

**Project title:** Field Vegetables: An evaluation of autumn/winter cauliflower, spring cabbage cultivars and other winter brassica crops.

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**Location of project:** Trevarnon Farm, Gwithian, Cornwall.

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The results and conclusions in this report are based on an investigation conducted over a one-year period. The conditions under which the experiments were carried out and the results have been reported in detail and with accuracy. However, because of the biological nature of the work it must be borne in mind that different circumstances and conditions could produce different results. Therefore, care must be taken with interpretation of the results, especially if they are used as the basis for commercial product recommendations.

## AUTHENTICATION

We declare that this work was done under our supervision according to the procedures described herein and that the report represents a true and accurate record of the results obtained.

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## GROWER SUMMARY

### Headline

Some of the new autumn and winter cauliflower cultivars can increase income by £691/Ha where grade 1 product is 10% above standard cultivars based on 19760 plants/Ha (8000/Acre).

### Background

Duchy College working in partnership with six national seed houses and local growers have carried out the evaluation of commercially available autumn cauliflower, winter cauliflower and spring greens cultivars over the past 14 years. Initially introduced into the confidential/screening trials and then within the commercially available trials each cultivar has been recorded and evaluated year on year. With the improvement in plant breeding and new cultivars being introduced these need to be assessed alongside current and established varieties in order to improve yields and quality of produce.

### Results

The following cultivars are of most interest to the industry. These have performed well during 2010 – 2011, however results over several seasons will need to be considered when selecting cultivars for production. Full information on all varieties can be found in the 'Full Trial Report'.

Comments on curd protection, disease, uniformity, suitability for various markets, defects and ease of harvesting are found in the Full Trial report in the Appendices.

### Autumn cauliflower: Top performing cultivars

Seed House	Cultivar	% Class 1	Trays/Hectare (Acre)	Heading period
Seminis	RX 5710	86	2594 (1050)	09.10.10 – 21.10.10
Clause	Meridien	84	2532 (1025)	09.10.10 – 23.10.10
Elsoms	Skywalker	79	2235 (905)	09.10.10 – 23.10.10
Clause	Naruto	81	2297 (930)	11.10.10 – 24.10.10
Seminis	Aquata	88	2549 (1032)	14.10.10 – 28.10.10
Clause	Regata	83	2304 (933)	12.10.10 – 26.10.10
Seminis	Appia	76	2100 (850)	14.10.10 – 31.10.10
Elsoms	Salou	77	2164 (876)	21.10.10 – 03.11.10
Syngenta	Cartier	80	2243 (908)	25.10.10 – 01.11.10

**Winter cauliflower:** Top performing cultivars.

Yields will vary as there were two transplanting dates and two plant densities/Ha which reflected the expected heading period. Adverse weather conditions in late November 2010 and again in January 2011 reduced the yields on a number of cultivars within this heading period.

Please refer to the 'Full Trial Report' for further details.

Seed House	Cultivar	% Class 1	Trays/Hectare (Acre)	Heading period
Seminis	5965	78	2188 (886)	25.10.10 – 03.11.10
Seminis	5982	84	2003 (811)	25.10.10 – 15.11.10
Clause	Diwan	78	2134 (864)	01.11.10 – 11.11.10
Clause	Galiote	48	1339 (542)	03.11.10 – 23.12.10
Nickerson	Cendis	46	1139 (461)	11.11.10 – 13.01.11
Syngenta	Lorien	58	1573 (637)	18.11.10 – 03.01.11
Clause	Triomphant	50	1356 (549)	23.12.10 – 17.01.11
Tozer	1039	53	1265 (512)	17.01.11 – 07.02.11
Syngenta	Alpen	48	1139 (461)	27.01.11 – 14.02.11
Nickerson	AC 7111	60	1423 (576)	31.01.11 – 17.02.11
Tozer	1018	64	1536 (622)	07.02.11 – 17.02.11
Seminis	Treknow	58	1376 (557)	10.02.11 – 22.02.11
Clause	Brick	88	2087 (845)	10.02.11 – 25.02.11
Seminis	Tintagel	78	2117 (857)	10.02.11 – 22.02.11
Syngenta	Arkwright	72	1709 (692)	14.02.11 – 25.02.11
Seminis	5738	78	2114 (856)	14.02.11 – 28.02.11
Nickerson	Dionis	78	1850 (749)	14.02.11 – 03.03.11
Nickerson	AC 7140	80	2171 (879)	14.02.11 – 28.02.11
Clause	Redoutable	78	1850 (749)	14.02.11 – 28.02.11
Elsoms	Medaillon	74	2008 (813)	14.02.11 – 03.03.11
Syngenta	SG 5001	74	2008 (813)	22.02.11 – 03.03.11
Syngenta	Clemen	76	2062 (835)	28.02.11 – 14.03.11
Seminis	Trewint	74	2008 (813)	28.02.11 – 14.03.11
Syngenta	Canten	72	1954 (791)	03.03.11 – 21.03.11
Clause	Fleet	87	2374 (961)	03.03.11 – 17.03.11
Seminis	5697	58	1425 (577)	03.03.11 – 24.03.11
Tozer	2038	86	2332 (944)	03.03.11 – 21.03.11
Clause	Matelot	78	2134 (864)	07.03.11 – 21.03.11
Seminis	Cadal	82	2223 (900)	10.03.11 – 21.03.11
Elsoms	Madiot	86	2331 (944)	10.03.11 – 17.03.11
Clause	Mascaret	74	2008 (813)	17.03.11 – 21.03.11
Syngenta	Ciren	82	2223 (900)	17.03.11 – 28.03.11
Elsoms	Capulet	90	2440 (988)	17.03.11 – 24.03.11
Syngenta	Charif	86	2332 (944)	17.03.11 – 28.03.11
Elsoms	Isadora	88	2403 (973)	17.03.03 – 24.03.11
Elsoms	Invicta	94	2621 (1061)	24.03.11 – 30.03.11
Syngenta	Danden	88	2423 (981)	28.03.11 – 04.04.11
Nickerson	AA 2178	80	2193 (888)	28.03.11 – 07.04.11
Elsoms	Vogue	80	2243 (908)	30.03.11 – 07.04.11
Syngenta	C 5010	83	2238 (906)	30.03.11 – 04.04.11
Seminis	Tenfold	82	2243 (908)	28.03.11 – 04.04.11
Syngenta	Darwin	92	2495 (1010)	15.04.11 – 18.04.11

## Spring Green cultivars

Seed House Cultivar	Comments	Transplanting Date	Harvest dates	Pack out yield Trays/Acre (10 bags x 550grams)
Tozer Wintergreen	Crinkled leaf type. Variable size greens. Leggy. Wide internodes. Dark green leaf.	12.09.10	22.03.11	520
Seminis Winter Special	Uniform. High yield. Good greens. Few defects.	12.09.10	22.03.11	718
Duchy	Compact. Uniform. Smooth leaf. Good greens. Will heart up.	12.09. 10	22.03.11	625

The trials were undertaken at Trevarnon Farm in Gwithian, Cornwall. The soil type was a sandy clay loam. The site is south facing and is part of a farm rotation based around Brassicas, cereals and grass break crops. The farm has traditionally grown Brassica crops supplying both the multiple and local markets. The trial itself is treated as a commercial crop undergoing similar field operations as the commercially grown crops on the farm.

## Main conclusions

All of the autumn cauliflower cultivars performed well during 2010 and are commercially available to growers, each with their own characteristics, traits and qualities. Due to low temperatures in November 2010 (down to  $-8.1^{\circ}\text{C}$  ground frost) and again in January 2011

the winter cauliflower cultivars had much reduced yields over the December/January heading period with many of the later transplanting cultivars struggling to make a large enough frame to produce marketable sized heads. However the later heading cultivars grew well in the spring with a number producing high yields from the end of February onwards. The large number of cultivars available enables growers to select suitable cultivars for their production systems, which vary from farm to farm and area to area. The cultivars available ensure continuous supply complimenting each other throughout the production period. However there is a continuous need to improve output and quality especially in the production period between late December and early February where yields can be lower.

Trials have also been undertaken, where a number of confidential cultivars from a range of seed companies have been assessed with some new named cultivars being introduced into the commercially available cultivar trials for 2011-2012 and a number to follow in subsequent years.

The spring greens also suffered due to the extreme temperatures with the crop harvesting almost 6 weeks later than anticipated with lower yield than normal.



# FULL TRIAL REPORT

## *Introduction*

Working in partnership with a number of National seed-houses the Trials have enabled the evaluation of commercially available Autumn, Winter Cauliflower and Spring Green cultivars, in order that improved cultivars can be assessed alongside current and established cultivars in order to improve yields, quality of produce and continuity of supply.

