


Evaluation of cauliflower and broccoli varieties

Autumn Planting

(January - May 2006)

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Introduction

This report is the second in a series of four produced from the evaluation of cauliflower and broccoli varieties conducted at the Manjimup Horticultural Research Institute. The results are provided to allow seed suppliers, seedling nurseries, producers, packers and marketers to identify the best variety for a particular harvest period. All varieties receive exactly the same treatment throughout their growth. This has allowed the identification of agronomic requirements that may be specific to some varieties. Varieties that have specific agronomic requirements may perform better when the growing inputs are exactly tailored to suit these varieties. Contact details for participating seed companies are available in Appendix 2.

Trial Details

Transplanting and Harvesting Dates

Table 1: Transplant and harvest dates for cauliflower and broccoli.

	Transplanting Dates	First Harvest Date	Last Harvest Date
Cauliflower	27 January 2006	31 March 2006	2 May 2006
Broccoli	27 January 2006	21 March 2006	7 April 2006

Note: Not all varieties were harvested on every date. These days represent the total harvest days across all varieties.

Fertiliser Applications

Fertiliser was applied both at transplanting and post transplanting. Details of fertiliser application are given below. All varieties received the same fertiliser program.

Table 2: Fertiliser application for all varieties.

Date	Product	Rate of Application	Method of Application
27 January 2006	Summit Spud	1500 kg/ha	Incorporated at planting
27 January 2006	All Phos	100 kg/ha	Incorporated at planting
31 January 2006	Ammonium nitrate	75 kg/ha	Foliar application
8 February 2006	Soluble boron	20 kg/ha	Foliar application
8 February 2006	Sodium molybdate	1 kg/ha	Foliar application
8 February 2006	Zinc sulphate	28 kg/ha	Foliar application
10 February 2006	Urea	100 kg/ha	Foliar application
20 February 2006	Urea	150 kg/ha	Foliar application
2 March 2006	Calcium nitrate	150 kg/ha	Foliar application
14 March 2006	Calcium nitrate	150 kg/ha	Foliar application
23 March 2006	Calcium nitrate	100 kg/ha	Foliar application

Planting

Cauliflower were grown in a two row per 1.7m bed configuration at a within row spacing of 40cm and a between row spacing of 80cm. Broccoli were grown in a three row per 1.7m bed configuration at a within row spacing of 45cm and a between row spacing of 45cm. All varieties were grown in 5.1m x 6m plots and were surrounded by a buffer variety. At harvest, 5m of the four inner rows of each cauliflower plot and 3m of the seven inner rows of each broccoli plot were picked, which provided approximately 100 plants for assessment (50 per replicate).

Weather Conditions
Weather conditions were monitored daily throughout the life of the crop. Details of the weather can be found in Appendix 1. Average maximum daily temperatures were 23.1°C in January, 25.7°C in February, 25.0°C in March and 17.5°C in April. Crops were irrigated with over-head sprinklers. Irrigation was scheduled according to 100% evaporation replacement.

Insect, Disease and Weed Control
A monitoring program for insects and disease was conducted throughout the life of the crop and were controlled as required. Weeds were controlled prior to transplanting and post transplanting.

Covering
Curds were covered as required to prevent curd discolouration. The number of covers required by each variety in addition to curds covered at harvest was recorded. Curds were covered whenever the curd was visible through the frame or if there was a risk that the curd may have become visible before harvest.

Harvesting
All leaves are removed from around the cauliflower curd and broccoli head during the harvesting procedure so that an accurate estimation of yield (t/ha) can be made. Harvesting occurred every three to four days as required. Harvesting is delayed as long as possible, up to when curd/head quality would decrease if delayed longer. Broccoli was cut so the stem was about the same length as the diameter of the heads, giving an evenly proportioned head width and stem length.

Grading
The cauliflower and broccoli were graded to allow a comparison of their yield and quality to be made. All curds and heads were assessed for total and marketable yield and quality. Marketable yield was determined by the weight of the curd or head, a quality grade score and the density of the curd or head. Colour of the curd and head was also taken into account. A marketable cauliflower curd/broccoli head was considered to be of a high standard of quality (with no visible defects or markings).

