



MOUNTAIN BLUE

FARMING · GENETICS · NURSERY · MARKETING

# 2023 Blueberry Variety Guide





## Background:

Established in 1978, Mountain Blue is a family owned and operated company that produces the highest quality blueberry fruit and genetics along with an extensive nursery and marketing service. We seek to be sustainable through innovative production practices, mechanisation, and varietal improvement. Mountain Blue's mission is to be the global leader in the production of the finest blueberry fruit and varieties. As the leading supplier of blueberry stock, Mountain Blue delivers high quality blueberry plants to commercial growers nationwide. Through our own breeding program, headed up by Ridley Bell, we supply world-renowned genetics in a variety of formats to suit our growers' individual requirements. Considered a world-leading expert, Ridley has been actively involved in the development of the Australian blueberry industry since its humble beginning in 1975. His early work has involved the development of several Northern Highbush varieties. Named 2010 NSW Farmer of the Year, Ridley continues his work in the development of new varieties, both Northern and Southern Highbush, including the world-renowned variety, *Eureka*. Mountain Blue and the Bell family was also recently named *The Weekly Times* Coles 2020 Horticulture Farmer of the Year for their contribution to the Australian blueberry industry.

Disclaimer: Whilst Mountain Blue has taken all reasonable care to ensure the accuracy of the data/information provided in this summary, the data/information is provided for information purposes only and shall not constitute reliance information. Growers must satisfy themselves as to the suitability of the varieties and Mountain Blue gives no warranty or guarantee whatsoever. The yields and timing of flowering and fruiting are based off data collected off plants in the ground at Tabulam, New South Wales, Australia (Lat: long 28.83:152.54, elev.: -130m).





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# Early-Season Varieties

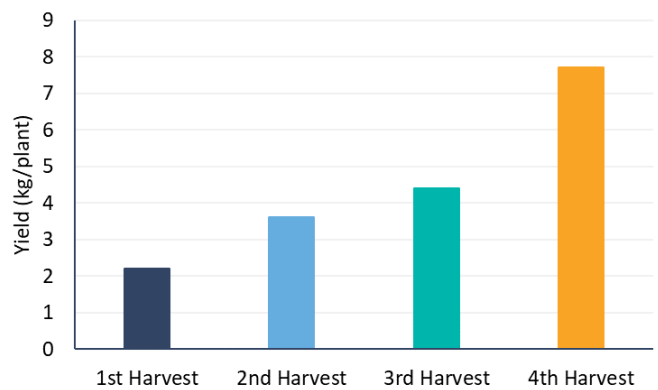
## Eureka Sunrise

Selected from one of our best breeding lines, *Eureka Sunrise* has all the best qualities of its parent *Eureka*. Selected in 2014 for its early period of fruit ripening, high yield, sweet flavour and suitability to machine harvest. This early variety is extremely popular with consumers due to the excellent flavour and overall eating quality making it well suited to the fresh market. The plant is very vigorous and tough with a round shape and whippy canes that fruit deep down laterals making the yield high and picking an ease. *Eureka Sunrise* begins ripening from June, reaching peak production in August with the fruits presenting in large, loose clusters. The fruit is large to very large and crisp with an excellent sugar/acid balance and a small dry scar.

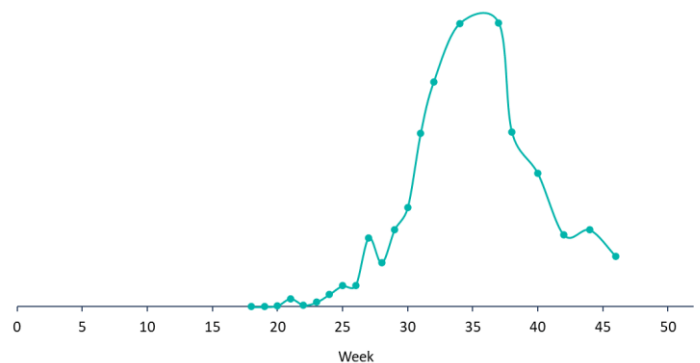


## Yield

The yield data displayed below is collected from 5-plant trial plots, in soil at Tabulam, NSW, Australia. Harvest data is collected over consecutive years as the bushes mature. Figure 1 shows the first, second and third year harvests on 1, 2, 3 and 4-year-old bushes as 2.2kg/plant, 3.6kg/plant, 4.4kg/plant and 7.7kg/plant respectively. The timing and distribution of fruit ripening and harvest of *Eureka Sunrise* is shown in Figure 2 where it begins ripening from week 22 with peak harvest during weeks 35-38 before the yield drops dramatically.



**Figure 1. The first, second, third- and fourth-year harvest of *Eureka Sunrise*.**



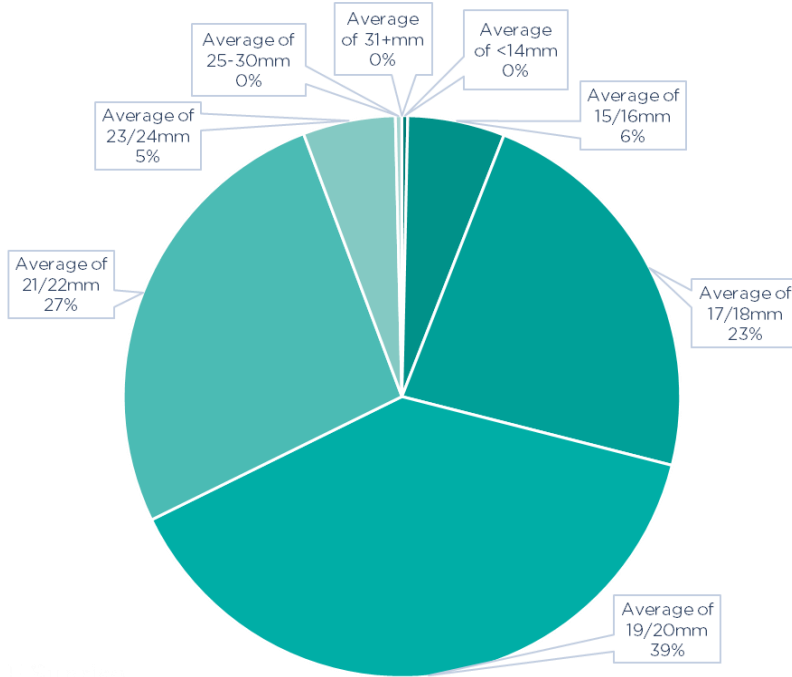
**Figure 2. The harvest distribution of *Eureka Sunrise*.**

Table 1 shows a brief summary of the fruit quality characteristics of *Eureka Sunrise* including the varieties fruit size, fruit weight, brix and firmness. While the fruit size breakdown is shown in Figure 3.



**Table 1. Fruit quality characteristics of *Eureka Sunrise*.**

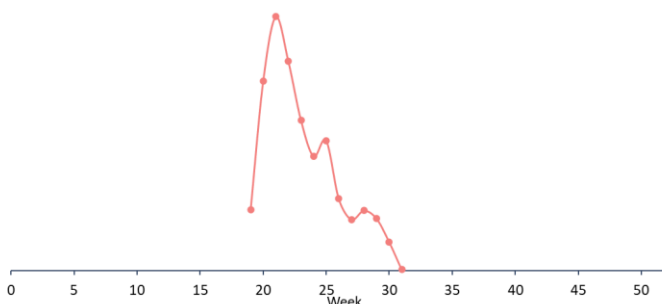
Avg. Berry Weight (g)	Avg. Berry Size (mm)	Brix (°Bx)	Firmness (% durofel)
3	19	14	75



**Figure 3. The fruit size breakdown of *Eureka Sunrise*.**

### Flowering and pollination

*Eureka Sunrise* flowers only slightly later than Mountain Blue’s other early varieties, beginning around week 18 and peaking at week 22 before flowering slowly reduces and ends around week 31 (Figure 4). During in-house pollination tests, *Eureka Sunrise* set 83% of fruit and is considered adequately self-fertile and can be ‘block planted’. A pollinator such as *Dazzle* can be used with no significant yield loss.



**Figure 4. The flowering distribution of *Eureka Sunrise*.**

### Management:

The high yielding nature of *Eureka Sunrise* can be a detriment as plants can overcrop at young ages, therefore it is important to manage crop load through pruning until the plants grow a sufficient canopy to support the fruit load.

*Eureka Sunrise* has shown excellent performance under high plastic tunnels with primocane style growth providing fruit into May. However, good pollination is needed as the corolla is more likely to remain on primocane style flowers of *Eureka Sunrise*. Pruning on *Eureka Sunrise* is also important to open the canopy and create airflow and improve spray efficacy as it has been shown to have increased susceptibility to thrips and botrytis.

As the plant structure of *Eureka Sunrise* is quite whippy it tends to sprawl at a young age, thus harder prunes are important within the first few months to promote stronger upright growth which prevents the plant from sprawling.