The Autumn Cauliflower Trial compared established cultivars alongside new introductions for the heading period of early October to early November.

The main Winter Cauliflower Trial compared cultivars transplanted at commercially accepted spacings for each cultivar, at two transplanting dates in early and late July. This compared, and provided detailed information on the advantages/disadvantages of staggered transplanting dates which is commercially practiced in order to maximize the potential of some cultivars. This Trial covers cultivars heading from early November through to May providing a continuous supply following on from the Autumn cultivars.

The Spring Greens Trial compared commercially grown hybrid cultivars transplanted alongside the traditional Wintergreen cultivar. These are then assessed for suitability as greens being harvested from late January to March depending on the cultivar and season. All cultivars transplanted as modules in early September 2010 at a spacing of 25cms apart in the row and 5 rows to a 2.5m bed.

The Cauliflower Trials provide detailed information on each cultivar including:-

Harvesting period. 10% 50% and 90% harvest dates.

% Grade 1, Grade 2 and unmarketable produce.

Marketable yields/Ha (Acre)

Comments on any defects, including disease tolerance especially for *Xanthomonas* and mildew, pest presence, and the suitability for the various market outlets.

Evaluation on the ease of harvesting, packing, uniformity, depth and quality of curds.

Comments on curd protection, leaf quality and crop growth.

*Varieties and numbered selections included*

The Autumn Cauliflower Trial consisted of 14 cultivars replicated twice, transplanted at 21698 plants/Ha (8785/acre). Transplanted on the 7<sup>th</sup> July 2010.

The Winter Cauliflower Trial consisted of 75 cultivars transplanted at a spacing of either 21698 /Ha (8785/Acre) or 18986/Ha (7687/Acre) depending on expected heading period. Transplanted on the 7<sup>th</sup> and 23<sup>rd</sup> July 2010.

These cultivars being supplied by 6 commercial seed houses.

The Spring Greens Trial compared 2 hybrid cultivars with the traditional Wintergreen cultivar. All 3 cultivars from different commercial seed houses.

## **AUTUMN CAULIFLOWER CULTIVARS 2010 - 11**

**34" X 21"** 21698/Ha (8785/ACRE)

<b>PLOT</b>	<b>SEEDHOUSE</b>	<b>VARIETY</b>
54	SEMINIS	AQUATA
55	SEMINIS	AGENDA
56	SEMINIS	RX 5710
57	SEMINIS	APPIA
58	CLAUSE/TEZIER	NARUTO (CLX 33516)
59	CLAUSE/TEZIER	MERIDIEN
60	CLAUSE/TEZIER	RAFALE
61	CLAUSE/TEZIER	REGATA
62	CLAUSE/TEZIER	INTREPID
63	CLAUSE/TEZIER	OPTIMIST
64	ELSOMS	SKYWALKER
65	ELSOMS	SALOU
66	ELSOMS	SANTE FE
67	SYNGENTA	CARTIER
68	SEMINIS	AQUATA
69	SEMINIS	AGENDA
70	SEMINIS	RX 5710
71	SEMINIS	APPIA
72	CLAUSE/TEZIER	NARUTO (CLX 33516)
73	CLAUSE/TEZIER	MERIDIEN
74	CLAUSE/TEZIER	RAFALE
75	CLAUSE/TEZIER	REGATA
76	CLAUSE/TEZIER	INTREPID
77	CLAUSE/TEZIER	OPTIMIST
78	ELSOMS	SKYWALKER
79	ELSOMS	SALOU
80	ELSOMS	SANTE FE
81	SYNGENTA	CARTIER

## WINTER CAULIFLOWER CULTIVARS 2010 – 11

### TIME OF PLANTING TRIAL

#### Transplanted 7.7.10 (Plots 82- 157) and 23.7.10 (Plots 158-233)

PLOTS	(82 – 92)	(223 – 233)	34" X 21"	21698/Ha	(8785/ACRE)
PLOTS	(93 – 120)	(195 - 222)	34" X 24"	18987/Ha	(7687/ACRE)
PLOTS	(121 – 157)	(158 – 221)	34" X 21"	21698/Ha	(8785/ACRE)

PLOT	SEEDHOUSE	VARIETY	HEADING PERIOD	
82	233	CLAUSE/TEZIER	NAVALO	Mid Nov
83	232	SEMINIS	ARICA	Late Nov
84	231	SEMINIS	5965	Late Nov
85	230	CLAUSE/TEZIER	DIWAN	Late Nov/Dec
86	229	CLAUSE/TEZIER	GALIOTE	Early Dec
87	228	NICKERSON	CENDIS	Early Dec
88	227	NICKERSON	AB 9130	Early Dec
89	226	TOZER	1001	Mid/Late Dec
90	225	CLAUSE/TEZIER	TRIUMPHANT	Mid/Late Dec
91	224	ELSOMS	BELOT	Mid Dec
92	223	SYNGENTA	DRAKE	Mid Dec
93	222	SEMINIS	5982	Late Dec
94	221	ELSOMS	MAGINOT	Late Dec
95	220	SEMINIS	TYPICAL (5978)	Late Dec/Jan
96	219	CLAUSE/TEZIER	HERMINE	Late Dec/Jan
97	218	SYNGENTA	LORIEN	Late Dec
98	217	CLAUSE/TEZIER	DJEME	Dec/Jan
99	216	TOZER	1022	Dec/Jan
100	215	SYNGENTA	ALPEN	Early Jan
101	214	CLAUSE/TEZIER	JUBARTE	Early/Mid Jan
102	213	NICKERSON	AB 1004	Mid Jan
103	212	SEMINIS	5697	Mid Jan
104	211	TOZER	1038	Jan
105	210	TOZER	1039	Jan
106	209	SEMINIS	TERMINELLO	Mid Jan
107	208	TOZER	1018	Mid Jan
108	207	NICKERSON	AC 7111	Mid Jan
109	206	TOZER	1008	Mid/Late Jan
110	205	SEMINIS	TREKNOW	Mid/Late Jan
111	204	SYNGENTA	ARKWRIGHT	Late Jan
112	203	CLAUSE/TEZIER	BRICK	Late Jan
113	202	CLAUSE/TEZIER	09-01	Late Jan
114	201	TOZER	1011	Late Jan
115	200	NICKERSON	DIONIS	Late Jan
116	199	TOZER	1035	Late Jan
117	198	TOZER	1037	Late Jan

<b>PLOT</b>	<b>SEEDHOUSE</b>	<b>VARIETY</b>	<b>HEADING PERIOD</b>	
118	197	TOZER	1036	Early Feb
119	196	CLAUSE/TEZIER	REDOUTABLE	Early Feb
120	195	SYNGENTA	C5014	Early Feb
121	194	ELSOMS	MEDAILLON	Mid Feb
122	193	SEMINIS	TINTAGEL	Mid Feb
123	192	SYNGENTA	C5016	Mid Feb
124	191	NICKERSON	AC 7140	Mid Feb
125	190	CLAUSE/TEZIER	FLEET	Mid Feb
126	189	SEMINIS	CADAL	Mid Feb
127	188	SYNGENTA	CANTEN	Mid Feb
128	187	SYNGENTA	C5009	Mid Feb
129	186	CLAUSE/TEZIER	MATELOT	Mid Feb
130	185	SEMINIS	5738	Mid/Late Feb
131	184	SYNGENTA	CLEMEN	Mid/Late Feb
132	183	CLAUSE/TEZIER	MASCARET	Mid/Late Feb
133	182	SYNGENTA	C5020	Mid/Late Feb
134	181	SYNGENTA	CIREN	Mid/Late Feb
135	180	SEMINIS	TREWINT	Late Feb
136	179	ELSOMS	CAPULET (2713)	End Feb
137	178	SYNGENTA	SGC 5001	Late Feb
138	177	SYNGENTA	DANDEN	Early March
139	176	CLAUSE/TEZIER	MARSOUIN	Early March
140	175	ELSOMS	MADIOT	Early March
141	174	ELSOMS	MYSTIQUE	Mid March
142	173	ELSOMS	VOGUE	Mid/Late March
143	172	TOZER	2038	Late March
144	171	SYNGENTA	CHARIF	Late March
145	170	SYNGENTA	C5010	Late March
146	169	ELSOMS	ISADORA	Late March
147	168	NICKERSON	VEDIS	Late March
148	167	ELSOMS	INVICTA	Late March
149	166	SYNGENTA	SG 4732	Late March
150	165	ELSOMS	TEMPEST	Late March
151	164	SYNGENTA	SG 4771	Early April
152	163	NICKERSON	AA 2178	Early April
153	162	SYNGENTA	DARWIN	Mid April
154	161	SYNGENTA	CFL 4773	Mid April
155	160	TOZER	2063	April
157	158	SEMINIS	TENFOLD (5370)	April

## **SPRING CABBAGE TRIALS 2010 - 11**

5 rows / variety      25cm spacing in row

Transplanted 12th September 2010 into good soil conditions. 1000 of each cultivar.