An acceptable weight for cauliflower was a curd between 0.5 and 2 kg. The curd should be a round, domed shape and creamy white to white in colour. The quality score must be five or greater and the density score two or greater. An acceptable size for broccoli heads was between 5 and 20cm in diameter and the head should be a green colour with no purple tinges. The quality score for broccoli must be five or greater and density score two or greater.

Density scores were allocated according to the following table. The quality scores are not presented in the results as they are used only to separate poor quality curds or heads in the grading data sheets from those that are of a high standard of quality. Varieties that had a large proportion of high quality curds/heads have had this noted in the results section.

Table 3: Density scoring system for cauliflower and broccoli.

Broccoli	Cauliflower
1 = Very open head	1 = Very open curd
2 = Reasonable density (head is closed and floret stems in middle of the head cannot be easily seen)	2 = Reasonable density (florets closed but not very close to stem underneath)
3 = Very tight head (no floret stems in the middle of the head can be seen)	3 = Very tight closed curd (florets curved underneath close to stem)

Storage of Product
Cauliflower curds of a high quality standard were placed in cool store at 1°C for 15 days. Prior to storage the curds were wrapped in paper and placed in a cardboard box. After 15 days cool store the curds were removed and re-graded for after-storage quality. Broccoli heads were not assessed for storage quality.

Results

The varieties were assessed prior to harvest, at harvest and post storage. The vigour of varieties was assessed relative to the control variety prior to harvest.

Table 4: Pre-harvest characteristics of cauliflower and broccoli.

Cauliflower variety	Vigour * (1 – 5)	% Sibs at 10 weeks after transplanting[#]	No. of covers required before harvest^	Comments
Aviron - Control	4.5	7.3	0	
Astrolabe	4	4.1	0	
Boris	5	5.2	0	Upright large frame
Dulis	5	4.3	0	Upright large frame
Lisbon	4	5.0	0	
Locris	4	7.2	0	
Moby	4	4.2	0	
Navigator	5	4.5	1	Upright large frame
Nevada	4	7.0	0	
Scudo	4	8.6	0	
Sergeant	4	2.0	1	
TCF 2806	5	2.0	0	Upright large frame
TCF 2816	4.5	4.9	0	
TCF 2818	4.5	5.4	0	
TCF 2819	4.5	0.0	0	
Victory	4	2.0	1	
WA 05 - 1	4	2.0	0	
WA 05 - 3	4	2.1	0	

Broccoli variety	Vigour * (1 – 5)	% Sibs at 10 weeks after transplanting[#]	No. of covers required before harvest^	Comments
Viper - Control	5	0	na	
Resolute	5	0	na	
WA 05-1B	5	0	na	
WA 05-3B	5	0	na	

* 1 = low vigour (less growth)
5 = high vigour (greatest growth)

[#] Seed was supplied as trial samples only and may not be subject to normal quality checks.

^ The number of covers prior to harvest indicates those varieties that require covering in addition to the covering procedure carried out during harvest.

Table 5: Maturity times, spread of harvest and total and marketable yield of cauliflower and broccoli at harvest.

Cauliflower variety	Days from transplant to first harvest^	Number of picks required (total yield)	Total Yield (t/ha)*	Marketable Yield (t/ha) #	Difference between total and marketable yield (t/ha)
Aviron - Control	73	3	24.6	11.0	13.6
Astrolabe	73	6	27.4	24.6	2.8
Boris	77	4	29.1	23.0	6.1
Dulis	81	5	29.6	21.5	8.1
Lisbon	73	5	28.3	25.7	2.7
Locris	73	3	32.0	28.8	3.2
Moby	70	5	31.9	29.3	2.6
Navigator	67	3	32.7	20.4	12.2
Nevada	70	3	28.5	6.5	22.0
Scudo	81	4	31.6	27.7	3.9
Sergeant	63	2	29.0	1.5	27.5
TCF 2806	73	4	31.6	17.0	14.6
TCF 2816	73	6	31.6	26.7	4.9
TCF 2818	73	2	32.5	25.7	6.8
TCF 2819	73	2	26.3	23.7	2.6
Victory	63	2	31.1	4.7	26.4
WA 05 - 1	73	3	36.1	28.2	8.0
WA 05 - 3	73	5	36.0	32.2	3.9
Whistler	67	3	26.8	15.4	11.4