## Dazzle

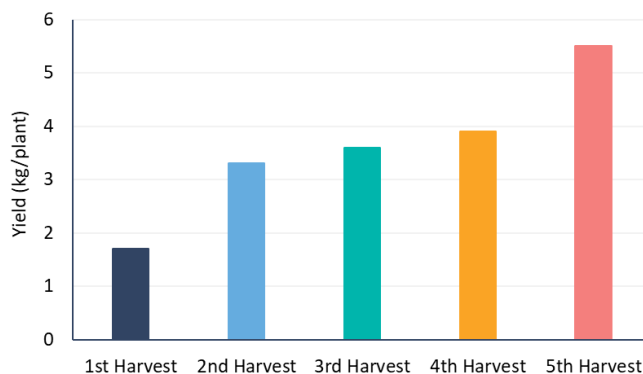
*Dazzle* was selected in 2008 based upon its vigour, early fruit ripening and sweet, crunchy berries. It is a vigorous, semi-upright bush with strong evergreen characteristics. *Dazzle* has a long harvest season with fruits ripening from May to peak production from August to October. Shoots of *Dazzle* do have the ability to differentiate into flower buds while still actively growing which can be a useful tool to manipulate/increase yield and timing. The fruit is large, sweet with a great bloom and crunch and has performed well in preliminary storage trials. The berries are large, and the bright bloom makes them attractive to consumers.



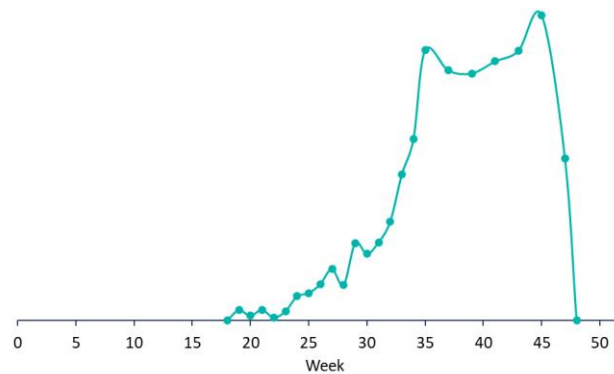
## Yield

The yield data displayed below is collected from 5-plant trial plots, in soil at Tabulam, NSW, Australia. Harvest data is collected over consecutive years as the bushes mature. *Dazzle* is proving to be a strong yielding plant with the first, second, third,

fourth and fifth harvest on 1, 2, 3, 4 and 5-year-old plants producing 1.7kg/plant, 3.3kg/plant, 3.6kg/plant, 3.9kg/plant and 5.5kg/plant respectively (Figure 5). Figure 6 shows the distribution and timing of *Dazzles'* production beginning approximately week 22 and peaking around week 35 and week 45.



**Figure 5. The first, second, third, fourth- and fifth-year harvest of *Dazzle*.**



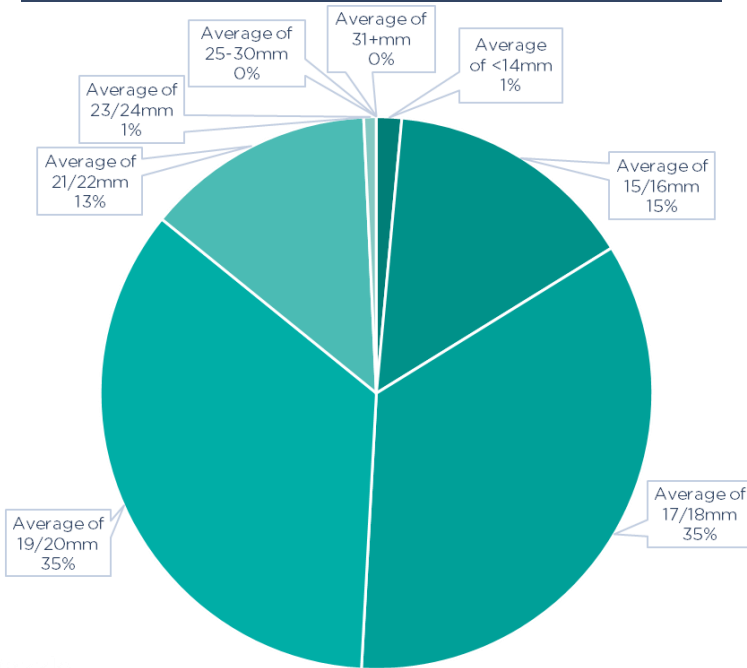
**Figure 6. The harvest distribution of *Dazzle*.**

Table 2 shows a summary of the fruit quality characteristics of *Dazzle* including the varieties fruit size, fruit weight, brix and firmness. The fruit size breakdown is shown in Figure 7.



**Table 2. Fruit quality characteristics of Dazzle.**

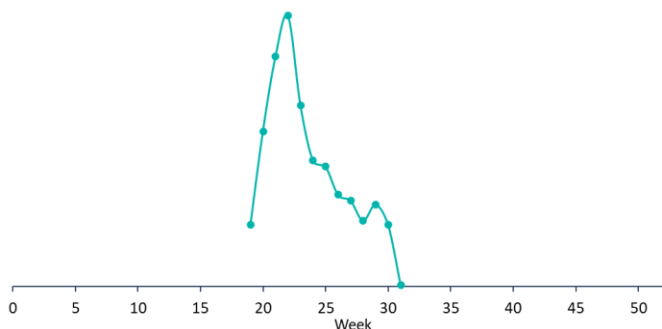
Avg. Berry Weight (g)	Avg. Berry Size (mm)	Brix (°Bx)	Firmness (% durofel)
2	18	14	76



**Figure 7. The fruit size breakdown of Dazzle.**

### Flowering and pollination

*Dazzle* begins flowering slightly earlier than *Eureka Sunrise*. It begins flowering around week 13 and has a long flowering window through to approximately week 30-32 (Figure 8). *Dazzle* is not considered self-fertile, having only set 54% of fruit during in-house pollination testing, thus requires a pollinator. It is suggested to be planted with *Eureka Sunrise*.



**Figure 8. The flowering distribution of Dazzle.**

### Management

When pruned early *Dazzle* can provide early fruit on evergreen plants (at Tabulam, NSW), however, strong primocane style growth will produce fruit with an undesirable picking scar. A late tip to spring growth can avoid this and result in a compact harvest season. A pollinator such as *Eureka Sunrise* is necessary for *Dazzle* productivity.





# Mid-Season Varieties

## Eureka Gold

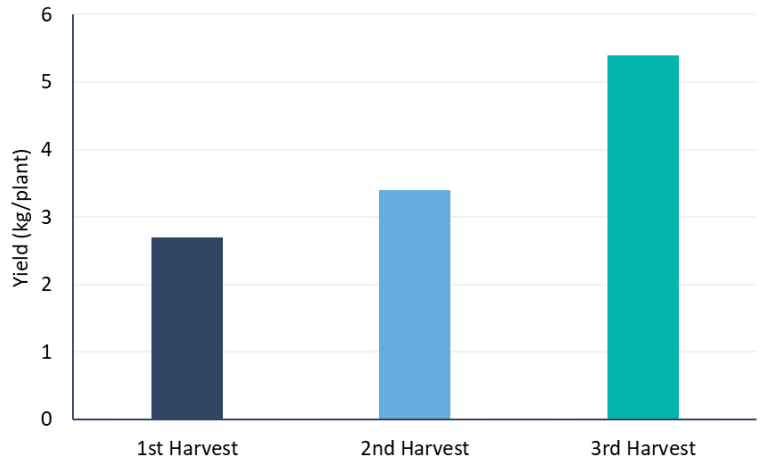
*Eureka Gold* is Mountain Blue's new varietal release. Selected in 2014 for its high yield and exquisite fruit quality, *Eureka Gold* has shown promise to be an excellent mid-season variety, presenting positive attributes from both parents; *Eureka* and *Twilight*, which includes large to very large fruit size, a crisp/crunchy texture, intense bloom and a great ease of picking. The bush is large with an upright/semi-upright growth habit and is vigorous. It fruits in large open/loose clusters and has shown a suitability to machine harvest. *Eureka Gold*'s ability to maintain its intense bloom post-harvest is a standout compared to other varieties.



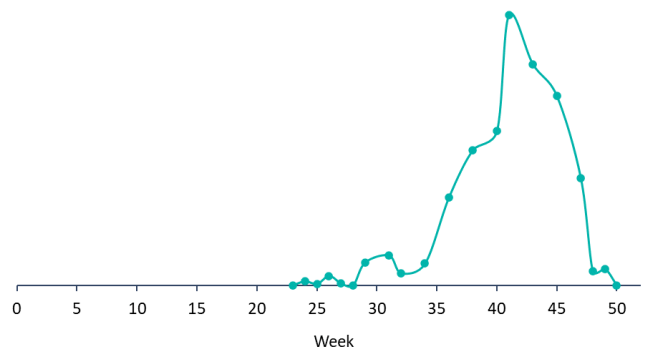
### Yield

The yield data displayed below is collected from 5-plant trial plots, in soil at Tabulam, NSW, Australia. Harvest data is collected over consecutive years as the bushes mature. Figure 9 shows the first, second and

Third-year harvest of *Eureka Gold* at 2.7kg/plant, 3.4kg/plant and 5.4kg/plant respectively. *Eureka Gold* starts producing its first fruit around week 25, until it reaches its main season fruit which ripens between week 40 and week 45 (Figure 10).



