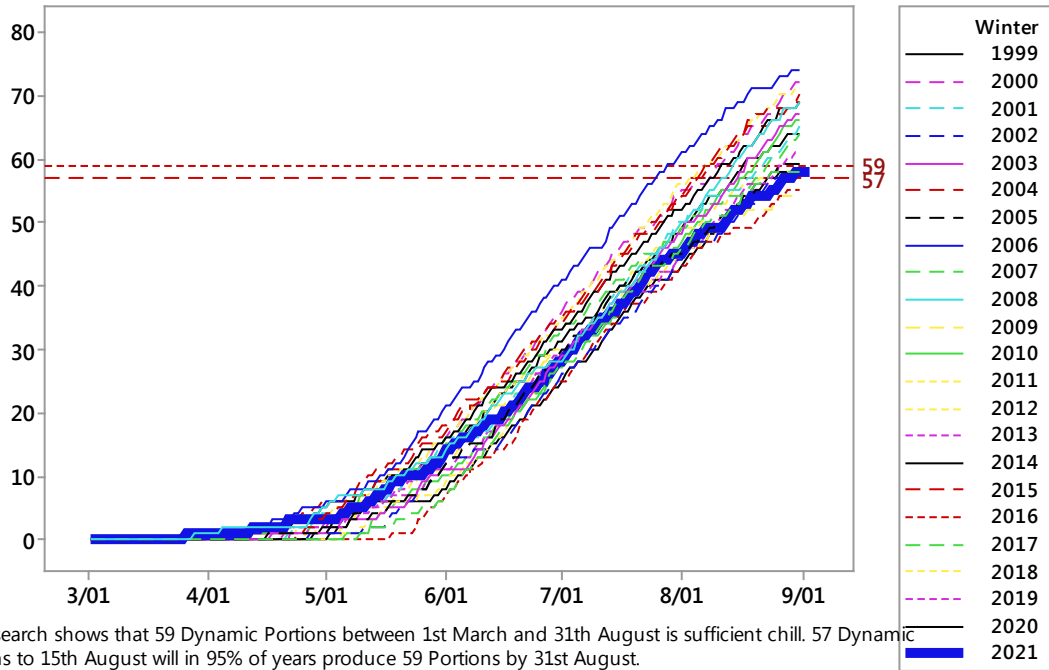
Renmark



PGA research shows that 59 Dynamic Portions between 1st March and 31th August is sufficient chill. 57 Dynamic Portions to 15th August will in 95% of years produce 59 Portions by 31st August.

RENMARK: 57 portions on the 31st of August and 3rd September.

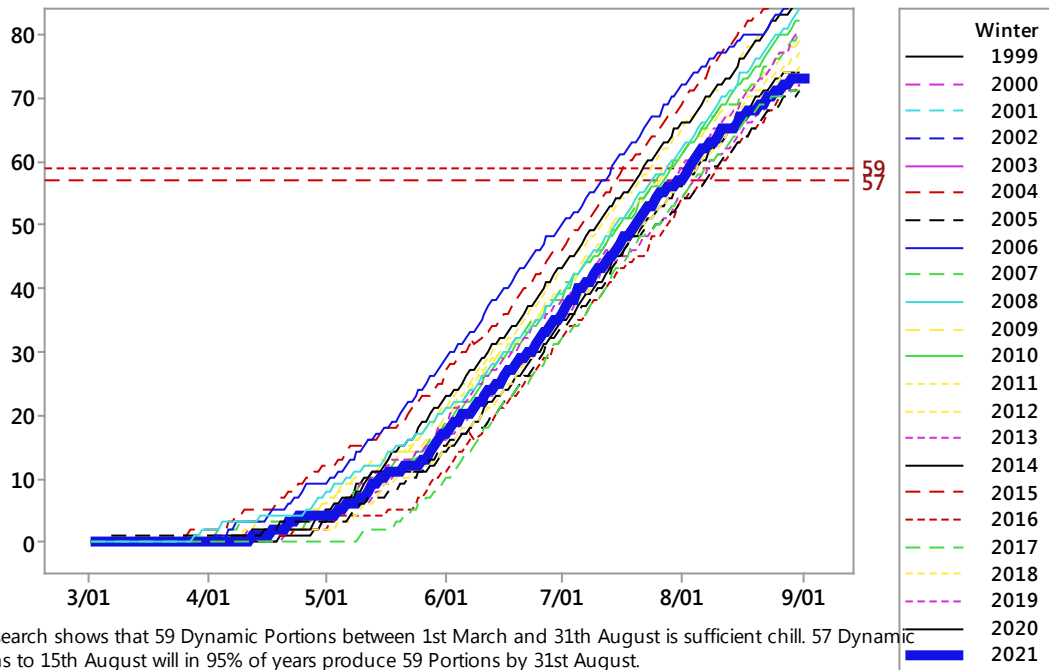
Loxton



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LOXTON: 58 portions on the 31st of August and 3rd September.