Module grown transplants.

<b>SEED HOUSE</b>	<b>CULTIVAR</b>
NICKERSON	DUCHY
TOZER	WINTERGREEN
SEMINIS	WINTER SPECIAL

### *Trial site details*

The Trials have been undertaken at Trevarnon Farm, Gwithian, Cornwall by kind permission of Mr. J. Hosking and Son.

## **Production details    Autumn and Winter Cauliflower**

### **Fertiliser**

06/07/10    Base Dressing    617Kg/Ha Yara 5-15-20

First Transplanting (07/07/10)

30/08/10    Top Dressing    197Kg/Ha Yara Calcium Nitrat

11/10/10    Top Dressing    247Kg/Ha Yara Calcium Nitrate

19/11/10    Top Dressing    247Kg/Ha Yara Calcium Nitrate

Second Transplanting (23/07/10)

30/08/10    Top Dressing    277Kg/Ha Yara Calcium Nitrate

27/09/10    Top Dressing    222Kg/Ha Yara Calcium Nitrate

19/11/10    Top Dressing    247Kg/Ha Yara Calcium Nitrate

### **Weed control**

First Transplanting (07/07/10)

17/07/10    Sultan @ 1.5Ltr/Ha in 400 Ltrs of water

Second Transplanting (23/07/10)

26/07/10    Sultan @ 1.5Ltr/Ha in 400 Ltrs of water

### **Inter row cultivations on 2 occasions**

### **Pest ad Disease control**

Wire netting prior to transplanting as rabbit control

Pre planting    Cyren @ 2Ltr/Ha (cutworm control)

22/08/10 in 300 Ltrs water/Ha

Plover @ 0.3Ltrs/Ha, Aphox @ 420Grms/Ha,

Fubol Gold @1Kg/Ha, Hallmark Zeon @ 50ml/Ha, Spartan @ 0.4Ltrs/Ha

Pesta @ 4Kg/Ha (slugg control)

07/10/10 in 300Ltrs water/Ha

Plover @ 0.3Ltrs/Ha, Breakthru @ 0.2Ltrs/Ha,

Aphox @ 420Grms/Ha, Permasect C @0.25Ltrs/Ha.

22/11/10 in 300Ltrs water/Ha

Plover @ 0.3Ltrs/Ha Breakthru @ 0.2Ltrs/Ha Mag Flo 300 @ 2.5Ltrs/Ha

Applied to Beds (1,3,4,5,6)

Transplanting dates

Time of Planting Trial 7<sup>th</sup> and 23<sup>rd</sup> July 2010

Autumn Variety Trial 7<sup>th</sup> July 2010

Confidential plots 7<sup>th</sup> July 2010

Trial design

**BRASSICA TRIALS FIELD PLAN 2010 - 11**

Confidential plots 234- 262					Spacing Time of Planting Plots 158 - 233 Transplanted 23/07/10					Spacing Time of Planting Plots 82 - 157 Transplanted 07/07/10					Autumn Varieties Plots 54 - 81					Confidential plots Plots 1 - 53					
264	265	266	267	268																					
242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	263										
F	240	241	227	217	207	197	187	177	167	261	262	150	140	271	272										
A	238	239	226	216	206	196	156	176	166	259	260	149	139	130	121	112	103	94	85	76	67	58			
R	236	237	225	215	205	195	185	175	165	257	258	148	138	129	120	111	102	93	84	75	66	57	39 - 40	16	8
M	234	235	224	214	204	194	184	174	164	157	147	137	128	119	110	101	92	83	74	65	56	35 - 38	15	7	
C	233	223	213	203	193	183	173	163	156	146	136	127	118	109	100	91	82	73	64	55	31 - 34	14	6		
R	232	222	212	202	192	182	172	162	155	145	135	126	117	108	99	90	81	72	63	54	27 - 30	13	5		
O	231	221	211	201	191	181	171	161	154	144	134	125	116	107	98	89	80	71	62	53	23 - 26	12	4		
P	230	220	210	200	190	180	170	160	153	143	133	124	115	106	97	88	79	70	61	49 - 52	19 - 22	11	3		
	229	219	209	199	189	179	169	159	152	142	132	123	114	105	96	87	78	69	60	45 - 48	18	10	2		
	228	218	208	198	188	178	168	158	151	141	131	122	113	104	95	86	77	68	59	41 - 44	17	9	1		
HEADLAND																									
HEDGE																									
FARM LANE TO TREVARNON FARM																									
LAYBY																									





Each plot consisting of 4 rows with the outer rows being guards. 50 plants of each cultivar recorded with harvesting occurring every Monday and Thursday throughout the harvesting period of the Trials. (October 2010 – May 2011).

#### *Trial records and data collected*

### **Predominant weather conditions July 2010 – May 2011**

Excellent transplanting conditions were experienced throughout July for all the Cauliflower Trial plots.

Both the air maximum and minimum temperature averages being above normal in July, August, and September. Early transplanting established well, later transplanting took a while to establish despite the warm weather.

However severe cold weather at the end of November and the first two weeks of December saw temperatures drop to  $-8^{\circ}\text{C}$  ground frost on 3 occasions. With hardly any cauliflower being harvested between the 26<sup>th</sup> November and the 20<sup>th</sup> December resulting in early varieties either suffering from severe frost damage to curds or delayed harvesting. Over this period no cultivar harvested more than 40% grade 1 produce.

Further ground and air frosts in early January also slowed down the crop and at one stage cultivars were 3 weeks behind normal harvesting periods. The knock on damage from snow and frost continued to be seen in most varieties with leaf quality being generally poor with heavy leaf drop even from the earlier plantings.

From mid February onwards mild weather returned and the crop recovered well resulting in good quality curds and high yields until the end of the season.

For each Autumn and Winter Cauliflower cultivar the following record sheet is completed at each harvest and on completion of harvesting summaries are made of all data collected supported by visual observations as appropriate. These to be found in the Full Trial report in the Appendices.



## *Discussion*

The top performing cultivars highlighted within the results section identifies cultivars that have performed in the region of or above the commercial average yield of 75% Grade 1. Each 1% above this average yield increases gross income by £69/Ha based on a price of 35p per cauliflower. However it is noted that the yields in the main Winter Cauliflower production period from mid December to late January were well below the average yields with high losses and in some cases very few if any Class 1 heads harvested.

## *Conclusions*

Several numbered cultivars seen previously in the Confidential plots have been included within the Autumn and Winter Cauliflower Trials with some performing well despite the variable weather conditions. Although a number of established cultivars continue to perform well, the following cultivars, which have been introduced in recent years, have performed well this season.

Seminis	RX 5710	Early to mid October
Seminis	Aquata	Mid to late October
Clause	Diwan	Early to Mid November
Seminis	5738	Mid to end February
Nickerson	AC 7140	Mid to end February
Syngenta	SG 5001	End to early March
Tozer	2038	Early to mid March
Nickerson	AA 2178	End March to early April
Syngenta	C 5010	Late March to early April
Seminis	Tenfold	Late March to early April

These need to be considered as additional options alongside the more established cultivars.

It is to be noted that each cultivar performs differently from season to season however data is available over the past 14 seasons which provides a basis upon which growers can make an informed decision on which cultivars to grow to provide a continuous supply.

## *Technology transfer*

The Trials are harvested twice a week and results are updated weekly on the following website <http://www.cornwall.ac.uk/research/herring>

Open days were held in December, January and March where up to date information was made available to growers and representatives from the industry.

### *Appendices*

The following appendices show the summaries of all cultivars in both the Autumn and Winter Cauliflower Trials for 2010 – 11, with additional comments regarding each cultivar.