Broccoli Variety	Days from transplant to first harvest^	Number of picks required (total yield)	Total Yield (t/ha)*	Marketable Yield (t/ha) #	Difference between total and marketable yield (t/ha)
Viper - Control	53	3	14.3	11.6	2.8
Resolute	60	4	12.8	5.1	7.7
WA 05-1B	56	4	14.9	11.8	3.1
WA 05-3B	53	4	12.9	10.5	2.3

^ Days from transplant to first harvest have been averaged for the two replicates of each variety.

* Yields may be greater in trials than commercial practice due to all curds being picked. Curds that mature early or late compared to the main harvest period may not be included in commercial yield estimates.

Yield when curds/heads not suitable for market are removed.

Table 6: Characteristics of cauliflower and broccoli at harvest.

Cauliflower variety	Average marketable curd weight (g)	Average marketable curd diameter (cm)	Density^	Colour*
Aviron - Control	1061.4	16.4	1.8	Off white
Astrolabe	998.2	15.6	2.4	Creamy
Boris	1118.7	16.0	2.8	Off white
Dulis	1057.7	15.4	2.8	Off white
Lisbon	1096.8	16.1	2.5	White
Locris	1146.5	16.3	2.5	Off white
Moby	1101.9	16.2	2.5	White
Navigator	1114.0	16.6	2.9	Off white
Nevada	892.8	14.7	2.9	White
Scudo	1114.8	18.2	2.8	Off white
Sergeant	999.6	15.9	2.8	Off white
TCF 2806	1131.7	16.4	2.0	Off white
TCF 2816	1103.4	15.6	2.9	Off white
TCF 2818	1164.8	16.3	2.5	Off white
TCF 2819	1076.0	15.9	2.3	White
Victory	922.3	16.0	2.9	Off white
WA 05 - 1	1309.9	16.4	2.9	Off white
WA 05 - 3	1293.3	16.1	3.0	White
Whistler	944.5	15.8	2.9	White

Broccoli variety	Average marketable head weight (g)	Average marketable head diameter (cm)	Density^	Colour
Viper - Control	351.8	13.2	2.9	Dark green
Resolute	316.9	12.5	2.0	Light green
WA 05-1B	341.2	12.9	2.8	Green
WA 05-3B	319.5	12.2	2.9	Green

^ Average density of total yield.

* Off white describes a curd that has a slightly creamy colour although it is predominately white.

Table 7: Percentage (%) of total yield picked at each harvest*.

Cauliflower variety	31 Mar (63)	4 Apr (67)	7 Apr (70)	10 Apr (73)	14 Apr (77)	18 Apr (81)	21 Apr (84)	25 Apr (88)	28 Apr (91)	2 May (95)	Total
Aviron - control				18	34	48					100
Astrolabe				1	5	9	13	26	46		100
Boris					12	35	29	24			100
Dulis						5	4	15	37	39	100
Lisbon				17	25	24	21	13			100
Locris				11	57	32					100
Moby			5	7	21	43	24				100
Navigator		37	32	31							100
Nevada			11	33	56						100
Scudo						7	23	41	29		100
Sergeant	57	43									100
TCF 2806				13	12	50	25				100
TCF 2816				3	10	14	30	24	19		100
TCF 2818				22	78						100
TCF 2819				13	87						100
Victory	31	69									100
WA 05 - 1				21	58	21					100
WA 05 - 3				3	31	34	22	10			100
Whistler		34	27	39							100

Broccoli variety	21 Mar (53)	24 Mar (56)	28 Mar (60)	31 Mar (63)	4 Apr (67)	7 Apr (70)	Total
Viper - Control	22	62	16				100
Resolute			3	21	56	20	100
WA 05-1B		45	15	20	20		100
WA 05-3B	13	33	51		3		100

* The percentage of yield picked at each harvest has been averaged for the two replicates of each variety.

