

grower solutions

melon update



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new genetics new market standards

by Damon Atkinson - Technical Sales Manager, South Queensland 0409 722 172

Lefroy Valley's seedless melon range has expanded to incorporate new genetics that are changing benchmarks in the Australian watermelon market. Since **Royal Armada's** limited commercial seed release last season, this outstanding variety has been a great success story for growers all over the country.

In Queensland, Royal Armada has shown superior results against traditional varieties. Its advantages over past traditional standard types are outstanding yield, presentation, internal flesh quality and firmness which are second to none. Royal Armada provides the consumer an eating sensation that sets a new benchmark for seedless watermelons.

In the United States, with their advanced fresh cut market, Royal Armada is proving to be a top performer because of its superior flesh density, flesh colour and high sugars. This high flesh density provides greater ability for the flesh to hold together and transport longer distances exceptionally well. Royal Armada also produces only very small and reduced numbers of immature white seeds. This is an important feature as the immature white seeds found in seedless watermelon generate ethylene production which reduces flesh quality and shelf life. Royal Armada offers significant genetic improvements in this trait which benefits growers by delivering better flesh quality and shelf life.

Royal Armada has proven itself in Emerald, Chinchilla, Bundaberg, Bowen, St George, Victoria and W.A. and is now "the one to beat" in the market today. The table below provides an indication of the success that Royal Armada has achieved over 2 years in a range of seasons and areas. This variety is a must to grow/trial for all quality conscious seedless watermelon growers. For more information contact your local area representative, to secure your seed for this coming season.

Other proven favourites

Dragon Heart and **Pinto** have both excelled in the hottest growing periods. Dragon Heart has a solid dark rind that produces fruit 8 to 10 kg in size, with exceptionally high yields recorded in the heat and in sandy soils. The dark rind and bright red flesh provide an eye-catching display for supermarket shelves.

Pinto has a similar rind colour to "Redback", and has recorded outstanding results in the warmest growing slots. Pinto will achieve weights up to 12 kg and has great flavour, with excellent uniformity particularly with wider plant spacings.

New genetics in Lefroy Valley's seedless watermelon range is leaving a fantastic taste in consumers mouths and improved profits for growers "That's what a Watermelon should taste like!"



A healthy harvest of Pinto with Savage as pollinator.



Royal Armada



Pinto

ROYAL ARMADA - TRIAL RESULT SUMMARY

AREA	HARVEST DATE	FRUIT AVE. WT (kg)	FLESH DENSITY RATING	GROWER SCORE COMPARED TO STD.	GROWER COMMENT
Kununurra	23-Jun-03	8	10	7	Outstanding quality
Rockhampton	04-Nov-03	7 to 10	7	7	Improvement on std
Bundaberg	11-Dec-03	6 to 7	7	3	Smaller than std
NSW	04-Feb-04	7 to 10	7	7	Larger fruit better yield then std
N.Vic	19-Feb-04	8 to 12kg	7	5	V. Similar to std. but better flesh density
Texas	14-Apr-04	12kg	7	7	Best flesh quality - large fruit
Emerald	26-Apr-04	6 to 7kg	7	5	High PM pressure but best flavour & texture
Bowen	11-May-04	9 to 10	7	7	Best size & yield in trial
Emerald	12-May-04	8 to 10	7	7	Better flavour & internals than std
Bowen	17-May-04	12	7	7	Best in trial - largest size best internals
Bowen	17-May-04	9	7	7	Cuts best slightly later maturing
Bowen	01-Jun-04	8	7	5	Great flavour & texture
Bowen	15-Jun-04	9	7	7	Best flesh quality - no cracks
Kununurra	16-Jun-04	7.7	7	7	Good yield best internals
Broome	16-Sep-04	7 to 9	5	5	Some squarish fruit - some internal cracking
Lowood	18-Nov-04	8 to 10	7	7	Best in planting
Bundaberg	23-Nov-04	10	7	7	V. crispy flesh - much less internal cracks than std
Mandura	14-Jan-04	10	7	7	V. good yield & size
NW Vic	09-Feb-05	10	7	7	Good size & yield - will go comercial
Chinchilla	09-Feb-05	10 to 12	7	7	Outstanding internals - good size
Chinchilla	14-Feb-05	10	7	7	2-3 days later than std. good size & yield
Chinchilla	22-Feb-05	9 to 11	7	7	Handled heat well. no hollowness, good firmness
Chinchilla	28-Feb-05	12	7	7	Better than std. cuts v. well. less white seeds
Chinchilla	16-Mar-05	11	7	7	Good internal quality & yield