**Figure 9. The first, second and third-year harvest of *Eureka Gold*.**



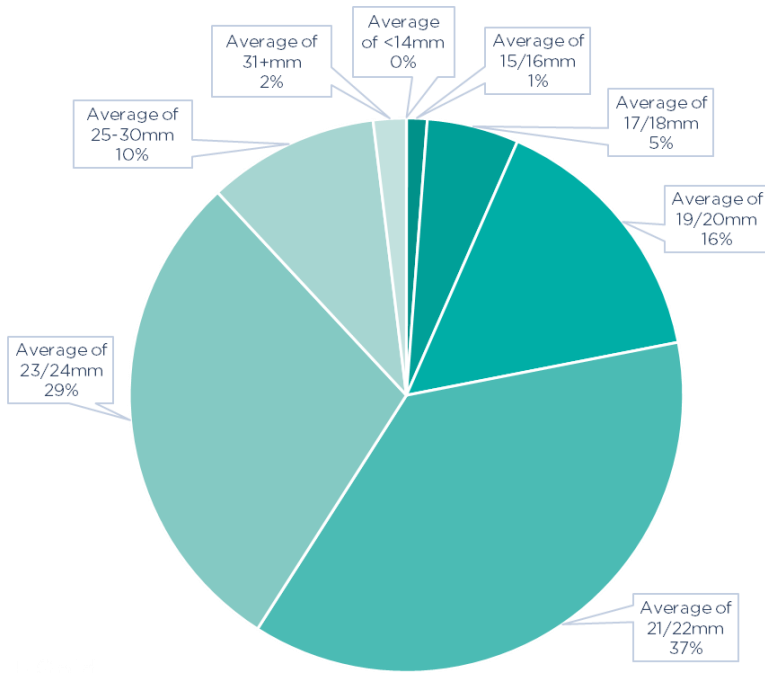
**Figure 10. The harvest distribution of *Eureka Gold*.**

Table 3 shows a summary of the fruit quality characteristics of *Eureka Gold* including the varieties fruit size, fruit weight, brix and firmness. Figure 11 shows the fruit size breakdown throughout harvest.

**Table 3. Fruit quality characteristics of *Eureka Gold*.**

Avg. Berry Weight (g)	Avg. Berry Size (mm)	Brix (°Bx)	Firmness (% durofel)
3.5	20	13	82

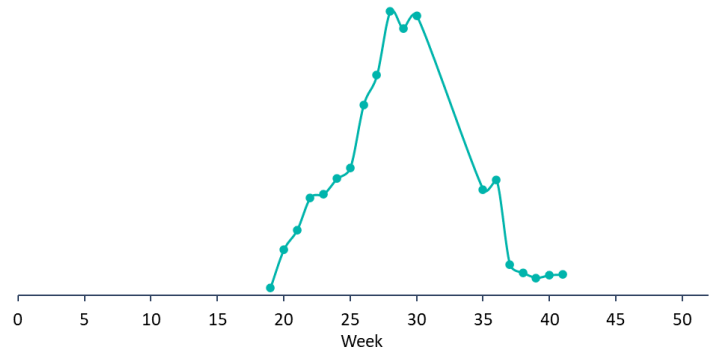




**Figure 11. The fruit size breakdown of Eureka Gold.**

## Flowering and pollination

*Eureka Gold* flowers slightly later than *Masena* with flowering commencing around week 20 and peaking at week 30 before finishing around week 40 (Figure 12). Pollination testing has shown *Eureka Gold* to be self-fertile with 99% of pollinated flowers setting fruit.



**Figure 12. The flowering distribution of Eureka Gold.**



## Management

The Management of *Eureka Gold*, particularly pruning, is key in maximising the performance and productivity of the variety. The growth habit shares more similarities with its parent *Twilight* with a strong, lignified, upright tree-like structure with a low tendency to throw new basal shoots/canes from the crown, compared to that of *Eureka*. Due to this lack of caning, strong tree-like structure, and strong apical dominance, pruning to build complexity from a young age is a necessity to avoid strong, dominant upright shoots which create a lanky, unproductive plant. Growing under continuous poly can exacerbate the problem, as such, a strong positive response is achieved by removing plastic during the growing season or growing *Eureka Gold* outside of poly tunnels.



## Masena

*Masena* was selected in 2011 due to its high yield, vigorous plant growth and the high-quality, highly-flavoured berry. It is a mid-season variety with a very vigorous, semi-upright plant stature. *Masena* has shown a strong primocaning type habit which is a useful tool to manipulate timing and increase yield. Its high yielding nature can be attributed to its long fruiting season with fruit ripening from July to November. The plant fruits in large, moderate to loose clusters making it suitable for hand picking while the ease of picking and bush structure also make it suitable for machine harvest. The fruit is medium to large, round and firm and has a strong flavour that attracts consumers. Its strong bloom has allowed *Masena* to perform well in post-harvest storage.



## Yield

The yield data displayed below is collected from 5-plant trial plots, in soil at Tabulam, NSW, Australia. Harvest data is collected over consecutive years as the bushes mature.

Figure 13 below highlights the productivity of *Masena* with yields of 3.1kg/plant, 5.2kg/plant, 5.7kg/plant, 8kg/plant and 8.4kg/plant in the first, second, third, fourth- and fifth-year harvests respectively. *Masena* has been able to produce fruit as early as May/June on 'primocane style' growth, however its regular season begins around week 30 before it peaks around 41-43 and finishes at approximately week 48 (Figure 14).

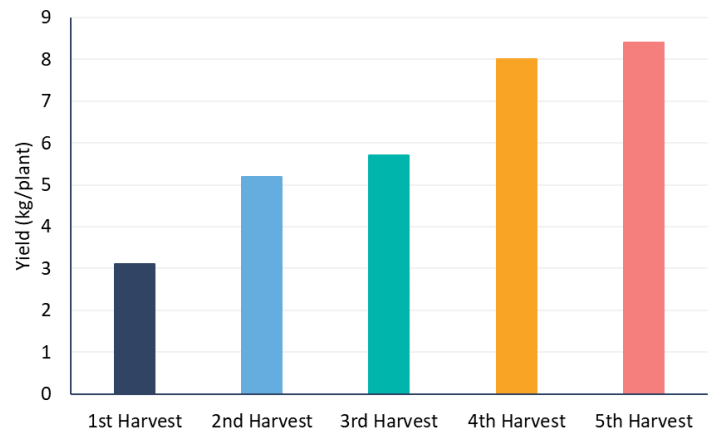


Figure 13. The first, second, third, fourth and fifth-year harvest of *Masena*.

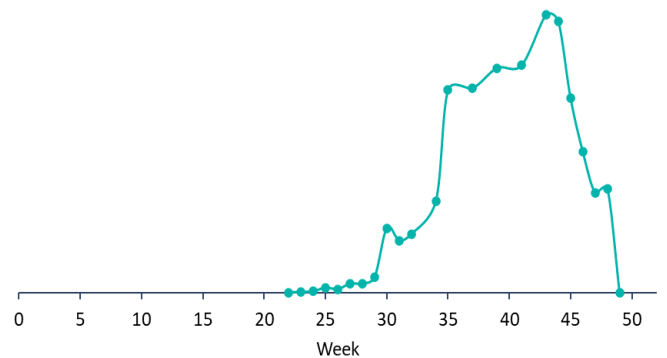
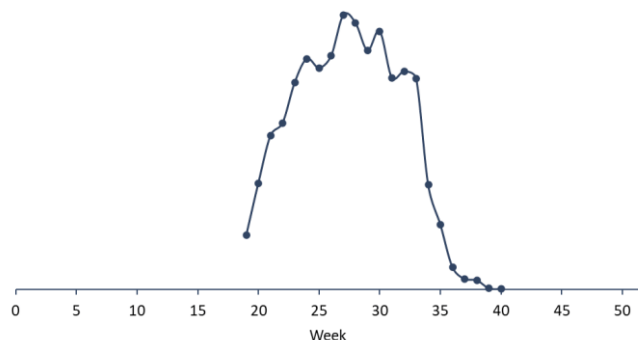


Figure 14. The harvest distribution of *Masena*.

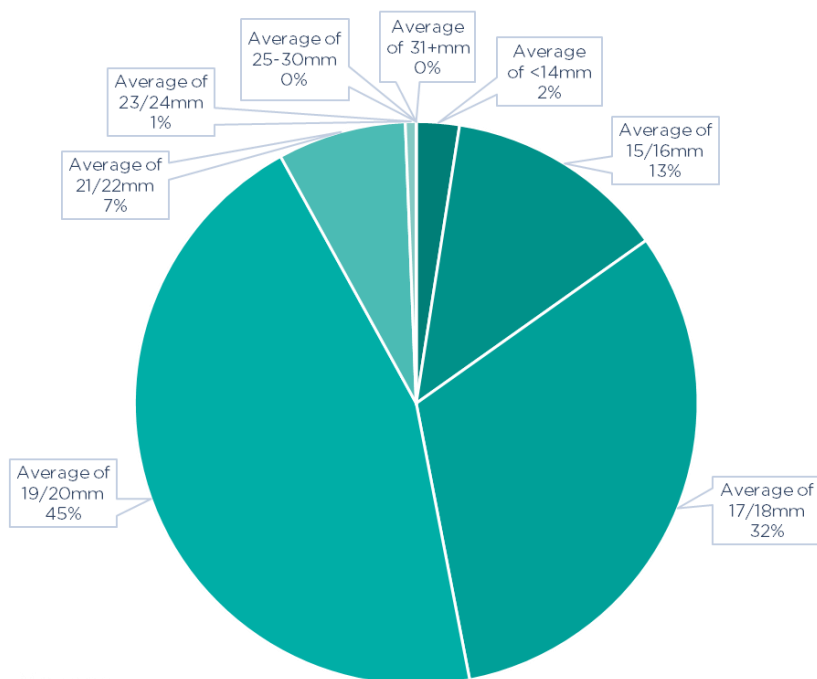
Table 4 shows a summary of the fruit quality characteristics of *Masena* including the varieties fruit size, fruit weight, brix and firmness with Figure 15 highlighting the fruit size breakdown.