# Autumn Cauliflower Variety Trial

**2010 - 11**

Plots transplanted 10th July

8785 plants/acre

Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt	Facepack	Class 2			
VARIETY					1	2		Class 1	Crates/Acre				
		10%	50%	90%		%	%	%	8	6	16	12	
<b>Seminis</b>	54	14.10	21.10	28.10	14	86	4	10	681	351	22	0	
<b>AQUATA</b>	68	14.10	18.10	28.10	14	90	4	6	813	234	22	0	
<b>Average</b>		<b>14.10</b>	<b>19.10</b>	<b>28.10</b>	<b>14</b>	<b>88</b>	<b>4</b>	<b>8</b>	<b>747</b>	<b>293</b>	<b>22</b>	<b>0</b>	
Medium sized frame. Paler inner leaf. Slightly crinkled leaf. Uniform. Some xanthomonas on outer leaves. Good Facepack material.													
Slightly wide base to curds. Good weight. Few defects.													
<b>Seminis</b>	55	18.10	25.10	1.11	14	66	6	28	571	205	33	0	
<b>AGENDA</b>	69	21.10	28.10	1.11	11	78	2	20	725	176	11	0	
<b>Average</b>		<b>19.10</b>	<b>26.10</b>	<b>1.11</b>	<b>12.5</b>	<b>72</b>	<b>4</b>	<b>24</b>	<b>648</b>	<b>191</b>	<b>22</b>	<b>0</b>	
Uniform large frame. Slightly twisted leaf over curds. Wide leaves. Smooth curds. Some variation in curd size. A few loose off white curds.													
Good Facepack material.													
<b>Seminis</b>	56	7.10	14.10	18.10	11	88	2	10	637	439	11	0	
<b>RX5710</b>	70	11.10	18.10	25.10	14	84	6	10	615	410	33	0	
<b>Average</b>		<b>9.10</b>	<b>16.10</b>	<b>21.10</b>	<b>12.5</b>	<b>86</b>	<b>4</b>	<b>10</b>	<b>628</b>	<b>425</b>	<b>22</b>	<b>0</b>	
Leafy. Slightly wide base to curds. Tight smooth curds. Uniform. Very good Facepack material. Large curds. Very few defects. Looks good in tray.													
<b>Seminis</b>	57	14.10	28.10	3.11	20	72	6	22	747	59	22	15	
<b>APPIA</b>	71	14.10	21.10	28.10	14	80	2	18	835	59	11	0	
<b>Average</b>		<b>14.10</b>	<b>24.10</b>	<b>31.10</b>	<b>17</b>	<b>76</b>	<b>4</b>	<b>20</b>	<b>791</b>	<b>59</b>	<b>16</b>	<b>7</b>	
Tall upright frame. Slightly crinkled leaf. Slightly twisted leaf over curds. Some xanthomonas on outer leaves. A few small plants/curds.													



# Autumn Cauliflower Variety Trial

2010 - 11

Plots transplanted 10th July

8785 plants/acre

Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt		Facepack	Class 2		
VARIETY						1	2			Class 1			
		10%	50%	90%		%	%	%		8	Crates/Acre		
										6	16	12	
Clause	58	11.10	14.10	28.10	17	82	2	16		835	88	11	0
Tezier	72	11.10	18.10	21.10	10	80	4	16		703	234	22	0
NARUTO													
<b>Average</b>		<b>11.10</b>	<b>16.10</b>	<b>24.10</b>	<b>13.5</b>	<b>81</b>	<b>3</b>	<b>16</b>		<b>769</b>	<b>161</b>	<b>17</b>	<b>0</b>
Medium frame. Good white curds. Easy to see and cut. Slight twist to leaf over curds. Good Facepack material. Few defects. Uniform.													
Clause	59	11.10	14.10	25.10	14	82	8	10		527	498	33	11
Tezier	73	7.10	11.10	21.10	14	86	4	10		703	322	22	0
MERIDIEN													
<b>Average</b>		<b>9.10</b>	<b>12.10</b>	<b>23.10</b>	<b>14</b>	<b>84</b>	<b>6</b>	<b>10</b>		<b>615</b>	<b>410</b>	<b>28</b>	<b>6</b>
Large frame. Slightly wide base to curds. Large medium depth curds. Few defects. Good Facepack material. Strong midrib to leaves.													
Some xanthomonas on outer leaves.													
Clause	60	7.10	18.10	25.10	18	84	4	12		922	0	22	0
Tezier	74	7.10	14.10	18.10	11	70	12	18		766	0	66	0
RAFALE													
<b>Average</b>		<b>7.10</b>	<b>16.10</b>	<b>21.10</b>	<b>14.5</b>	<b>77</b>	<b>8</b>	<b>15</b>		<b>844</b>	<b>0</b>	<b>44</b>	<b>0</b>
Small frame. Curds low to the ground. Uniform sized curds. Upright leaf. Easy to see, cut and bag. Good Facepack material. A little leaf scorch.													
Few other defects.													
Clause	61	18.10	28.10	1.11	14	86	4	10		944	0	22	0
Tezier	75	7.10	14.10	21.10	14	80	4	16		747	176	22	0
REGATA													
<b>Average</b>		<b>12.10</b>	<b>21.10</b>	<b>26.10</b>	<b>14</b>	<b>83</b>	<b>4</b>	<b>13</b>		<b>846</b>	<b>88</b>	<b>22</b>	<b>0</b>
Large frame. Slightly wide base to curds. Uniform. Good weight. Good Facepack material.													

# Autumn Cauliflower Variety Trial

2010 - 11

Plots transplanted 10th July

8785 plants/acre

Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt		Facepack	Class 2		
VARIETY						1	2			Class 1			
<b>Clause</b>	62	18.10	28.10	8.11	21	70	10	20		769	0	55	0
<b>Tezier</b>	76	11.10	18.10	25.10	14	82	4	14		791	146	22	0
<b>INTREPID</b>													
<b>Average</b>		<b>14.10</b>	<b>23.10</b>	<b>1.11</b>	<b>17.5</b>	<b>76</b>	<b>7</b>	<b>17</b>		<b>780</b>	<b>73</b>	<b>39</b>	<b>0</b>
Uniform. Slightly spreading habit. Slightly wide base to curds. Good Facepack material.													
<b>Clause</b>	63	14.10	25.10	1.11	18	78	4	18		856	0	22	0
<b>Tezier</b>	77	14.10	28.10	8.11	25	66	10	24		859	88	55	0
<b>OPTIMIST</b>													
<b>Average</b>		<b>14.10</b>	<b>26.10</b>	<b>4.11</b>	<b>21.5</b>	<b>72</b>	<b>7</b>	<b>21</b>		<b>858</b>	<b>44</b>	<b>39</b>	<b>0</b>
Uniform. Upright inner leaf. Easy to see and cut. Slightly twisted leaf over curds. Good Facepack material. Smooth curds. Xanthomonas on outer leaves.													
Some small plants/curds.													
<b>Elsoms</b>	64	7.10	14.10	25.10	18	82	4	14		747	205	22	0
<b>SKYWALKER</b>	78	11.10	18.10	21.10	10	76	4	20		769	88	22	0
<b>Average</b>		<b>9.10</b>	<b>16.10</b>	<b>23.10</b>	<b>14</b>	<b>79</b>	<b>4</b>	<b>17</b>		<b>758</b>	<b>147</b>	<b>22</b>	<b>0</b>
Uniform. Good Facepack material. Twisted leaf over curds. Smooth curds. Slightly wide base to curds. Some xanthomonas on outer leaves.													
Few other defects.													
<b>Elsoms</b>	65	21.10	28.10	3.11	13	76	10	14		747	117	55	0
<b>SALOU</b>	79	21.10	28.10	3.11	13	78	12	10		769	119	66	0
<b>Average</b>		<b>21.10</b>	<b>28.10</b>	<b>3.11</b>	<b>13</b>	<b>77</b>	<b>11</b>	<b>12</b>		<b>758</b>	<b>118</b>	<b>61</b>	<b>0</b>
Tall frame. Twisted leaves over curds. Xanthomonas on outer leaves. Good Facepack material.													



# Autumn Cauliflower Variety Trial

2010 - 11

Plots transplanted 10th July

8785 plants/acre

Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt	Facepack				
VARIETY					1	2			Class 1	Crates/Acre			Class 2
		10%	50%	90%		%	%	%	8	6	16	12	
<b>Elsoms</b>	66	3.11	11.11	22.11	19	74	6	20	812	0	33	0	
<b>SANTA FE</b>	80	8.11	11.11	2.12	24	68	12	20	703	59	66	0	
<b>Average</b>		<b>5.11</b>	<b>11.11</b>	<b>27.11</b>	<b>21.5</b>	<b>71</b>	<b>9</b>	<b>20</b>	<b>758</b>	<b>30</b>	<b>50</b>	<b>0</b>	
Uniform. Large frame. Good Facepack material. Easy to see, cut and bag. Looks good in tray. A few small plants/curds.													
<b>Syngenta</b>	67	25.10	28.10	1.11	7	80	6	14	791	117	33	0	
<b>CARTIER</b>	<b>Plot 81 transplanted on the 19th July</b>												
	81	15.11	22.11	13.12	28	54	10	36	571	29	55	0	
Uniform. Xanthomonas on outer leaves. Slightly crinkled leaf type. Solid curds. Pale leaf over curds.													
Very good Facepack material. Much smaller frame with later transplanting. Frost damage on later transplanting from end November to mid December.													