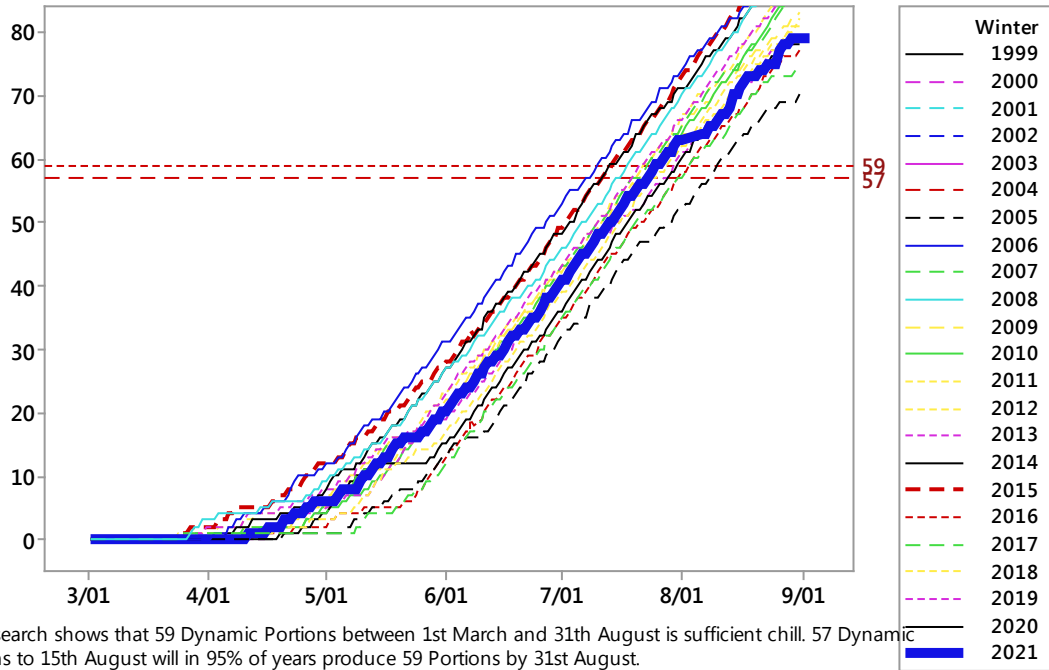
Lameroo



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LAMEROO: 73 portions on the 31st of August.

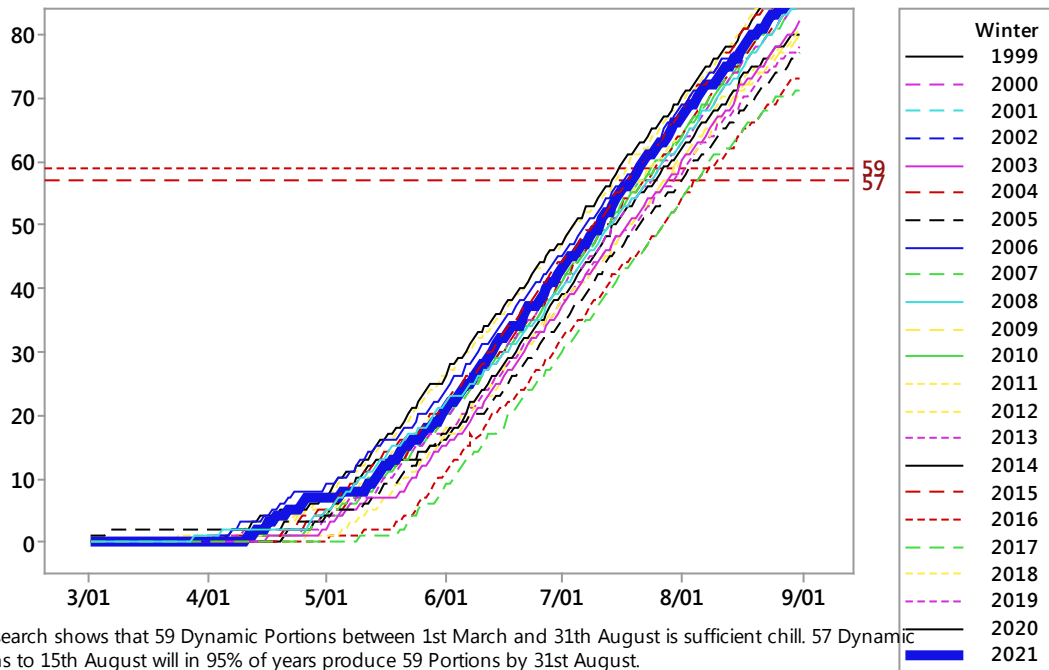
Nhill



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NHILL: 79 portions on the 31st of August.