SCORING INTERPRETATION

- 10 - Vastly superior to standard
- 7 - Superior to std.
- 5 - Equal to std.
- 3 - Inferior to std.
- 1 - Vastly inferior to std

great performers in the market

By Ruth Wiadowski - Technical Sales -
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This season many major commercial rockmelon varieties for Northern Victoria/Southern NSW were discontinued making it an important screening season for many growers.

SoSweet was trialled extensively in all areas with mixed success. In all cases it produced outstanding taste and brix, vigorous plants and high yield. The variety achieved mixed acceptance from growers with some resistance to non-slip melons. SoSweet remains a specialty line for the main season in this market.

Portola is a full netted variety grown in this region early, for its firmness, size and yield. This variety is no new kid on the block but is adapted to growing in cloches and provides surprisingly high yields for this early market.

MEL 1813 has performed well as a fully netted melon for midsummer for the past two years. Semi commercial planting and more extensive trials will be carried out this coming season. Contact us if you want to trial this exciting new variety.

In the watermelon market Royal Armada has performed outstandingly with its

flavour yield and internal solidness. Pinto has also performed well, with its rind colour meeting market preference. Pinto is best suited for the hot season and will be the variety of choice for a number of growers in the coming season.



Portola



MEL 1813

Measure high flavour

The following important points should be remembered to ensure accurate results when using a refractometer.

1. The refractometer should be calibrated using a drop of distilled water. At calibration the shaded portion viewed through the eyepiece should measure 0.

2. There is definite variation in sugar content within a melon especially as ripening develops. There are several testing methods used but the International Standard is pulp from the middle of the flesh from an equatorially cut melon. Sugar levels develop faster around the cavity, compared to flesh close to the rind.

A clear line on the refractometer reading is an indication of the presence of simple



Refractometer

sugars. A more blurred line shows the presence of more complex sugars - which is often an indication of high flavour.

Gourmet melon breeders in the USA tell us that there are up to 20 complex molecules that they have identified that contribute to high flavour in melons.

by Peter Mullins - National Product
Manager 0419 940 087

Update from Western Australia & Northern Territory

by Allan MacKinley - Regional Sales Manager -
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The past season has been a difficult one for growers to produce consistent quality, mainly due to the erratic weather through the summer. There was a definite shortage of hot weather and many cool nights, which effected most varieties from the North to the South. In March summer finally arrived and some good yields and quality were finally achieved.

Bacterial rind necrosis occurred throughout the area and was found in most varieties. It is thought that this disorder is caused by the bacteria *Erwinia*, how and why it occurs is not known, but it is an increasing phenomenon in most water melon production areas around the world. Rind necrosis seems to occur more in some varieties than others, and incidence is encouraged by extremes in weather conditions.



Growers are encouraged to monitor Calcium and Boron levels and keep them in the optimum range.



Dragon Heart is still a favourite for the West Australian market. This variety presents well on the supermarket shelf and demonstrates superior shelf life to market agents.

Royal Armada has performed well with many growers in all growing areas, showing excellent yield combined with increased size and outstanding internal fruit quality.

Demand for seed is growing as growers see the advantages of this variety.

Prices have been reasonable throughout the season, but growers who had fruit late in the Southern season were getting strong prices.