**Table 4. Fruit quality characteristics of *Masena*.**

Avg. Berry Weight (g)	Avg. Berry Size (mm)	Brix (°Bx)	Firmness (% durofel)
2.5	17	14	67



**Figure 16. The flowering distribution of *Masena*.**



**Figure 15. The fruit size breakdown of *Masena*.**



## Flowering and pollination

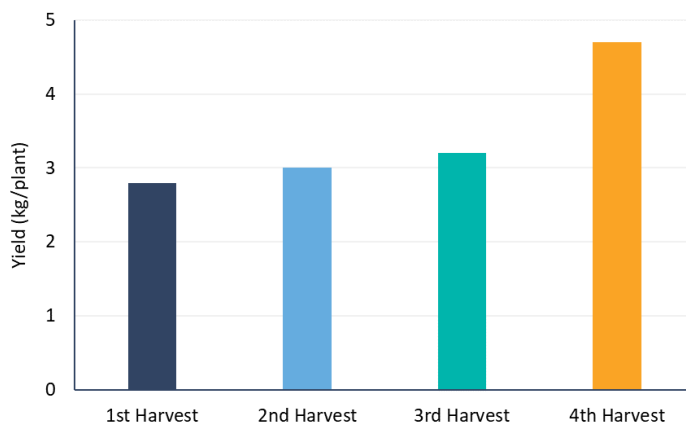
Although *Masena* is a mid-season variety, it can begin flowering from around week 17 on ‘primocane style’ growth, while peak flowering is not seen until 10 weeks later at week 27 where flowering then trails off to finish at approximately week 35-40 (Figure 16). *Masena* can be considered self-fertile with in-house pollination tests showing 93% fruit set. Higher fruit set and fruit size can be achieved through cross-pollination with mid-season variety *Splash*.

## Management

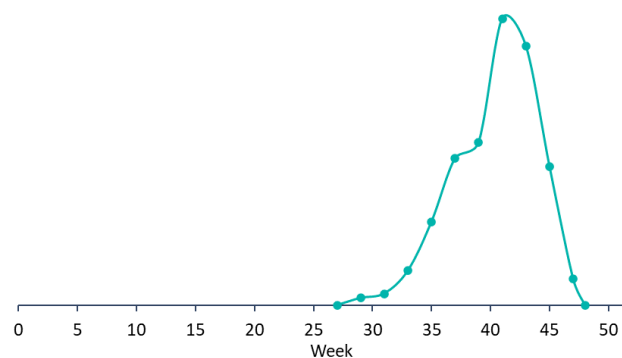
The timing of harvest on *Masena* can be brought forward by conducting a moderate to hard prune quite late in the season, which promotes a greater percentage of strong actively growing shoots that differentiate while still growing (primocane style). Care needs to be taken on younger plants to avoid overcropping which can result in small fruit size and hinder establishment. The dense firmness and strong bloom mean *Masena* has dealt well in warmer conditions and preliminary shelf-life trials. *Masena* has shown sensitivity to saline conditions.

## Eureka Maxx

Originating from Mountain Blue's top mid-season varieties; *Eureka* and *Masena*, Eureka Maxx is Mountain Blue's newest variety. It was selected in 2016 for its very large fruit size, great bloom, strong crunch and a unique flavour profile blending the best from both parents. The bush is vigorous and whippy with a high yield, the fruit presents in moderately loose clusters which are easy to pick.



**Figure 17. The first, second, third and fourth year harvest of Eureka Maxx.**



**Figure 18. The harvest distribution of Eureka Maxx.**

Table 5 shows a summary of the fruit quality characteristics of *Eureka Maxx* including the varieties fruit size, fruit weight, brix and firmness. Figure 19 displays the fruit size breakdown of the harvest for *Eureka Maxx*.

**Table 5. Fruit quality characteristics of Eureka Maxx.**

Avg. Berry Weight (g)	Avg. Berry Size (mm)	Brix (°Bx)	Firmness (% durofel)
4.5	23	14	70

## Yield

The yield data displayed below is collected from 5-plant trial plots, in soil at Tabulam, NSW, Australia. Harvest data is collected over consecutive years as the bushes mature. Figure 17 shows the first, second, third and fourth harvests of *Eureka Maxx*, which yielded 2.8kg/plant, 3kg/plant, 3.2kg/plant and 4.7kg/plant respectively. The fruit of *Eureka Maxx* begins ripening around week 28 with a steady production until around week 35 before peak production approximately week 41 before reducing dramatically and finishing ripening by week 48 (Figure 18).

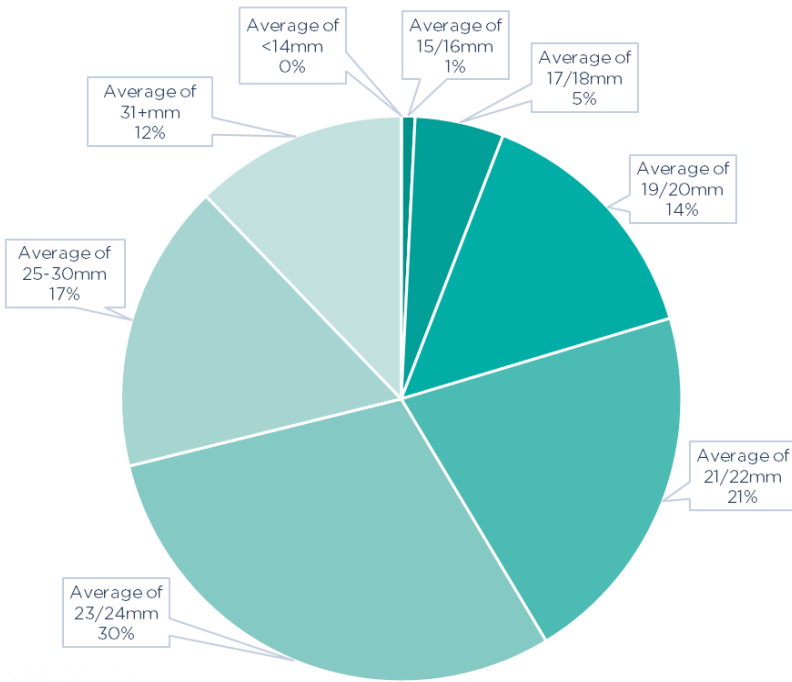


Figure 19. The fruit size breakdown of *Eureka Maxx*.

## Management

Although *Eureka Maxx* can produce earlier fruit on primocane style growth, the quality of this fruit can be reduced through an undesirable picking scar and the jumbo-sized fruit can display a decline in the firmness/texture of the berry where it becomes 'spongy' rather than 'crisp'. Juvenile leaves can show variegation, however this does disappear with age.

## Flowering and pollination

*Eureka Maxx* begins flowering around week 17 before the main flush of flowers around week 25-30 (Figure 20). Pollination testing has shown *Eureka Maxx* is self-fertile.

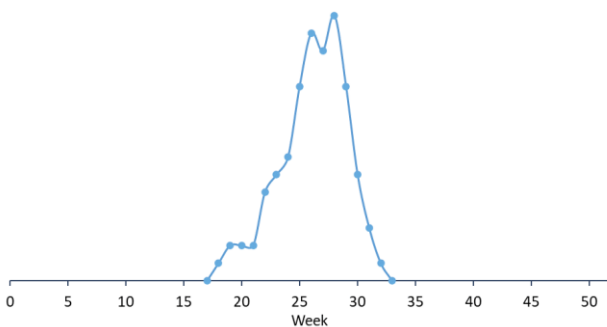


Figure 20. The flowering distribution of *Eureka Maxx*.

# Late-Season Varieties

## Eureka Sunset

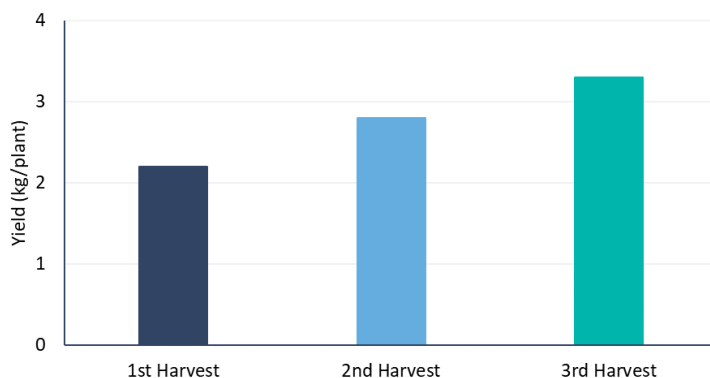
*Eureka Sunset* is a direct descendant of the *Eureka* variety, possessing all the best fruit characters of its parent with the benefit of a later season. Although classified as late, it ripens as more of a mid/late-season variety. *Eureka Sunset* was selected in 2014 because of its large, sweet and crisp berries, vigorous plant growth and later season fruit. The plant has a semi-upright growth habit with vigorous vegetative growth and loose fruit clusters, which makes hand harvesting an ease. The fruit is large and sweet with a good bloom and characteristic “crunch” that appeals strongly to consumers.



