



Advanced Oilseed Rape

***Next Generation Low Biomass
Winter Oilseed Rape***

Being a direct descendant of Es Astrid, Es Cubic can claim its position as the next generation low biomass rape variety

Harvest benefits of Es Cubic

- Low biomass—Height 144cm
- Good High Output 104%
- Improvement in Oil Content
- Very Early Seed Maturity

Agronomic benefits of Es Cubic

- Excellent autumn vigour
- Highest Stem Canker multigene resistance
- Good Stem Stiffness
- Early Flowering

Looking for a replacement for Castille?

Don't want to risk later harvest, lodged crops or higher fungicide inputs – **then grow Es Cubic**

Es Cubic – Out Performing Castille

Variety	Es Cubic conv	Castille conv*	ES Cubic benefit
Gross Output %	104	102	+ 2
Treated Yield %	102	103	
Oil Content %	45.0	42.9	+ 2.1%
Height	144 cm	147cm	Shorter
Resistance to lodging **	[8]	8.0	
Stem Stiffness **	7.6	7.1	+ 0.5
Earliness of flowering **	6.7	7.9	
Earliness of maturity **	7.1	5.8	+ 1.3
Resistance to Light Leaf Spot **	5.1	5.0	
Resistance to Stem Canker **	7.1	5.8	+ 1.3

Data from the HGCA table, varieties grown in 2009, (*control variety) ** 9 = high score 1 = low score



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ADVANCED COST-EFFECTIVE MANAGEMENT

Es Cubic has good autumn vigour ensuring that crops establish well before the pigeons arrive.

Modesto and Cruiser seed dressing also aid autumn establishment.



LOW BIOMASS variety with all the management and cost advantages

- Faster harvesting = less diesel, reduced costs
- Better lodging resistance = enhanced flow rate through combine
- Improved air flow reduces pod disease and increases grain dry down

ADVANCED YIELD PERFORMANCE

HGCA harvest results 2009 Es Cubic has + 6% more yield than Castille

Yield % control	Mean 5.32 t/ha	Yorkshire	Kent	Gloucester	Oxford	Notts	Hereford	Shropshire	Hampshire	Suffolk	Suffolk
Es Cubic	103	-	102	96	104	97	108	103	106	104	104
Castille	97	83	98	92	99	105	99	104	101	92	97
Oil Content											
Es Cubic	45.0	-	48.6	44.4	43.3	45.9	42.8	44.0	46.3	44.7	45.5
Castille	43.2	41.9	45.7	43.2	41.9	44.4	41.2	41.7	44.1	42.5	45.1

Source: HGCA harvest results 2009 E&W region



+ 1.8% Oil

Harvest results 2008 Es Cubic has + 5% more yield than Castille

Yield % control	Mean 4.48 t/ha	Suffolk	Gloucester	Notts	Lincolnshire	Perth	Suffolk	W. Lothian
Es Cubic	107	97	122	113	112	104	111	97
Castille	102	105	97	110	100	99	106	95
Oil Content								
Es Cubic	45.7	46.0	47.6	46.1	46.4	41.6	46.7	44.8
Castille	43.5	44.5	44.3	43.5	44.7	40.3	43.4	43.0

Source: FERA 2008 harvest results



+ 2.2% Oil



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ADVANCED DISEASE RESISTANCE

Es Cubic has the highest combined disease resistance making it suitable for growing throughout the UK.


Phoma is the most significant disease in the UK

Phoma Stem Canker remains the most common and costly disease in UK Oilseed rape crops. 60% of the national crop is grown in the high risk areas for Phoma.

All growers apply autumn fungicides to control Phoma. In a wet autumn early fungicide application is essential on varieties with poor resistance.

Es Cubic has a high disease resistance to Phoma reducing pressure on autumn sprays and giving growers more flexibility in timing at a busy time of the year.

HGCA rating
Es Cubic = 7.1
 + multigene benefit



According to Dr Peter Gladders of ADAS an HGCA rating of 7 or above reduces the need for a fungicide. Each HGCA disease rating is worth £20/ha to growers.