<b>TIME OF PLANTING AND SPACING TRIAL</b>									<b>Winter Cauliflower</b>		<b>2010 - 11</b>		
<b>A plots transplanted 7th July 2010</b>					<b>B plots transplanted 23rd July 2010</b>								
Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt		Facepack	Class 2		
VARIETY						1	2			Class 1			
		10%	50%	90%		%	%	%		8	Crates/Acre		
											6	16	12
<b>Clause</b>	82A	21.10	28.10	1.11	11	66	12	22		571	205	66	0
<b>Tezier</b>													
<b>NAVALO</b>	233B	11.11	22.11	23.12	42	52	14	34		571	0	77	0
Good Facepack material. Twisted leaves over curds. Uniform. Smooth curds. Looks good in tray.													
Later transplanting producing good curds up to mid December then damaged by frost. Some small plants/curds with later transplanting.													
<b>Seminis</b>	83A	21.10	28.10	8.11	18	72	10	18		769	29	55	0
<b>ARICA</b>													
	232B	15.11	26.11	13.12	28	44	12	44		483	0	66	0
Tall frame. Pale green leaf. Slightly twisted leaf over curds. Uniform. Good weight. Good Facepack material.													
Later transplanting produced small frames and curds with 44% small or frosted late November/early December.													
<b>Seminis</b>	84A	25.10	28.10	3.11	9	78	4	18		769	117	22	0
<b>5965</b>													
	231B	22.11	13.12	23.1	31	18	15	67		195	0	85	0
Medium to large curds. Good Facepack material. Uniform. Good weight. Slightly knobby curds. Few defects. A few small plants/curds.													
Later transplanting producing small frame/curds with a high % frosted in late November/early December.													
<b>Clause</b>	85A	1.11	3.11	11.11	10	78	12	10		835	29	66	0
<b>Tezier</b>													
<b>DIWAN</b>	230B	3.1	13.1	17.1	14	32	38	38		351	0	193	0
Excellent Facepack material. Uniform frame and curd size. Clean leaf. Easy to see, cut and bag. Good leaf colour.													
Later transplanting producing a smaller frame with 10% frosted and 32% off white curds. 20% small unmarketable curds.													
<b>Clause</b>	86A	3.11	18.11	23.12	50	48	34	18		483	59	187	0
<b>Tezier</b>													
<b>GALIOTE</b>	229B	27.12	8.1	17.1	21	36	28	36		395	0	154	0
Uniform frame. Easy to see, cut and bag. Some small white bracts. Good weight. Some good Facepack material.													
Some plants collapsed due to frost damage. Frost damaged curds mid to end of December. Later transplanting smaller curds with 26% off white.													
<b>Nickerson</b>	87A	11.11	13.12	13.1	63	46	22	32		505	0	110	15
<b>CENDIS</b>													
	228B	8.1	17.1	17.1	9	42	30	28		461	0	165	0
Twisted leaf over curds. Slightly wide base to curds. Strong midrib to curds. Good Facepack material. Some frost damage from late Nov/late December.													
Later transplanting producing small frame/curds. 20% off white and 20% small curds.													

<b>TIME OF PLANTING AND SPACING TRIAL</b>										<b>Winter Cauliflower</b>		<b>2010 - 11</b>	
<b>A plots transplanted 7th July 2010</b>					<b>B plots transplanted 23rd July 2010</b>								
<b>Seed house</b>	<b>PLOT</b>	<b>CUTTING PERIOD</b>			<b>DAYS</b>	<b>Class</b>	<b>Class</b>	<b>Unmkt</b>		<b>Facepack</b>	<b>Class 2</b>		
<b>VARIETY</b>						<b>1</b>	<b>2</b>			<b>Class 1</b>			
		<b>10%</b>	<b>50%</b>	<b>90%</b>		<b>%</b>	<b>%</b>	<b>%</b>		<b>8</b>	<b>6</b>	<b>16</b>	<b>12</b>
<b>Nickerson</b>	88A	23.1	13.1	17.1	25	<b>38</b>	46	16		417	0	253	0
<b>AB 9130</b>													
	227B	17.1	20.1	24.1	7	<b>28</b>	12	60		307	0	66	0
Uniform. Good frame and curds. Reasonable curd colour. Slightly off white curds. Good weight. Easy to see, cut and bag.													
Later transplanting suffered due to frost damage with 56% frosted/off white curds. Poor leaf with later transplanting.													
<b>Tozer</b>	89A	13.12	29.12	3.1	21	<b>12</b>	16	72		132	0	88	0
<b>1001</b>													
	226B	8.1	13.1	13.1	5	<b>8</b>	22	70		88	0	121	0
Small frame and curds. Open frame prone to frost damage in late November and mid December. Poor leaf cover with some leaf scorch.													
63% frosted/off white curds early planting and 70% later planting date.													
<b>Clause</b>	90A	23.12	10.1	17.1	25	<b>50</b>	16	34		549	0	88	0
<b>Tezier</b>													
<b>TRIOMPHANT</b>	225B	17.1	20.1	27.1	10	<b>50</b>	10	40		549	0	55	0
Solid curds. Well protected. Good Facepack material. 34% off white/frosted curds in late December/early January.													
<b>Elsoms</b>	91A	8.11	18.11	23.12	45	<b>38</b>	30	32		417	0	165	0
<b>BELOT</b>													
	224B	10.1	17.1	20.1	10	<b>28</b>	24	48		307	0	132	0
Smallish curds. Some good Facepack material. Small white bracts on early transplanting. Struggled to make size 8. 20% off white curds.													
Some frosted curds. Later transplanting 52% off white/frosted curds.													
<b>Syngenta</b>	92A	15.11	13.12	29.12	44	<b>38</b>	22	40		417	0	121	0
<b>DRAKE</b>													
	223B	3.1	13.1	17.1	14	<b>30</b>	32	38		329	0	176	0
Uniform. Good Facepack material. A few small curds. Small frame. 30% frosted curds mid/late December. Easy to see, cut and pack.													
50% off white/frosted curds from later transplanting.													
<b>Seminis</b>	93A	25.10	3.11	15.11	21	<b>84</b>	4	12		811	0	21	0
<b>5982</b>													
	222B	23.12	3.1	8.1	16	<b>24</b>	28	48		264	0	154	0
Tall frame. Slightly lighter inner leaf. Good Facepack material. Some small curds. Very few other defects with early Transplanting.													
Looks good in tray. Easy to see, cut and bag. Good curd cover. 48% off white/frosted with later transplanting.													

<b>TIME OF PLANTING AND SPACING TRIAL</b>							<b>Winter Cauliflower</b>			<b>2010 - 11</b>		
<b>A plots transplanted 7th July 2010</b>				<b>B plots transplanted 23rd July 2010</b>								
Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt	Facepack	Class 2		
VARIETY						1	2		Class 1			
		10%	50%	90%		%	%	%	8	Crates/Acre		
									6	16	12	
<b>Elsoms</b>	94A	11.11	22.11	23.12	42	34	30	36	327	0	144	0
<b>MAGINOT</b>												
	221B	13.1	17.1	24.1	11	34	20	46	373	0	110	0
Uniform frame. Small white bracts in curds from early transplanting. Reasonable curd cover. Some good Facepack material.												
Frost damage from mid/late December. Very small frame with later transplanting. Heavy leaf drop. 36% curds too small to market.												
<b>Seminis</b>	95A											
<b>TYPICAL</b>		Severe frosts down to -7C at end of November and again in mid December. Very few marketable heads from both transplantings.										
	220B											
Solid tight curds. Paler inner leaf. Frost damage to tips of leaves with severe bleaching of leaves.												
<b>Clause</b>	96A	8.1	17.1	21.1	13	36	28	36	373	29	143	15
<b>Tezier</b>												
<b>HERMINE</b>	219B	17.1	20.1	31.1	14	38	34	28	365	0	163	0
Twisted leaf over curds. Not easy to see and cut well protected curds. Tendency for curds to become loose. Slightly wide base to curds.												
<b>Syngenta</b>	97A	18.11	13.12	3.1	46	58	16	26	637	0	88	0
<b>LORIEN</b>												
	218B	8.1	13.1	27.1	19	44	18	38	423	0	86	0
Slightly wide base to curds. Good weight. Reasonable cover leaf. Strong upright frame. Good Facepack material.												
Some frost damage curds late December with curds off white in colour.												
<b>Clause</b>	98A	6.1	13.1	17.1	11	40	34	26	439	0	176	0
<b>Tezier</b>												
<b>DJEME</b>	217B	17.1	20.1	31.1	14	20	58	22	192	0	269	0
Uniform. Slightly twisted frame with good curd cover. Not the easiest to see and cut curds. Some off white and loose curds. Good weight.												
Good Facepack material. 64% loose curds with later transplanting.												
<b>Tozer</b>	99A	27.12	8.1	17.1	21	34	30	36	373	0	165	0
<b>1022</b>												
	216B	10.1	17.1	27.1	17	44	28	28	423	0	134	0
Small frame and curds. Some frost damage due to limited curd cover. 54% with off white curds. Later transplanting higher % of Class 1 curds.												