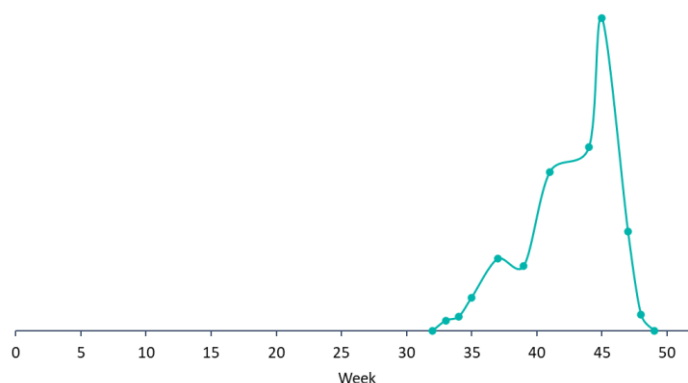
### Yield

The yield data displayed below is collected from 5-plant trial plots, in soil at Tabulam, NSW, Australia. Harvest data is collected over consecutive years as the bushes mature. *Eureka Sunset* has yielded 2.2kg/plant, 2.8kg/plant and 3.3kg/plant during the first, second and third-year harvests respectively (Figure 21).

Figure 22 shows the distribution of the yearly harvest of *Eureka Sunset* with the narrow ripening period and sharp peak in production around week 45.



**Figure 21. The first, second and third-year harvest of *Eureka Sunset*.**



**Figure 22. The harvest distribution of *Eureka Sunset*.**

Table 6 shows a brief summary of the fruit quality characteristics of *Eureka Sunset* including the varieties fruit size, fruit weight, brix and firmness with the fruit size breakdown being displayed in Figure 23.

**Table 6. Fruit quality characteristics of *Eureka Sunset*.**

Avg. Berry Weight (g)	Avg. Berry Size (mm)	Brix (°Bx)	Firmness (% durofel)
3	19	13	72

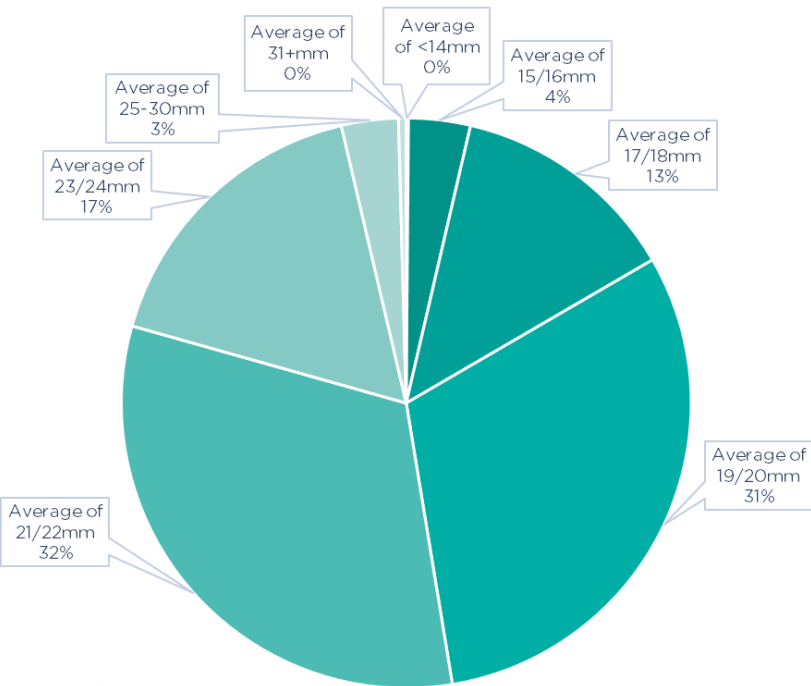


Figure 23. The fruit size breakdown of *Eureka Sunset*.

## Management

Although categorised with Mountain Blue's late varieties, the small overlap of flowering will dramatically hinder pollination if they are planted together. *Eureka Sunset* has shown to perform better in cooler climates. The tendency for the corolla to remain attached to the fruit can also cause issues throughout harvest.

## Flowering and pollination

*Eureka Sunset* has a short flowering window, thus a compact season with flowering from week 25 to week 40 (Figure 24). *Eureka Sunset* can be considered self-fertile with in-house pollination testing showing 100% compatibility with its own pollen; however, fruit size can be increased with cross-pollination with *Splash*.

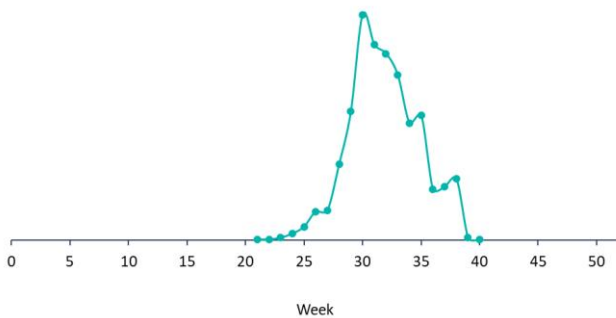


Figure 24. The flowering distribution of *Eureka Sunset*.

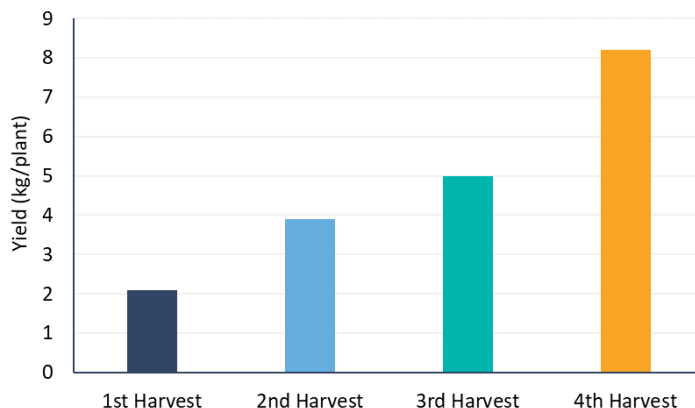
## Echo

Selected in 2014, *Echo* is a late season variety. Its selection was based upon its late season fruit, large, crisp berries, and suitability to machine harvest. It is a vigorous bush with a round to upright growth habit that presents fruit in loose clusters. It ripens in early November with the fruit being large to very large with a very good bloom and crisp texture. It's sweetness late in the season makes it a valuable variety.

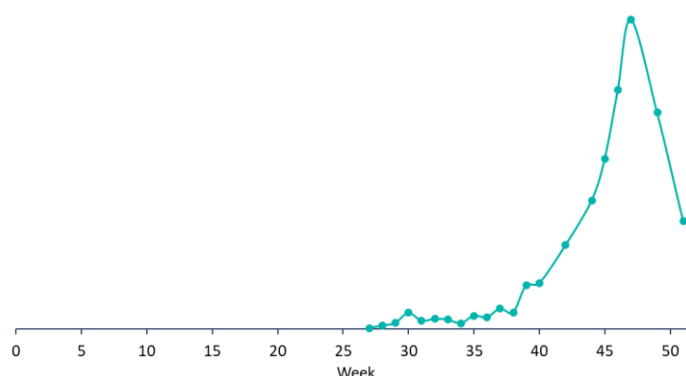


## Yield

The yield data displayed below is collected from 5-plant trial plots, in soil at Tabulam, NSW, Australia. Harvest data is collected over consecutive years as the bushes mature. *Echo* has yielded 2.1kg/plant, 3.9kg/plant, 5kg/plant and 8.2kg/plant during the first, second, third and fourth-year harvests on one, two, three and four-year old bushes respectively (Figure 25). The fruit slowly ripens with a sharp increase in production until approximately week 47/48 where harvest spikes and the bulk of fruit is produced before it finishes ripening by week 51 (Figure 26).