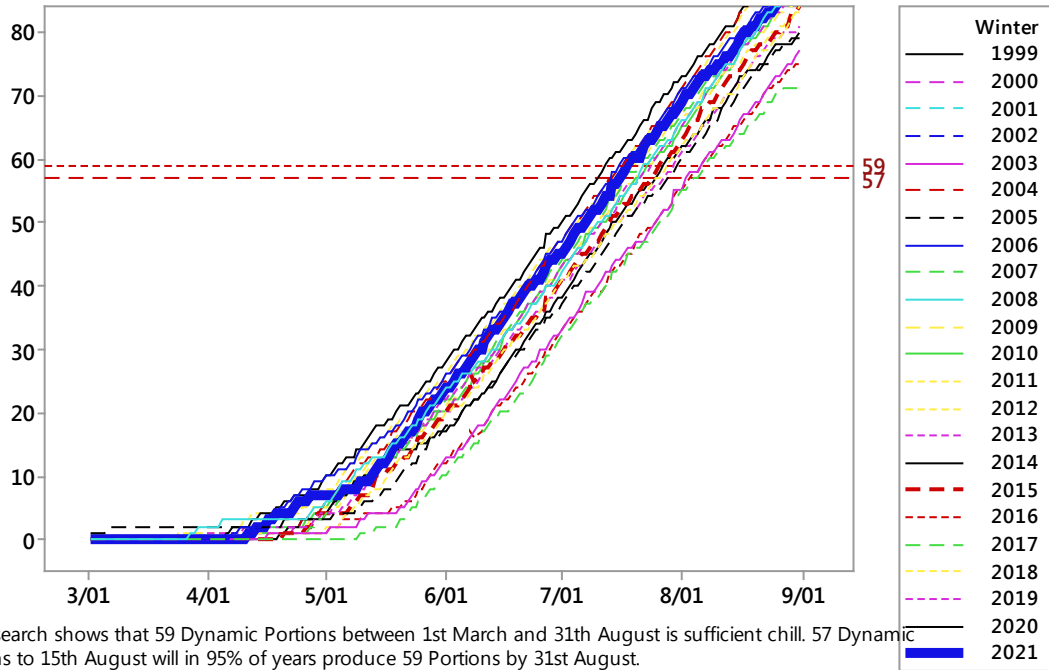
Yarrowonga



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YARRAWONGA: 85 portions on the 31st of August.

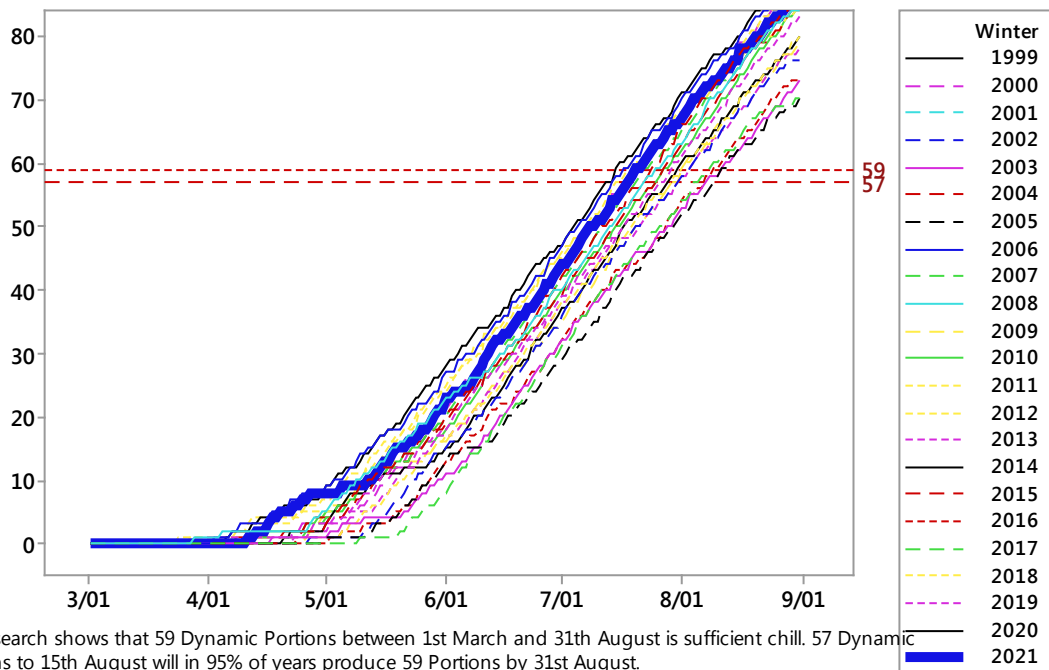
Albury



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ALBURY: 88 portions on the 31st of August.