TIME OF PLANTING AND SPACING TRIAL							Winter Cauliflower				2010 - 11	
A plots transplanted 7th July 2010				B plots transplanted 23rd July 2010								
Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt	Facepack	Class 2		
VARIETY						1	2		Class 1			
		10%	50%	90%		%	%	%	8	Crates/Acre		
										6	16	12
<b>Syngenta</b>	100A	27.1	7.2	14.2	18	48	18	34	461	0	85	0
<b>ALPEN</b>												
	215B	7.2	10.2	14.2	7	30	12	58	307	0	58	0
Small frame. Solid curds. Several small plants/curds. Good Facepack material. Easy to see, cut and bag. Frosted curds with later transplanting.												
<b>Clause</b>	101A	17.1	3.2	7.2	21	40	32	28	388	0	153	0
<b>Tezier</b>												
<b>JUBARTE</b>	214B	3.2	10.2	17.2	14	40	19	41	388	0	92	0
Twisted frame. Difficult to see curds. Untidy frame. Slightly wide base to curds. Medium depth. Later transplanting producing small frame. High % loose and off white curds with later transplanting.												
<b>Nickerson</b>	102A	10.2	10.2	14.2	4	10	22	68	96	0	106	0
<b>AB 1004</b>												
	213B	14.2	17.2	3.3	17	16	20	64	153	0	98	0
Small frame. Heavy leaf drop. Over 50% with small white curds.												
<b>Seminis</b>	103A	10.2	14.2	25.2	15	50	26	24	480	0	125	0
<b>5697</b>												
	212B	3.3	7.3	24.3	21	58	18	24	577	0	86	0
Small frame. Uniform. Solid curds. Good leaf cover. Will turn off white if not cut every 3 or 4 days. A few small plants/curds. Few other defects.												
<b>Tozer</b>	104A	17.1	3.2	7.2	21	42	16	42	404	0	77	0
<b>1038</b>												
	211B	3.2	7.2	10.2	7	18	8	74	173	0	38	0
Slightly open habit. Some good Facepack with early transplanting. Variable plant size. A high number of curds damaged by frost in late January from both transplantings.												
<b>Tozer</b>	105A	13.1	20.1	3.2	21	53	27	20	512	0	128	0
<b>1039</b>												
	210B	27.1	7.2	17.2	21	22	10	68	211	0	135	0
Some good Facepack material. Easy to see, cut and bag. Clean leaf. Several small plants/curds. High % frosted curds with later transplanting.												

<b>TIME OF PLANTING AND SPACING TRIAL</b>							<b>Winter Cauliflower</b>				<b>2010 - 11</b>	
<b>A plots transplanted 7th July 2010</b>				<b>B plots transplanted 23rd July 2010</b>								
Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt	Facepack	Class 2		
VARIETY						1	2		Class 1			
		10%	50%	90%		%	%	%	8	Crates/Acre		
										6	16	12
<b>Seminis</b>	106A	17.1	7.2	10.2	24	32	28	40	307	0	135	0
<b>TERMINELLO</b>												
	209B	27.1	10.2	17.2	21	22	10	68	211	0	48	0
Tall frame. 28% small curds with first transplanting. Poor leaf quality. Open frame producing creamy curds. The later transplanting produced small frame/curds with 42% off white curds. Suffered from heavy leaf drop.												
<b>Tozer</b>	107A	7.2	10.2	14.2	7	64	12	24	596	26	58	0
<b>1018</b>												
	208B	10.2	22.2	3.3	21	42	8	50	404	0	38	0
Good leaf cover. Good Facepack material from early transplanting. Some frosted curds in January.												
<b>Nickerson</b>	108A	31.1	10.2	17.2	17	60	27	13	576	0	128	0
<b>AC 7111</b>												
	207B	10.2	17.2	22.2	12	52	26	22	500	0	125	0
Twisted leaf over curds. Slightly wide base to curds. Fairly uniform. Good Facepack material. A few off white curds, needs harvesting every 3 days.												
<b>Tozer</b>	109A	7.2	14.2	17.2	10	52	24	24	500	0	115	0
<b>1008</b>												
	206B	10.2	14.2	22.2	12	44	30	26	423	0	144	0
Some good Facepack material. Uniform frame but varied sized curds. Will turn off white if not cut every 4 days. Good curd cover.												
<b>Seminis</b>	110A	10.2	10.2	22.2	12	58	24	18	557	0	115	0
<b>TREKNOW</b>												
	205B	10.2	17.2	25.2	15	54	32	14	519	0	154	0
Good Facepack material. Medium sized frame. A few frosted curds in February. Uniform. Easy to see, cut and bag. Looks good in tray. Later transplanting 33% of curds turned creamy/off white.												
<b>Syngenta</b>	111A	14.2	17.2	25.2	11	72	12	16	692	0	58	0
<b>ARKWRIGHT</b>												
	204B	17.2	22.2	3.3	14	60	20	20	577	0	96	0
Slightly crinkled leaf. Uniform. Solid deep curds. Very good Facepack material. Easy to see, cut and pack. Few defects.												

TIME OF PLANTING AND SPACING TRIAL										Winter Cauliflower			2010 - 11	
A plots transplanted 7th July 2010					B plots transplanted 23rd July 2010									
Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt		Facepack	Class 2			
VARIETY						1	2			Class 1				
		10%	50%	90%		%	%	%		8	Crates/Acre			
										6	16	12		
<b>Clause</b>	112A	10.2	17.2	25.2	15	88	6	6		845	0	29	0	
<b>Tezier</b>														
<b>BRICK</b>	203B	22.2	25.2	7.3	13	76	8	16		673	77	38	0	
Clean leaf. Twisted leaves over curds. Uniform. Short wrapper leaves over curds. Light curds. Good Facepack material. Few defects.														
<b>Clause</b>	113A	3.2	7.2	14.2	11	66	20	14		596	51	86	13	
<b>Tezier</b>														
<b>09-Jan</b>	202B	7.2	10.2	17.2	10	63	20	17		584	28	84	14	
Very good Facepack material. Slightly crinkled leaf. Uniform. Lighter inner leaf. Easy to see, cut and bag. Good on second transplanting.														
Slightly open habit. Lighter curds with later transplanting.														
<b>Tozer</b>	114A	7.2	14.2	17.2	10	52	32	16		384	154	154	0	
<b>1011</b>														
	201B	14.2	22.2	3.3	17	48	26	26		461	0	125	0	
Open frame. Flattish curds. Light curds. Will turn off white. Some good Facepack material. 28% loose curds with 18% off white with later transplanting.														
<b>Nickerson</b>	115A	14.2	22.2	3.3	17	78	8	14		749	0	38	0	
<b>DIONIS</b>														
	200B	17.2	3.3	17.3	28	58	16	26		557	0	77	0	
Uniform. Excellent Facepack material. Easy to see, cut and bag. Few defects. Later transplanting producing smaller frame/curds with some off white.														
<b>Tozer</b>	116A	13.1	20.1	7.2	25	38	24	38		365	0	115	0	
<b>1035</b>														
	199B	24.1	7.2	10.2	17	14	12	74		135	0	58	0	
Uniform frame. Some good Facepack material. Easy to see, cut and bag. Later transplanting small frames with high % frosted.														
<b>Tozer</b>	117A	8.1	17.1	27.1	19	38	28	34		417	0	154	0	
<b>1037</b>														
	198B	20.1	3.2	7.2	18	28	24	48		269	0	115	0	
Some small plants/curds. Good Facepack material. Reasonable curd cover. Curds will turn off white. Later transplanting gave small frames.														
Frost damaged curds late January.														