**Figure 25. The first, second, third- and fourth-year harvest of *Echo*.**



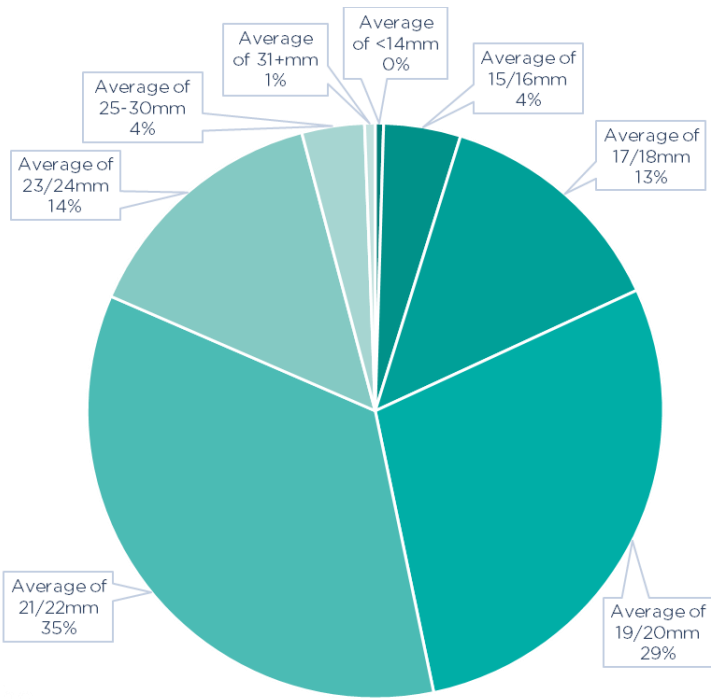
**Figure 26. The harvest distribution of *Echo*.**

Table 7 shows a brief summary of the fruit quality characteristics of *Echo* including the varieties fruit size, fruit weight, brix and firmness while Figure 27 highlights the breakdown of fruit sizing.

**Table 7. Fruit quality characteristics of *Echo*.**

Avg. Berry Weight (g)	Avg. Berry Size (mm)	Brix (°Bx)	Firmness (% durofel)
3.5	20	12	68





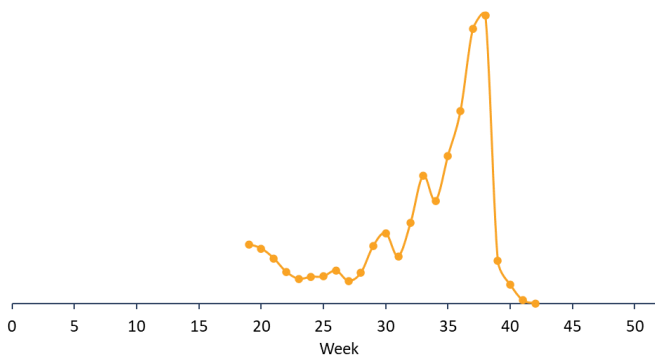
**Figure 27. The fruit size breakdown of Echo.**

## Management

*Echo* is well suited to cooler climates with a semi-deciduous habit ensuring late season production. Under mild, evergreen systems, *Echo* has been shown to ripen during mid-season production windows with some earlier primocane style fruit. It can produce strong whippy upright canes, thus pruning for structure when the plant is young is important, trellis can also be used on young plants to support canes until a strong plant structure is built. Late frosts in cooler climates can pose a risk to flowers. *Echo* can be block planted or planted with *Twilight* for cross-pollination.

## Flowering and pollination

With a similar timing to *Twilight*, *Echo* has a compact flowering period which commences around week 31 and quickly reaches peak flower by week 38 before finishing around week 40 (Figure 21). Although considered self-fertile with 95% fruit set during in-house pollination trials, *Echo* can be pollinated by *Twilight* to achieve a slightly higher fruit set and fruit weight.



**Figure 28. The flowering distribution of Echo.**

# Appendix 1

## Early Season Varietal Summary

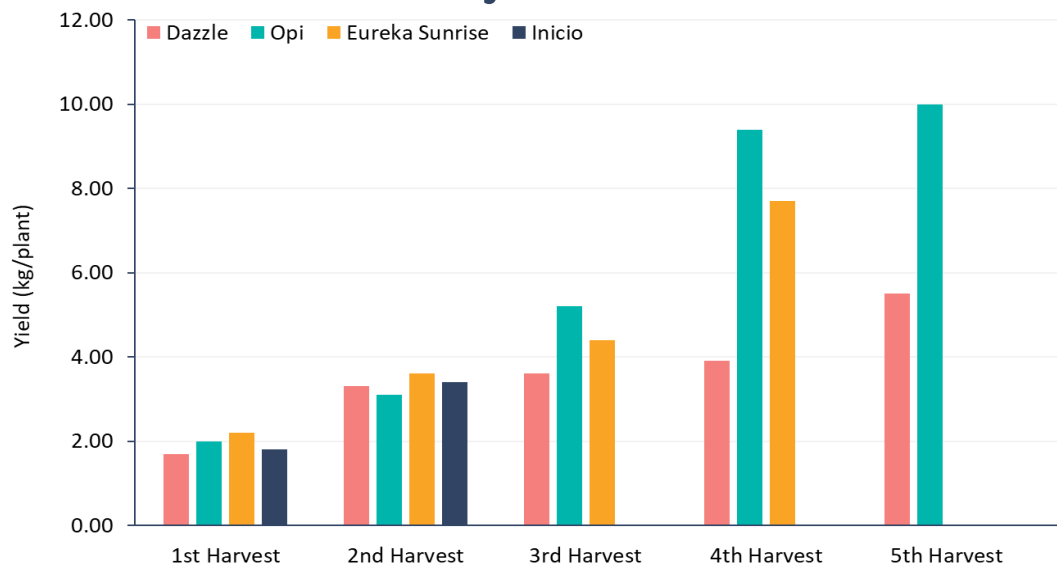


Figure 29. The yield comparison of the four early varieties; Dazzle, Opi, Eureka Sunrise and Inicio.

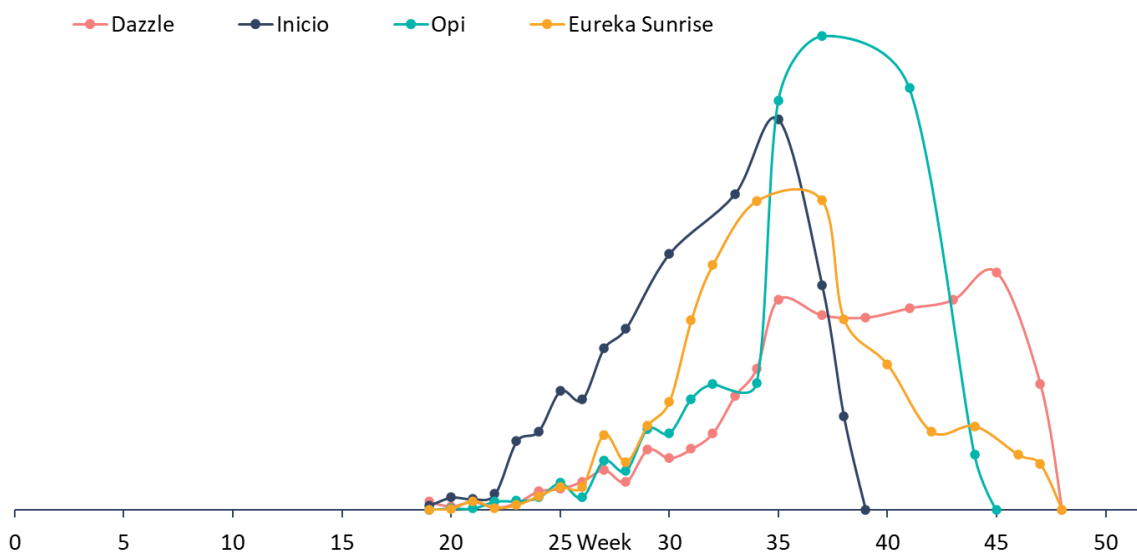


Figure 30. The comparison of harvest timing of the four early varieties; Dazzle, Opi, Eureka Sunrise and Inicio.

Table 8. The pollination matrix showing the compatibility of the four early varieties; Dazzle, Opi, Eureka Sunrise and Inicio.

		Male			
		EUREKA SUNRISE	DAZZLE	INICIO	OPI
FEMALE	DAZZLE	94%/2.6 g.	54%/1.9g.	93%/2.2 g.	94%/1.4 g.
	EUREKA SUNRISE	83% / 3.2 g.	73%/3.8 g.	93%/2.2 g.	90% /3.1 g.
	OPI	TBA	68%/1.6g.	91%/2.6 g.	97%/1.7 g.
	INICIO	100%/3.4 g.	96%/2.0 g.	81%/4.1 g.	99%/4.3 g.

Table 9. The berry quality characteristics of the four early varieties; Dazzle, Opi, Eureka Sunrise and Inicio.