( ) Figure in brackets represents the number of days from transplanting to first harvest (days after transplanting).

Table 8: Cauliflower curd and broccoli head comments

Cauliflower variety	Comments (Harvest)	Comments (Post-storage)*
Aviron - control	Marketable yield reduced by minor yellowing of curds and reduced curd density.	Not assessed due to insufficient curds at each harvest to fill a storage box.
Astrolabe	Good harvest quality with a small reduction in marketable yield due to irregular shaped curds.	Minor cell collapse.
Boris	Good harvest quality. Marketable yield reduced by small percentage of yellowing.	Very minor cell collapse.
Dulis	Good harvest quality with dense curds. Marketable yield reduced by splitting.	Very minor cell deterioration.
Lisbon	Good harvest quality with a small reduction in marketable yield due to yellowing and presence of some off-types.	Minor cell collapse.
Locris	Very good harvest quality. Slight reduction in marketable yield due to yellowing.	Minor cell collapse.
Moby	Very good harvest quality. Slight reduction in marketable yield due to presence of sib plants.	Minor cell collapse.
Navigator	Good harvest quality with dense curds. Marketable yield reduced by a minor amount of splitting and presence of off-types.	Very minor cell collapse.
Nevada	Marketable yield reduced by splitting of curds.	Not assessed due to insufficient curds at each harvest to fill a storage box.
Scudo	Very good harvest quality with dense curds. Slight reduction in marketable yield due to minor splitting of curds.	Minor cell collapse.
Sergeant	Marketable yield reduced by splitting.	Not assessed due to insufficient curds at each harvest to fill a storage box.
TCF 2806	Marketable yield reduced by minor yellowing and reduced curd density.	Loss of post storage quality due to cell collapse.
TCF 2816	Good harvest quality with dense curds. Marketable yield reduced by minor insect damage on curds.	Excellent post storage quality.

Cauliflower variety	Comments (Harvest)	Comments (Post-storage)*
TCF 2818	Good harvest quality. Marketable yield reduced by minor yellowing and presence of off-types.	Very minor cell collapse.
TCF 2819	Good harvest quality. Slight reduction in marketable yield due to minor yellowing and under-sized curds.	Loss of post storage quality due to cell collapse.
Victory	Marketable yield reduced by splitting.	Not assessed due to insufficient curds at each harvest to fill a storage box.
WA 05 - 1	Very good harvest quality with dense curds. Slight reduction in marketable yield due to slug damage on curds.	Very good post storage quality.
WA 05 - 3	Very good harvest quality with dense curds. Slight reduction in marketable yield due to a number of under sized curds.	Reduced post storage quality due to cell collapse.
Whistler	Marketable yield reduced by splitting of curds.	Minor cell collapse.

Broccoli variety	Comments (Harvest)	Comments (Post-storage)*
Viper - Control	Very good harvest quality with dense heads. Slight reduction in marketable yield due to minor rodent damage on heads.	n/a
Resolute	Marketable yield reduced due to minor white blister infection and hollow stem.	n/a
WA 05-1B	Good harvest quality with dense heads. Slight reduction in marketable yield due to minor rodent damage on heads.	n/a
WA 05-3B	Good harvest quality with dense heads. Slight reduction in marketable yield due to minor white blister infection and the presence of sib plants.	n/a

* Collapse is the breakdown of individual 'flowers' within a floret. Discolouration of the affected 'flowers' has not yet occurred. Deterioration is the next stage from cell collapse, when the individual 'flowers' have started to turn brown or black.