As a direct descendant from Es Astrid, Cubic has a high disease rating of 7 plus the same multigene resistance to Phoma stem canker.

Good Light Leaf Spot resistance

Es Cubic has a LLS resistance of 5.1. This combines with the 7.1 Stem Canker resistance rating to give an excellent all round package of disease resistance. This high combined disease resistance makes Es Cubic suitable for growing in all regions of the UK.



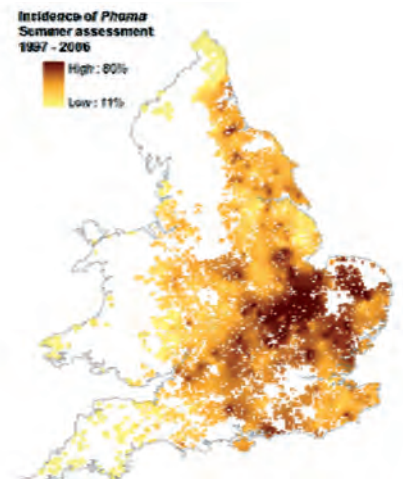
Growers spray at 10% autumn phoma leaf spotting

Yield loss maybe up to 50%, but 0.5-1t/ha is common when control has been lacking.



Light Leaf Spot on stem

Historic incidence of phoma



Es Cubic, Alienor and Astrid with their high multigene resistance within the plant provide inherent resistance to the fungus reducing risk of yield loss from Phoma stem canker and giving growers more flexibility and control.

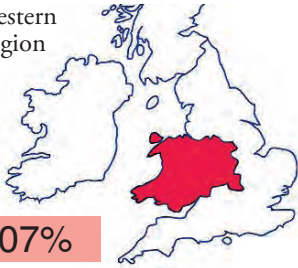
CUBIC

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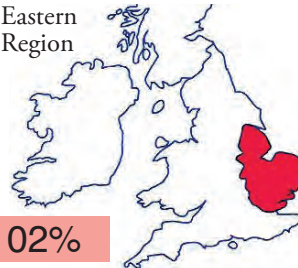
ADVANCED YIELD PERFORMANCE

Western
Region



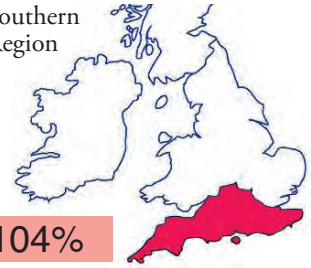
107%

Eastern
Region



102%

Southern
Region



104%

NIAB Pocket Guide to Varieties Autumn 2010

Winter Oilseed rape NIAB regional yields

The top yielding conventional variety in the NIAB West region

Es Cubic = 107%

Ahead of Fashion & Vision 106%, DK Cabernet 105% and well ahead of Castille 102%



HGCA Winter Oilseed Rape 2010 - East and West Region



Variety type	Gross output % control	Seed yield as % control	Agronomic features	Resistance to lodging*	Stem stiffness*	Shortness of stem*	Earliness of flowering*	Earliness of maturity*	Oil content of seed (%)	Light leaf spot*	Stem canker*
Es-Cubic	Conv	104	102	[8]	7.6	7.3	6.7	7.1	45.0	5.1	7.1
Control varieties	4.7 t/ha 4.5t/ha										
Castille	Conv	102	103	8.0	7.1	7.7	7.9	5.8	43.4	5.0	5.8
NKBravour	Conv	102	100	7.8	7.5	6.8	6.7	5.3	45.3	5.0	5.1
Winner	Conv	94	95	6.6	5.7	6.5	7.9	5.5	43.6	5.6	3.9
Excalibur	RH	102	102	7.3	7.1	6.5	8.1	6.2	44.2	6.0	4.7

Varieties grown in RL trials 2009 but not added to the HGCA Recommended List.

This table should be read in conjunction with the HGCA Recommended List of Winter Oilseed Rape 2010/11.

* Scale of 1-9 where 9 is the top rating.

**Drill Es Cubic this Autumn and experience
the Next Generation Low Biomass variety**



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