	Avg. Berry Weight (g)	Avg. Berry Size (mm)	Brix (°Bx)	Firmness (% durofel)
Dazzle	2	18	14	76
Eureka Sunrise	3	19	14	75
Opi	2	17	13	61
Inicio	3	18	13	65

## Appendix 2

### Mid-Season Varietal Summary

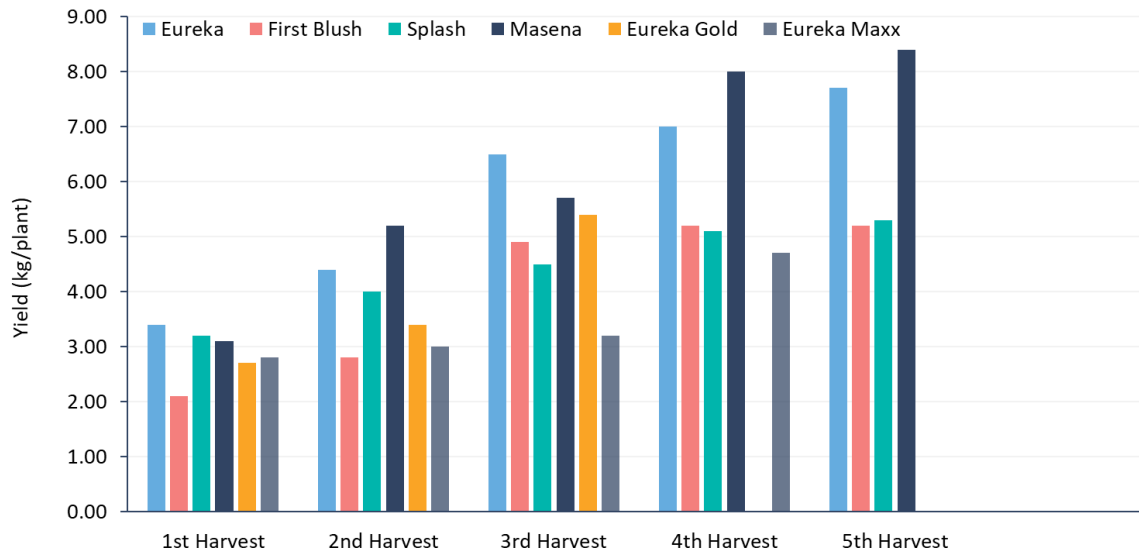


Figure 31. The yield comparison of the six mid-varieties; Eureka, First Blush, Splash, Masena, Eureka Gold and Eureka Maxx.

● Eureka      ● First Blush      ● Splash  
● Masena      ● Eureka Maxx      ● Eureka Gold

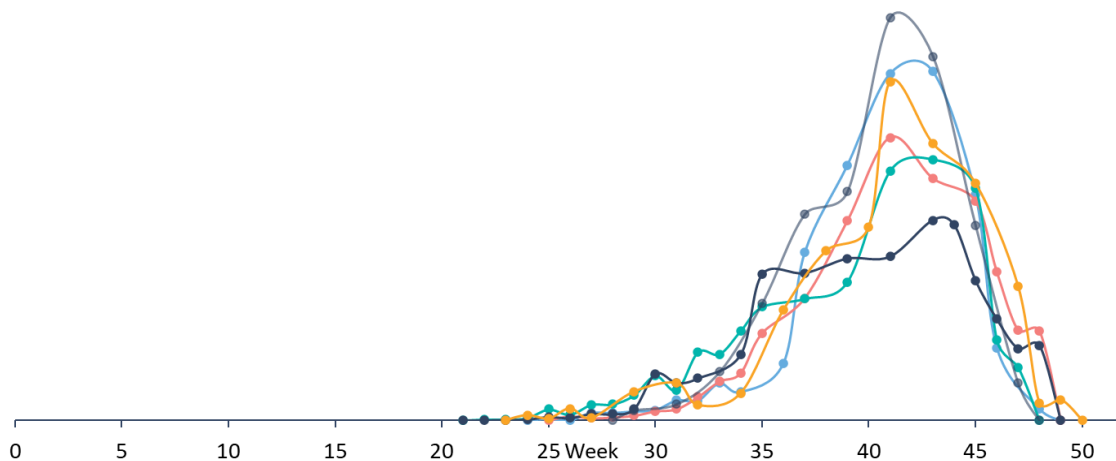


Figure 32. The comparison of harvest timing of the four mid-varieties; Eureka, First Blush, Splash, Masena and Eureka Gold.

Table 10. The pollination matrix showing the compatibility of the mid-varieties; Eureka, First Blush, Splash, Masena, Eureka Gold and Eureka Maxx.

		Male					
		MASENA	EUREKA	FIRST BLUSH	EUREKA GOLD	EUREKA MAXX	SPLASH
FEMALE	MASENA	93%/2.5g	21%/1.9 g.	43%/2.5 g.	100%/2.9 g.	TBA	100%/3.2 g.
	EUREKA	78%/4.1 g.	47%/2.5 g.	100%/4.5 g.	TBA	100%/3.5 g.	75%/2.3 g.
	FIRST BLUSH	84%/2.2 g.	100%/2.2 g.	86%/1.8 g.	92%/2.6 g.	100%/3.1 g.	80%/2.4 g.
	EUREKA GOLD	53%/4.1 g.	TBA	61%/3.1g.	99% /3.5 g.	TBA	43%/2.2 g.
	EUREKA MAXX	100%/2.6 g.	64%/4.4g.	84%/5.0g.	TBA	100%/4.5g	97%/3.6g.
	SPLASH	99%/2.7 g.	100%/3.0 g.	82%/2.0 g.	100%/2.3g.	98%/2.4 g.	75%/2.6 g.

Table 11. The berry quality characteristics of the five mid-varieties; Eureka, First Blush, Splash, Masena and Eureka Gold.

	Avg. Berry Weight (g)	Avg. Berry Size (mm)	Brix (°Bx)	Firmness (% durofel)
Splash	2.5	18	17	73
First Blush	2	17	13	71
Eureka	3	19	13	67
Masena	2.5	17	14	67
Eureka Gold	3.5	20	13	82
Eureka Maxx	4.5	23	14	70

# Appendix 3

## Late Season Varietal Summary

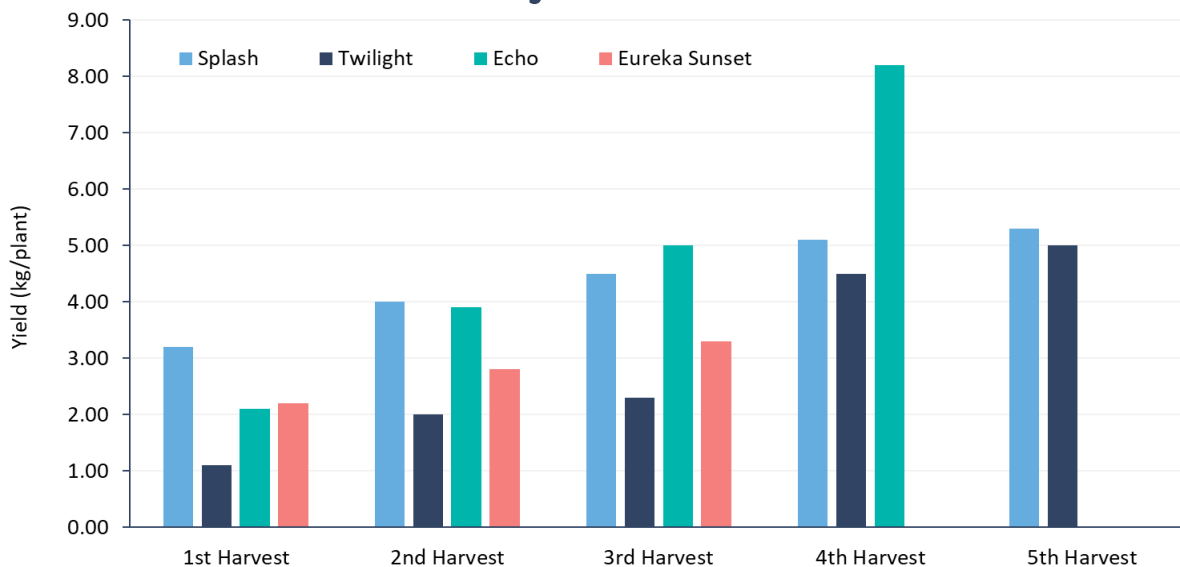


Figure 33. The yield comparison of the four late varieties; Splash, Eureka Sunset, Twilight and Echo.

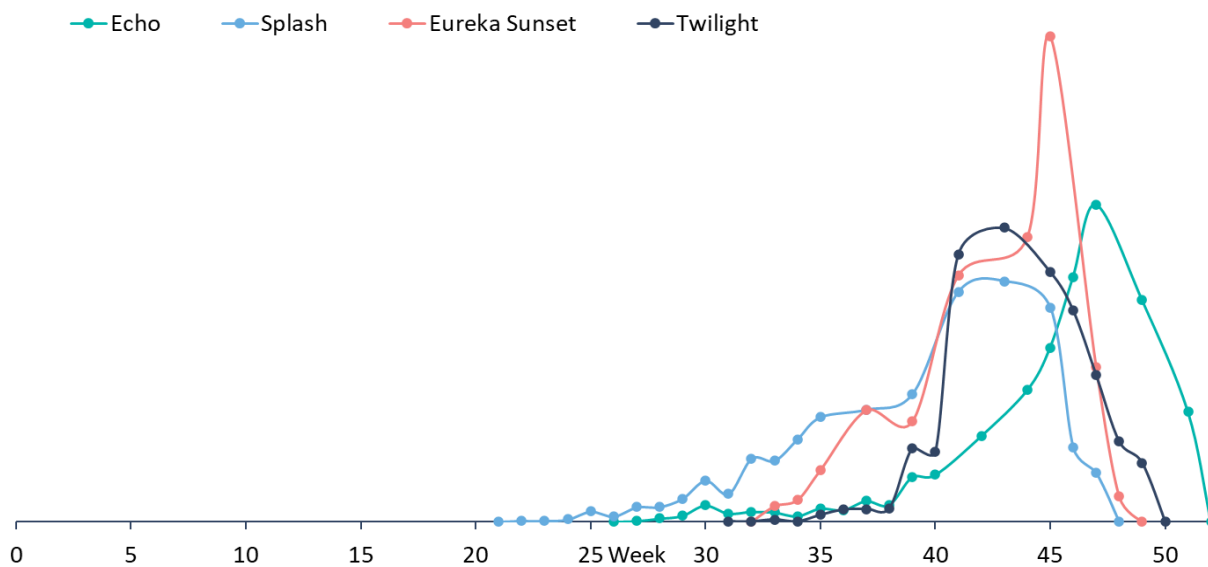


Figure 34. The comparison of harvest timing of the four late varieties; Splash, Eureka Sunset, Twilight and Echo.