<b>TIME OF PLANTING AND SPACING TRIAL</b>							<b>Winter Cauliflower</b>			<b>2010 - 11</b>		
<b>A plots transplanted 7th July 2010</b>				<b>B plots transplanted 23rd July 2010</b>								
Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt	Facepack	Class 2		
VARIETY						1	2		Class 1			
		10%	50%	90%		%	%	%	8	Crates/Acre		
										6	16	12
<b>Tozer</b>	118A	17.1	3.2	7.2	21	18	16	66	173	0	77	0
<b>1036</b>												
	197B	3.2	10.2	10.2	7	16	20	64	154	0	96	0
Open frame. Many frost damaged curds. Uniform.												
<b>Clause</b>	119A	14.2	22.2	28.2	14	78	8	14	749	0	38	0
<b>Tezier</b>												
<b>REDOUTABLE</b>	196B	7.3	14.3	24.3	17	72	12	16	653	51	29	38
Uniform. Very good Facepack material. Quick heading period. Looks good in tray. Few defects.												
<b>Syngenta</b>	120A	8.11	8.11	15.11	7	62	22	16	422	231	67	51
<b>C5014</b>												
	195B	8.1	13.1	27.1	19	38	20	42	417	0	110	0
Uniform frame. Solid curds. Some large curds. A few small plants/curds. Will turn off white if not cut every 2 or 3 days. Good Facepack material.												
<b>Elsoms</b>	121A	14.2	28.2	3.3	17	74	10	16	813	0	55	0
<b>MEDAILLON</b>												
	194B	28.2	3.3	4.3	4	54	6	40	593	0	33	0
Deep solid curds. Very good Facepack material. Easy to see, cut and bag. Few defects.												
Later transplanting producing some small plants/curdswith 20% frost damaged curds in early March.												
<b>Seminis</b>	122A	10.2	14.2	22.2	12	78	8	14	857	0	44	0
<b>TINTAGEL</b>												
	193B	22.2	22.2	28.2	6	72	18	10	769	29	99	0
Very good Facepack material. Uniform. Deep solid curds. Easy to see, cut and pack. Upright frame. Dark green leaf.												
Slightly open frame. Strong midrib to leaves.												
<b>Syngenta</b>	123A	6.1	13.1	17.1	11	62	22	16	681	0	121	0
<b>C5016</b>												
	192B	31.1	7.2	10.2	10	24	20	56	260	0	110	0
Solid curds. Very uniform. Very good Facepack material. Few defects. Slightly creamy curds. Frosted curds with late planting.												
Came through early frosts with little damage.												



<b>TIME OF PLANTING AND SPACING TRIAL</b>							<b>Winter Cauliflower</b>			<b>2010 - 11</b>			
<b>A plots transplanted 7th July 2010</b>				<b>B plots transplanted 23rd July 2010</b>									
Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt		Facepack	Class 2		
VARIETY						1	2			Class 1			
		10%	50%	90%		%	%	%		8	6	16	12
<b>Nickersons</b>	124A	14.2	22.2	28.2	14	80	10	10		879	0	55	0
<b>AC7140</b>													
	191B	22.2	28.2	3.3	9	56	12	32		615	0	66	0
Slightly pointed curds. Good weight. Uniform. Easy to see, cut and bag. Looks very good in tray. Very good Facepack material.													
Some loose off white curds with later transplanting.													
<b>Clause</b>	125A	22.2	25.2	7.3	13	76	12	12		835	0	66	0
<b>Tezier</b>													
<b>FLEET</b>	190B	3.3	10.3	17.3	14	87	2	11		961	0	14	0
Solid curds. Twisted leaf over curds. Good Facepack material. Few defects. Uniform. Slightly wide base to curds. Clean leaf.													
<b>Seminis</b>	126A	28.2	3.3	14.3	14	74	12	14		813	0	66	0
<b>CADAL</b>													
	189B	10.3	17.3	21.3	11	82	6	12		900	0	22	0
Uniform. Slightly wide base to curds. Good Facepack material. Needs cutting every 3 or 4 days. A few small plants/curds. Dark green leaf.													
Lighter curds with later transplanting.													
<b>Syngenta</b>	127A	10.2	28.2	3.3	21	54	16	30		593	0	88	0
<b>CANTEN</b>													
	188B	3.3	14.3	21.3	18	72	6	22		791	0	33	0
Fairly uniform. Several small plants/curds. Good Facepack material. Will turn off white if not cut every 3 or 4 days. Medium curd depth. Easy to see, cut and bag.													
Reasonable curd cover. Better at the later transplanting date.													
<b>Syngenta</b>	128A	17.1	20.1	10.2	24	26	26	48		286	0	143	0
<b>C5009</b>													
	187B	27.1	3.2	14.2	18	14	20	66		154	0	11	0
Slightly open frame. Frost damaged curds with both transplantings. Some small plants/curds.													
<b>Clause</b>	129A	7.3	14.3	21.3	14	78	4	18		835	29	22	0
<b>Tezier</b>													
<b>MATELOT</b>	186B	17.3	21.3	24.3	7	68	12	20		747	0	66	0
Twisted leaf over curds. Difficult to see curds. Uniform. Slightly lighter inner leaf. Clean leaf. Slightly wide base to curds. Good Facepack material.													
Some small curds.													

TIME OF PLANTING AND SPACING TRIAL							Winter Cauliflower			2010 - 11			
A plots transplanted 7th July 2010					B plots transplanted 23rd July 2010								
Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt		Facepack	Class 2		
VARIETY						1	2			Class 1			
		10%	50%	90%		%	%	%		8	6	16	12
<b>Seminis</b>	130A	14.2	22.2	28.2	14	<b>78</b>	8	14		856	0	44	0
<b>5738</b>													
	185B	28.2	3.3	10.3	10	<b>63</b>	9	28		692	0	48	0
Pale green leaf. Reasonable curd depth. Solid curds. Slightly wide base to curds. Good Facepack material. Few defects. Looks very good in tray. Clean leaf.													
Lighter curds with later transp[lanting].													
<b>Syngenta</b>	131A	28.2	7.3	14.3	14	<b>76</b>	4	20		835	0	22	0
<b>CLEMEN</b>													
	184B	14.3	17.3	21.3	7	<b>66</b>	6	28		724	0	33	0
Lighter inner leaf. Some variation in plant size. Solid curds. Good Facepack material. Looks good in tray. 20% small curds. Not as uniform as in previous season.													
<b>Clause</b>	132A	10.3	17.3	21.3	11	<b>72</b>	12	16		791	0	66	0
<b>Tezier</b>													
<b>MASCARET</b>	183B	17.3	17.3	21.3	4	<b>74</b>	10	16		813	0	55	0
Uniform. Good Facepack material. Tendency to become loose at edges. Very twisted leaf over curds. Not easy to see. Lighter curds with later transplanting.													
Needs cutting every 2 or 3 days.													
<b>Syngenta</b>	133A	23.12	8.1	17.1	25	<b>42</b>	20	38		461	0	110	0
<b>C5020</b>													
	182B	27.1	31.1	3.2	7	<b>24</b>	20	56		264	0	110	0
Solid curds. Paler inner leaf. Frost damage to outer leaves. Good quality curds. 38% off white/frosted curds. Later transplanting 64% frosted with 38% loose.													
<b>Syngenta</b>	134A	17.3	21.3	28.3	11	<b>82</b>	4	14		900	0	22	0
<b>CIREN</b>													
	181B	24.3	24.3	30.3	6	<b>64</b>	10	26		681	29	55	0
Slightly wide base to curds. Paler inner leaf. Dark outer leaves. Easy to see, cut and bag. Good Facepack material. A few loose curds at end of March.													
<b>Seminis</b>	135A	28.2	10.3	14.3	14	<b>74</b>	6	20		813	0	33	0
<b>TREWINT</b>													
	180B	10.3	17.3	21.3	11	<b>62</b>	12	26		681	0	55	15
Crinkled leaf type. Slightly wide base to curds. Clean leaf. Very good Facepack material. Good weight. Some loose an doff white curds with later transplanting.													