Appendix 1

Weather records at Manjimup Horticultural Research Institute (January – April 2006)

Monthly weather summary – January 2006

Date	Temperature		Evaporation	Rain	Comment
	Max	Min	mm	mm	
1-Jan-06	16.6	6.8	4.4	0	Fine Mild
2-Jan-06	22.8	7.4	7.8	0	Fine Warm
3-Jan-06	27.5	11.9	7.8	2.6	Drizzle Overcast Warm
4-Jan-06	19.6	13.4	2.6	0.4	Cloudy Mild
5-Jan-06	24.5	14.3	6.5	0	Cloudy Warm
6-Jan-06	24.4	14.7	6.8	0	Fine Warm
7-Jan-06	30.2	15.8	7.1	0	Fine Hot
8-Jan-06	31.3	15.2	7.2	0.6	Overcast Drizzle
9-Jan-06	21.8	11.0	4.8	0.4	Cloudy Mild
10-Jan-06	20.5	8.7	6.7	0	Fine Mild
11-Jan-06	21.7	9.3	6.8	0	Fine Mild
12-Jan-06	27.7	12.0	8.3	0	Cloud Increasing Warm
13-Jan-06	25.3	13.0	4.5	2.4	AM Drizzle Windy Warm
14-Jan-06	18.0	13.9	1.9	0	Fine Mild
15-Jan-06	21.6	14.4	4.1	0	Fine Mild
16-Jan-06	29.1	14.6	7.5	0	Cloudy Hot
17-Jan-06	21.9	15.2	5.8	0	Cloudy Mild
18-Jan-06	28.5	16.2	4.8	0	Overcast Warm
19-Jan-06	19.8	11.9	1.9	0.2	Fine Mild
20-Jan-06	25.2	13.8	6.5	0	Fine Warm
21-Jan-06	26.7	10.6	6.0	0	Windy Cloudy Warm
22-Jan-06	19.7	8.2	4.5	0	Fine Mild
23-Jan-06	22.6	9.4	7.1	0	Fine Warm
24-Jan-06	28.5	13.1	8.4	0	Rain Developing Hot
25-Jan-06	26.7	16.5	2.3	15.2	Overcast Showers
26-Jan-06	18.6	8.9	0.8	3.4	Fine Mild
27-Jan-06	20.5	7.9	6.5	0	Fine Mild
28-Jan-06	21.8	10.3	6.2	0	Windy Cloudy Mild
29-Jan-06	17.5	7.7	3.4	0	Showers Mild
30-Jan-06	17.0	8.9	5.0	0.2	Cloudy Mild
31-Jan-06	18.5	7.4	4.0	0.2	Cloudy Mild

Monthly weather summary – February 2006

Date	Temperature		Evaporation	Rain	Comment
	Max	Min	mm	mm	
1-Feb-06	20.8	10.7	5.3	0.2	Cloudy Mild
2-Feb-06	21.0	8.3	5.1	0	Fine Mild
3-Feb-06	23.5	12.7	6.9	0	Fine Warm
4-Feb-06	27.6	14.5	7.4	0	Fine Hot
5-Feb-06	30.9	14.5	8.0	0	Fine Hot
6-Feb-06	24.3	11.5	7.3	0	Cloudy Humid Warm Overnight Rain
7-Feb-06	32.4	16.9	7.3	10.6	Overcast Drizzle Hot
8-Feb-06	21.9	11.5	4.3	0.4	Windy Overcast Mild
9-Feb-06	17.6	8.1	4.3	0	Fine Mild
10-Feb-06	24.8	9.7	7.5	0	Fine Warm
11-Feb-06	26.5	10.9	7.4	0	Fine Hot
12-Feb-06	27.6	11.0	6.4	0	Cloudy Hot
13-Feb-06	26.5	12.5	5.9	0	Fine Hot
14-Feb-06	32.1	18.1	7.5	0	Fine Hot
15-Feb-06	33.3	16.2	6.6	0	Drizzle Hot
16-Feb-06	17.2	12.7	1.4	2.4	Cloudy Mild
17-Feb-06	21.8	12.7	3.4	0	Cloudy Mild
18-Feb-06	20.4	10.1	3.3	0	Fine Mild
19-Feb-06	20.6	8.7	5.4	0	Fine Mild
20-Feb-06	24.1	9.0	6.8	0	Fine Warm
21-Feb-06	30.5	16.8	7.5	0	Fine Very Hot Thundery Showers
22-Feb-06	34.8	20.4	7.4	1.2	Cloudy Hot
23-Feb-06	29.1	13.7	5.6	0	
24-Feb-06	21.2	9.4	4.4	0	
25-Feb-06	20.9	8.8	5.1	0	
26-Feb-06	23.8	9.5	6.5	0	Fine Warm
27-Feb-06	31.1	14.4	7.1	0	Fine Hot
28-Feb-06	32.3	15.9	7.2	0	Fine Hot