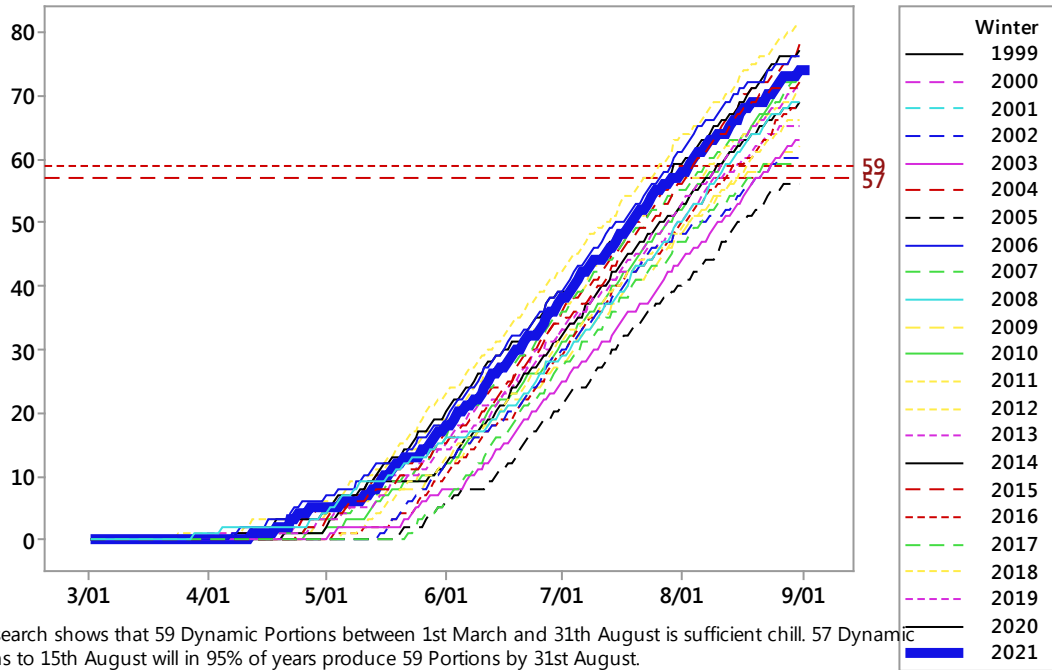
Wagga Wagga



PGA research shows that 59 Dynamic Portions between 1st March and 31th August is sufficient chill. 57 Dynamic Portions to 15th August will in 95% of years produce 59 Portions by 31st August.

WAGGA WAGGA: 87 portions on the 31st of August.

Griffith



GRIFFITH: 74 portions on the 31st of August.


Table 1 Portion in the Dynamic model from 1 March to 31 August

Winter	Albury	Griffith	Lameroo	Loxton	Mildura	Nhill	Renmark	Swan Hill	Wagga	Yarrowonga
1999				64	66		59	72		
2000				72	75		70	82	90	
2001				65	63		64	74		
2002		60		58	59		56	68	76	
2003	77	63		67	64		63	70	73	82
2004	91	72		70	65		63	78	86	88
2005	80	56	71	59	57	70	55	67	70	77
2006	89	76	85	74	72	91	68	79	88	87
2007	71	59	71	58	59	75	55	69	70	71
2008	88	69	84	69	68	93	65	76	84	85
2009	86	62	79	55	58	83	55	73	79	80
2010	88	73	82	66	69	86	65	79	85	87
2011	83	70	77	59	67	82	58	76	84	81
2012	93	81	86	71	73	88	68	81	90	92
2013	81	65	72	59	57	79	55	69	78	78
2014	79	69	74	58	59	78	55	69	80	80
2015	84	78	91	69	71	94	70	80	85	85
2016	75	68	72	55	57	77	53	67	73	73
2017	88	73	81	64	66	87	63	77	86	86
2018	84	66	75	58	58	81	57	68	80	81
2019	87	71	80	61	58	88	58	75	83	85
2020	94	77	85	69	70	91	65	81	92	91
2021	88	74	73	58	64	79	57	73	87	85

The raw data is collected from the Bureau of Meteorology sites. The data for each orchard may be different. This data and information is provided as a guide to growing pistachios in Australia. Each grower should ensure that actions taken on their orchard is appropriate for their orchard. The PGA Inc and its office bearers will not accept responsibility for the actions of individual growers on their orchard.

Chris Joyce, Chair, Research Committee
Pistachio Growers' Association

This newsletter is an output of Project PS17003 - Pistachio Productivity Improvement Program.

	<p>This project has been funded by Hort Innovation using the pistachio research and development levy and funds from the Australian Government. For more information on the fund and strategic levy investment visit horticulture.com.au</p>
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