Table 12. The pollination matrix showing the compatibility of the four late varieties; Splash, Eureka Sunset, Twilight and Echo.

		Male			
		SPLASH	EUREKA SUNSET	TWILIGHT	ECHO
FEMALE	ECHO	100%/1.2 g.	100%/1.2 g.	100%/1.5 g.	95%/1.2 g.
	TWILIGHT	64%/3.2 g.	98%/2.3 g.	90%/2.6g	95%/1.8 g.
	EUREKA SUNSET	83%/4.9 g.	100%/1.5 g.	80%/3.3 g.	86%/3.3 g.
	SPLASH	75%/2.6 g.	97%/1.9g	93%/3.0g.	100%/3.0g.

Table 13. The berry quality characteristics of the four late varieties; Splash, Eureka Sunset, Twilight and Echo.

	Avg. Berry Weight (g)	Avg. Berry Size (mm)	Brix (°Bx)	Firmness (% durofel)
Echo	3.5	20	12	68
Twilight	3	19	12	60
Eureka Sunset	3	19	13	72
Splash	2.5	18	17	73

# Appendix 4

## Complete Summary Data

Table 14. Harvest window summary of MBO's Early, Mid and Late season varieties.

	May				June				July				August					September					October					November					December				
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52			
Inicio																																					
Opi																																					
Dazzle																																					
Eureka Sunrise																																					
Masena																																					
Eureka																																					
First Blush																																					
Eureka Gold																																					
Eureka Maxx																																					
Splash																																					
Eureka Sunset																																					
Twilight																																					
Echo																																					

Table 15. The pollination matrix showing the summary of the combined compatibility of MBO's Early, Mid and Late-season varieties.

		MALE												
		EUREKA SUNRISE	DAZZLE	INICIO	OPI	MASENA	EUREKA	FIRST BLUSH	EUREKA GOLD	EUREKA MAXX	SPLASH	EUREKA SUNSET	TWILIGHT	ECHO
FEMALE	EUREKA SUNRISE	83% / 3.2 g.	87%/3g.	93%/2.2 g.	90% /3.1 g.									
	DAZZLE	94%/2.6 g.	54%/1.9g.	93%/2.2 g.	94%/1.4 g.									
	INICIO	100%/3.4 g.	96%/2.0 g.	81%/4.1 g.	99%/4.3 g.									
	OPI	TBA	68%/1.6g.	91%/2.6 g.	97%/1.7 g.									
	MASENA					93%/2.5g	21%/1.9 g.	43%/2.5 g.	100%/2.9 g.	TBA	100%/3.2 g.			
	EUREKA					78%/4.1 g.	47%/2.5 g.	100%/4.5 g.	TBA	100%/3.5 g.	75%/2.3 g.			
	FIRST BLUSH					84%/2.2 g	100%/2.2 g.	86%/1.8 g.	92%/2.6 g.	100%/3.1 g.	80%/2.4 g.			
	EUREKA GOLD					53%/4.1 g.	TBA	61%/3.1g.	99% /3.5 g.	TBA	43%/2.2 g.			
	EUREKA MAXX					100%/2.6 g.	64%/4.4g.	84%/5.0g.	TBA	100%/4.5g	97%/3.6g.			
	SPLASH					99%/2.7 g.	100%/3.0 g.	82%/2.0 g.	100%/2.3g.	98%/2.4 g.	75%/2.6 g.	97%/1.9g	93%/3.0g.	100%/3.0g.
	EUREKA SUNSET										83%/4.9 g.	100%/1.5 g.	80%/3.3 g.	86%/3.3 g.
	TWILIGHT										64%/3.2 g.	98%/2.3 g.	93%/2.9g	95%/1.8 g.
	ECHO										100%/1.2 g.	100%/1.2 g.	100%/1.5 g.	95%/1.2 g.



# Elite Selections

## M18-73-01

M18-73-01 is one of the elite selections currently under commercial trials at Mountain Blue. Selected in 2018, M18-73-01 is being trialled as Mountain Blue’s next generation early variety with very large fruit size, strong bloom, sweet flavour, strong primocane nature and a very firm and crunchy berry texture. The plant is vigorous and suitable to machine harvest, the structure can be upright/whippy, so tipping is necessary. M18-73-01 is considered self-fertile through pollination testing.

Table 16. The Berry quality characteristics of M18-73-01.

Average Berry Weight (g)	3.3
Average Berry Size (mm)	20.2
Brix (°Bx)	14.6
Firmness (% Durofel)	73.82
2 <sup>nd</sup> Harvest	3.3kg/plant

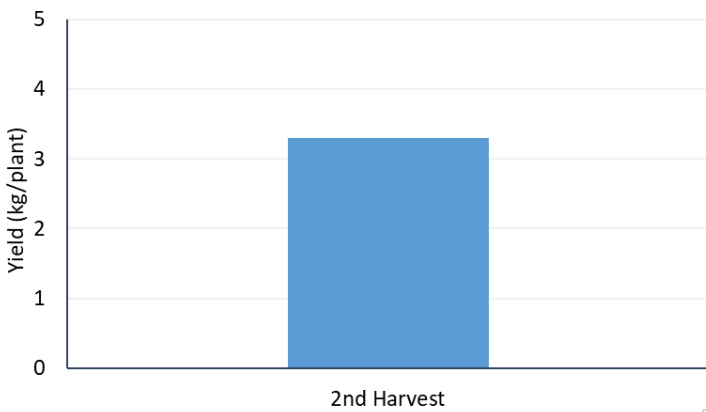


Figure 35. The average 2<sup>nd</sup> harvest of M18-73-01.

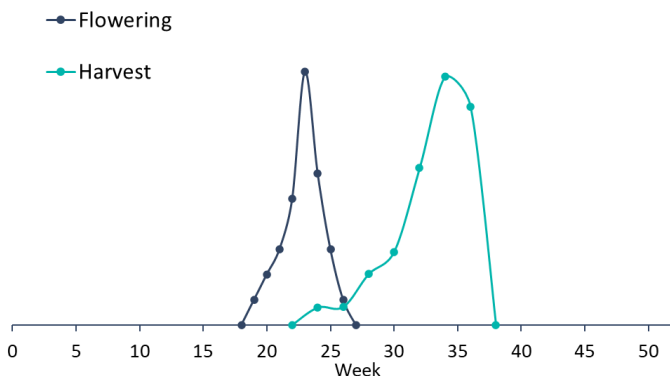


Figure 36. Flowering and Harvest distribution of M18-73-01.

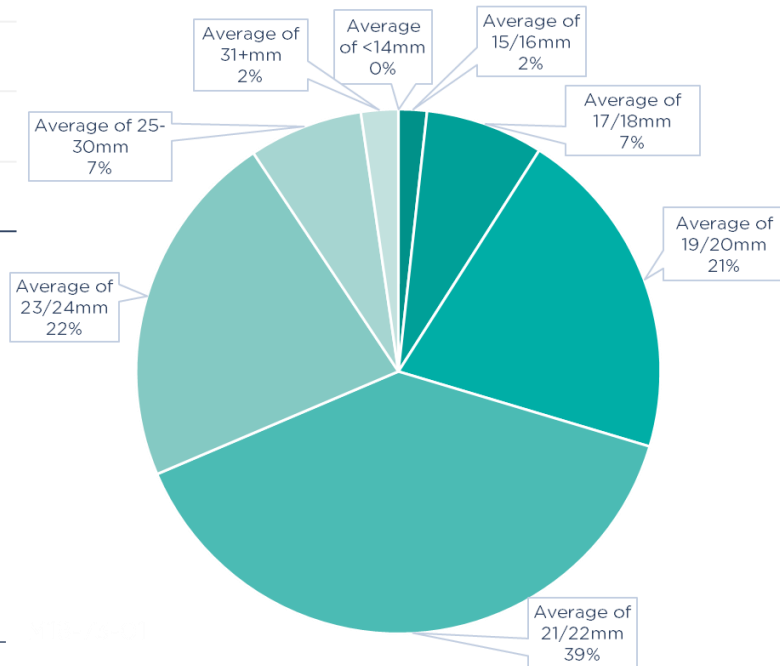


Figure 37. Fruit size breakdown of M18-73-01.



## M19-49-01

M19-49-01 was selected in 2019 and is the most recent elite selection under trials at Mountain Blue. An offspring of *Eureka Sunrise*, this selection was selected for its large fruit, strong crunch, dense texture, and unique flavour. *M19-49-01* is an early-season selection with a semi-upright and vigorous growth habit and the ability to primocane. Preliminary pollination trials show M19-49-01 to be considered moderately self-fertile with further testing underway.

Table 17. The Berry quality characteristics of M19-49-01.

Average Berry Weight (g)	2.5
Average Berry Size (mm)	18.9
Brix (°Bx)	15.3
Firmness (% Durofel)	92.5