Monthly weather summary – March 2006

Date	Temperature Max	Min	Evaporation mm	Rain mm	Comment
1-Mar-06	33.2	17.3	7.9	0	Cloudy Hot
2-Mar-06	28.3	15.5	5.4	0	Cloudy Showers Developing
3-Mar-06	22.8	12.6	3.6	0.8	Fine Mild
4-Mar-06	28.4	15.9	6.2	0.2	Fine Hot
5-Mar-06	33.4	18.3	7.7	0	Fine Hot
6-Mar-06	33.5	12.4	7.8	0	Fine Hot
7-Mar-06	29.3	13.7	7.5	0	Fine Hot
8-Mar-06	32.7	15.7	5.9	0	Fine Hot
9-Mar-06	28.1	16.6	4.6	0	
10-Mar-06	30.1	13.1	5.8	0	
11-Mar-06	27.5	11.5	5.1	0.2	Cloudy Warm
12-Mar-06	18.6	10.2	4.0	0	Cloudy Mild
13-Mar-06	20.7	8.6	4.5	0	Cloudy Mild
14-Mar-06	26.3	12.5	6.2	0	Fine Warm
15-Mar-06	21.6	11.5	4.1	0	Fine Mild
16-Mar-06	24.3	8.4	6.1	0	Fine Warm
17-Mar-06	26.8	10.2	5.7	0	Fine Warm
18-Mar-06	26.9	11.9	5.1	0	Fine Hot
19-Mar-06	25.0	11.1	4.4	0	Fine Hot
20-Mar-06	28.9	14.5	5.3	0	Fine Hot
21-Mar-06	32.1	17.3	4.9	0	Cloudy Hot
22-Mar-06	23.2	14.5	2.1	0	Rain Developing Warm
23-Mar-06	19.2	8.8	1.7	31.4	Rain Mild
24-Mar-06	13.8	12.3	0.7	10.6	Drizzle Cool
25-Mar-06	16.2	9.9	1.8	1.2	Fine Mild
26-Mar-06	16.4	7.1	3.0	0	Fine Mild
27-Mar-06	19.6	9.2	4.8	0.2	Fine Mild
28-Mar-06	24.7	10.3	5.1	0	Cloudy Warm Drizzle
29-Mar-06	20.8	10	3.6	0.2	Fine Mild
30-Mar-06	21.0	7.2	5.0	0	Fine Mild
31-Mar-06	20.8	7.5	4.7	0	Fine Mild