<b>TIME OF PLANTING AND SPACING TRIAL</b>							<b>Winter Cauliflower</b>			<b>2010 - 11</b>			
<b>A plots transplanted 7th July 2010</b>				<b>B plots transplanted 23rd July 2010</b>									
Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt		Facepack	Class 2		
VARIETY						1	2			Class 1			
		10%	50%	90%		%	%	%		8	6	16	12
<b>Elsoms</b>	136A	3.3	14.3	17.3	14	86	0	12		944	0	11	0
<b>CAPULET</b>													
	179B	17.3	21.3	24.3	7	90	0	10		988	0	0	0
Uniform. Upright frame. Very Good Facepack material. Easy to see, cut and bag. Few defects. Dark green leaf. Good curd cover. Looks very good in tray.													
<b>Syngenta</b>	137A	22.2	28.2	3.3	9	66	13	21		681	0	66	0
<b>SG 5001</b>													
	178B	22.2	3.3	3.3	9	74	10	16		813	0	55	0
Small frame. Crinkled leaf. Deep solid curds. Slightly twisted frame to plant. Very Good Facepack material. Some small plants/curds.													
<b>Syngenta</b>	138A	28.3	28.3	4.4	7	82	4	14		637	351	11	15
<b>DANDEN</b>													
	177B	28.3	30.3	4.4	7	88	2	10		922	59	11	0
Uniform. Very good Facepack material. Large frame and curds. A few small plants/curds. Few other defects. Slightly twisted leaf over curds. Some flattish curds with later transplanting.													
<b>Clause</b>	139A	10.3	14.3	17.3	7	52	26	22		571	0	143	0
<b>Tezier</b>													
<b>MARSOUIN</b>	176B	14.3	17.3	21.3	7	62	15	23		654	31	82	0
Very severe twist to leaves over curds. Difficult to see and cut. Some looseness at edges of curds. Flattish curds. Some good Facepack material.													
<b>Elsoms</b>	140A	10.3	14.3	17.3	7	86	0	14		944	0	0	0
<b>MADIOT</b>													
	175B	10.3	17.3	21.3	11	84	4	12		922	0	22	0
Good Facepack material. Easy to see, cut and pack. Flat/medium depth curds. Twisted leaf over curds. Uniform. Clean leaf. Few other defects.													
<b>Elsoms</b>	141A	7.3	21.3	24.3	17	64	10	26		703	0	55	0
<b>MYSTIQUE</b>													
	174B	17.3	21.3	28.3	11	58	22	20		637	0	121	0
Slightly open habit. Small frame. Lightish curds with 20% small plants/curds. Some good Facepack material. Few other defects.													

<b>TIME OF PLANTING AND SPACING TRIAL</b>							<b>Winter Cauliflower</b>			<b>2010 - 11</b>			
<b>A plots transplanted 7th July 2010</b>				<b>B plots transplanted 23rd July 2010</b>									
Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt	Facepack	Class 2			
VARIETY						1	2		Class 1				
		10%	50%	90%		%	%	%		Crates/Acre			
									8	6	16	12	
<b>Elsoms</b>	142A	30.3	4.4	7.4	8	<b>80</b>	2	18	791	117	11	0	
<b>VOGUE</b>													
	173B	4.4	4.4	7.4	3	<b>76</b>	8	16	791	59	33	15	
Slightly wide base to curds. Lighter inner leaf. Solid curds. Very good Facepack material. Looks very good in tray. Crinkly leaf type. Clean leaf. Uniform.													
<b>Tozer</b>	143A	3.3	14.3	21.3	18	<b>86</b>	2	12	944	0	11	0	
<b>2038</b>													
	172B	17.3	17.3	21.3	4	<b>84</b>	0	16	747	234	0	0	
Uniform. Clean leaf. Very good Facepack material. Looks good in tray. Few defects. Easy to see, cut and bag. Some small plants/curds.													
Large curds with later transplanting.													
<b>Syngenta</b>	144A	17.3	21.3	28.3	11	<b>86</b>	2	12	944	0	11	0	
<b>CHARIF</b>													
	171B	24.3	28.3	4.4	11	<b>82</b>	6	12	900	0	33	0	
Upright frame. Excellent Facepack material. Easy to see, cut and bag. Very few defects. Clean leaf. Looks very good in tray.													
<b>Syngenta</b>	145A	30.3	30.3	4.4	5	<b>83</b>	10	7	906	0	56	0	
<b>C5010</b>													
	170B	30.3	4.4	7.4	8	<b>64</b>	16	20	703	0	88	0	
Uniform. Very good Facepack material. Good weight. Very few defects. Some off white curds with later transplanting. 14% small plants/curds.													
<b>Elsoms</b>	146A	17.3	17.3	24.3	7	<b>88</b>	0	12	944	29	0	0	
<b>ISADORA</b>													
	169B	21.3	24.3	28.3	7	<b>88</b>	0	12	966	0	0	0	
Very uniform. Crinkled leaf type. Pale green leaf. Good curd cover. Solid curds. Easy to see, cut and bag. Very good Facepack material.													
Very few defects.													
<b>Nickerson</b>	147A	28.3	4.4	7.4	10	<b>68</b>	14	18	747	0	77	0	
<b>VEDIS</b>													
	168B	28.3	7.4	11.4	14	<b>46</b>	10	44	505	0	55	0	
Smallish frame. Light green slightly crinkled leaf. Some good Facepack material. Slightly wide base to curds. Medium/flattish curds. A few loose curds.													

<b>TIME OF PLANTING AND SPACING TRIAL</b>							<b>Winter Cauliflower</b>			<b>2010 - 11</b>			
<b>A plots transplanted 7th July 2010</b>				<b>B plots transplanted 23rd July 2010</b>									
Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt		Facepack	Class 2		
VARIETY						1	2			Class 1			
		10%	50%	90%		%	%	%		Crates/Acre			
										8	6	16	12
<b>Elsoms</b>	148A	24.3	24.3	30.3	6	<b>74</b>	6	20		791	29	33	0
<b>INVICTA</b>													
	167B	24.3	28.3	30.3	6	<b>94</b>	0	6		944	117	0	0
Tall frame. Leafy. Crinkled leaf type. Uniform. Some small curds despite large frame. Good Facepack material. Medium/flattish curds. Slightly wide base to curds Larger curds with the later transplanting.													
<b>Syngenta</b>	149A	4.4	18.4	21.4	17	<b>67</b>	5	28		758	0	26	0
<b>SG4732</b>													
	166B	18.4	21.4	23.4	5	<b>73</b>	8	19		801	0	44	0
Uniform. Good Facepack material. Paler inner leaf. Some small plants/curds on both transplantings. Large frame. A few off white curds. Few other defects.													
<b>Elsoms</b>	150A	21.3	24.3	28.3	7	<b>66</b>	18	16		725	0	99	0
<b>TEMPEST</b>													
	165B	24.3	28.3	30.3	6	<b>60</b>	12	28		659	0	66	0
Easy to see. Upright frames. Small curds. Some good Facepack material. Tendency to turn off white. 14% small plants/curds. Clean leaf.													
<b>Syngenta</b>	151A	30.3	4.4	15.4	16	<b>56</b>	22	22		571	59	121	0
<b>SG4771</b>													
	164B	30.3	7.4	11.4	12	<b>26</b>	46	28		286	0	220	44
Very leafy. Wide base to curds. Small curds despite leafy frame. Medium/flattish curds. High % off white curds especially with later transplanting..													
<b>Nickerson</b>	152A	28.3	4.4	7.4	10	<b>80</b>	10	10		851	37	41	18
<b>AA 2178</b>													
	163B	28.3	4.4	7.4	10	<b>72</b>	8	20		747	59	43	0
Dark green leaf. Paler inner leaf. Very good Facepack material. Solid very heavy curds. Few defects. Some large curds. Tight twisted leaf over curds.													
<b>Syngenta</b>	153A	15.4	15.4	18.4	3	<b>84</b>	4	12		922	0	22	0
<b>DARWIN</b>													
	162B	15.4	15.4	18.4	3	<b>92</b>	2	6		1010	0	11	0
Excellent Facepack material. Very uniform. Good weight. Easy to see, cut and bag. Looks very good in tray. Very few defects.													

<b>TIME OF PLANTING AND SPACING TRIAL</b>							<b>Winter Cauliflower</b>			<b>2010 - 11</b>		
<b>A plots transplanted 7th July 2010</b>				<b>B plots transplanted 23rd July 2010</b>								
Seed house	PLOT	CUTTING PERIOD			DAYS	Class	Class	Unmkt	Facepack	Class 2		
VARIETY						1	2		Class 1			
		10%	50%	90%		%	%	%	Crates/Acre			
		8	6	16	12							
<b>Syngenta</b>	154A	4.4	15.4	18.4	14	53	13	34	522	73	69	0
<b>CFL4773</b>												
	161B	11.4	15.4	18.4	7	62	22	16	659	29	110	15
Very leafy. Crinkled leaf type. Wide base to curds. Some small plants/curds. Open habit giving some off white curds.												
<b>Tozer</b>	155A	28.3	30.3	4.4	7	60	20	20	615	59	110	0
<b>2063</b>												
	160B	4.4	4.4	7.4	3	64	26	10	505	264	110	44
Uniform. Good Facepack material. Some small curds. Few other defects. Good weight. Easy to see, cut and bag.												
Turned off white in very warm weather at beginning of April.												
<b>Seminis</b>	157A	28.3	30.3	4.4	7	82	10	8	879	29	55	0
<b>TENFOLD</b>												
	158B	30.3	4.4	11.4	12	76	8	16	835	0	44	0
Very good Facepack material. Heavy curds. Dark green leaf. Deep solid curds. Uniform. Looks very good in tray. Easy to see, cut and pack.												