West Australian growers need to place their orders well in advance to ensure that sufficient seed is available for them. Bear in mind that with increased bio-security at our ports it can take up 8 weeks to import seed.

**Order now to
avoid shortages!**



SoSweet

Effective cold storage of SoSweet

Cold storage is an art and often defines the quality of the end product. The appeal of an outstanding fresh product becomes rapidly tarnished if it does not have shelf life or it breaks down in storage. The sensitivity of the variety or type of fruit must be considered, the rapid removal of field heat must be taken into account, and Relative Humidity (RH) should also be monitored and boosted to optimum levels. Ethylene removal and Controlled Atmosphere storage transport is another key component.

Standard rockmelons can be stored from 2° to 5°C. The riper they are, the less prone they are to Chilling Injury (CI).

Generally they are stored at 4°C at 85-95% RH. Honeydews are far more sensitive to CI, and should only be stored from 7 to 10°C at 85-95% RH.

SoSweet because of its European "blood," falls into the range required by Honeydews. The removal of field heat is important - and the sooner the melon centres are reduced to 10°C the easier it will be to maintain quality for the rest of the storage time. Thereafter, temperatures should be in the range of 9 to 12°C with RH boosted to 85-95%, compared to ambient humidity.

SoSweet should be picked at an earlier stage of ripeness than standard melons and as such are more

susceptible to chilling injury soon after harvest.

CI symptoms are the black-ening of the sutures, pitting of the rind and then surface decay.

At this stage they should be stored with temperatures at the higher end of the range. As ripening advances the temperature may be reduced if storage life is to be extended even further.

Once the fruit is fully ripe, generally by this time at the consumer, it can be stored at normal fridge temperatures without any CI.

This is very important information for distant growers who place a great deal of emphasis on removing field heat and then maintaining the cold chain throughout the delivery process over long distances.

If SoSweet are packed together with standard rockmelons and stored and transported at 4°C - they will show Chilling Injury. They will perform much better when stored and transported under their own optimum conditions or alternatively, with Honeydews.

This is also an important consideration for market agents who attempt to optimise shelf life, but would also like to deliver the highest quality product to the consumer.

by Peter Mullins - National
Product Manager 0419 940 087

Field days at Chinchilla



Warren Ford of Lefroy Valley - Queensland,
holding Mini Belle seedless watermelon



Savage

What a great few days the Chinchilla melon festival was earlier this year! Congratulations to this years organisers who did a great job, well done!

The melon variety field day held on Fred and Cameron Turners property displayed a well grown trial and certainly there were many people who came to see the trials. Growers from across the country as far away as Northern Territory, North Queensland, Cowra and WA attended as well as a number of local Chinchilla growers.

Stand out performers on the day were seedless watermelon Royal Armada which many growers came to see. The new mini seedless lunch-

box melon "Mini Belle" also attracted the interest of many growers. The new pollinator watermelon "Savage" also performed well in the trial with many growers requesting trial seed to plant in their own regions.

Savage is a "Red Tiger" type seeded melon featuring low incidence of bottle necking and distinctive dark green markings. Fruit are approx. 10-12kg and each end of the fruit has a strong blocky shape.

"Dragon Heart" seedless melon again proved why it has a place in the market with good fruit size and quality. This variety performs consistently in the warmer season planting period.



Pictured from left: Tyson, Jayden & Brinley Young of Dululu, Queensland.

Disclaimer: Lefroy Valley carries out stringent trialing throughout Australia/New Zealand prior to releasing varieties into the market place. We strongly recommend that all varieties be trialed under your growing conditions prior to commercial sowings taking place. For details of up to date trial results in your area please contact Lefroy Valley. Above information is valid 12 months from publication date. All cultural and descriptive information is supplied in good faith, as a guide only. Varietal performance is influenced by many variables, namely climatic, soil conditions, cultural and management practices. No liability will be accepted by Lefroy Valley or its representatives as to final performance based on this information.



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