Monthly weather summary – April/May 2006

Date	Temperature		Evaporation	Rain	Comment
	Max	Min	mm	mm	
01-Apr-06	21.3	12.9	4.9	0.0	
02-Apr-06	16.9	12.2	1.9	0.2	
03-Apr-06	21.8	11.4	2.9	1.2	
04-Apr-06	16.5	10.9	1.5	0.6	
05-Apr-06	16.1	10	1.6	0.0	
06-Apr-06	17.8	11.4	3.3	0.0	
07-Apr-06	18.5	9	3.2	0.0	
08-Apr-06	20.9	10.3	4.3	0.0	
09-Apr-06	25.6	12.8	4.4	0.0	
10-Apr-06	16.6	10.0	1.7	0.0	
11-Apr-06	17.9	10.9	1.6	2.2	
12-Apr-06	15.4	9.5	1.4	0.0	
13-Apr-06	16.5	12.0	1.8	1.6	
14-Apr-06	15.4	8.5	1.2	0.8	
15-Apr-06	20.2	9.6	2.5	0.2	
16-Apr-06	22.5	10.6	3.9	0.6	
17-Apr-06	15.1	7.3	2.5	0.2	
18-Apr-06	13.4	10.4	1.6	1.0	
19-Apr-06	16.4	10.4	2.2	0.4	
20-Apr-06	16.0	6.7	2.6	0.2	
21-Apr-06	19.8	12.3	3.2	0.2	
22-Apr-06	19.9	7.4	1.2	1.4	
23-Apr-06	16.7	11.0	1.1	4.0	
24-Apr-06	16.9	12.2	1.2	4.8	
25-Apr-06	16.1	10.3	0.9	6.0	
26-Apr-06	16.3	6.3	1.3	4.0	
27-Apr-06	12.6	7.0	1.8	1.0	
28-Apr-06	14.4	9.9	1.5	2.0	
29-Apr-06	15.3	6.9	1.1	0.4	
30-Apr-06	17.4	8.3	2.4	0.2	
01-May-06	17.5	9.9	2.1	0.0	
02-May-06	17.1	11.7	1.2	0.0	

Appendix 2

Seed company details:

Cauliflower Variety	Seed Company	Contact Person	Mobile Number
Aviron	Clause Tezier Australia	Larry Giles	0437 802 004
Astrolabe	Clause Tezier Australia	Larry Giles	0437 802 004
Boris	South Pacific Seeds	Tim Aldridge	0417 934 768
Dulis	South Pacific Seeds	Tim Aldridge	0417 934 768
Lisbon	Lefroy Valley	Alek Moreno	0418 914 714
Locris	South Pacific Seeds	Tim Aldridge	0417 934 768
Moby	Seminis	John McBride	0400 934 706
Navigator	Clause Tezier Australia	Larry Giles	0437 802 004
Nevada	Lefroy Valley	Alek Moreno	0418 914 714
Scudo	Clause Tezier Australia	Larry Giles	0437 802 004
Sergeant	Syngenta Seeds	Kevin Gugiatti	0408 499 990
TCF 2806	Terranova	Graham Adams	0417 930 233
TCF 2816	Terranova	Graham Adams	0417 930 233
TCF 2818	Terranova	Graham Adams	0417 930 233
TCF 2819	Terranova	Graham Adams	0417 930 233
Victory	Syngenta Seeds	Kevin Gugiatti	0408 499 990
WA 05 - 1	Rijk Zwaan	Dusanka Milunovic	0439 330 123
WA 05 - 3	Rijk Zwaan	Dusanka Milunovic	0439 330 123
Whistler	Seminis	John McBride	0400 934 706

Broccoli Variety	Seed Company	Contact Person	Mobile Number
Viper	Lefroy Valley	Alek Moreno	0418 914 714
Resolute	Syngenta Seeds	Kevin Gugiatti	0408 499 990
WA 05-1B	Rijk Zwaan	Dusanka Milunovic	0439 330 123
WA 05-3B	Rijk Zwaan	Dusanka Milunovic	0439 330 123

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- ***Seminis Seeds***
- ***South Pacific Seeds***
- ***Springall Nursery***
- ***Syngenta***
- ***Terranova Seeds***
- ***Warren Cauliflower Group (Inc)***

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This document has been prepared from a cauliflower and broccoli variety evaluation trial conducted at the Manjimup Horticultural Research Institute, South Western Highway, Manjimup WA 6258. The results reflect the growth characteristics, yield, quality and density of the cauliflower and broccoli varieties as recorded at this site during the conditions of the growing period (January to May 2006).

Variations in the characteristics of the cauliflower and broccoli varieties may occur during other growth period, locations and management programs. The availability of the document does not imply suitability to other areas, growth periods or management programs and any interpretation is the responsibility of the user.