



# POMEGRANATE

Growing in Australia

# POMEGRANATE GROWING IN AUSTRALIA

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## Climate

Pomegranates prefer a Mediterranean climate which is preferably frost free with cold wet winters and hot dry summers.

Pomegranates are deciduous in this climate and will repeat flower allowing for a crop even in the event of a late frost.

Pomegranates are able to tolerate extreme conditions ranging from winter snow in its natural environment through to extreme summer temperatures and still produce commercial yields.

## Water and Irrigation

Reliable volumes of irrigation water is needed to successfully grow Pomegranates. At maturity up to 8 ML/Ha (locality dependent) will be required.

Pomegranates are a salt tolerant crop and with good management will produce with total salt levels up to 4.0 dS/m.

Professional irrigation design is recommended. The suggested system is a double drip line with low output, pressure compensating drippers incorporated in line at 50cm centers.

The system requires quality filtration, flushing mains and fertigation capacity.

# GROWING OVERVIEW

## Soil

Pomegranates will grow in most soil types however it is preferable to select a site that drains freely (ie not prone to waterlogging).

Ideally the site will not contain high levels of salt and be ph neutral to slightly acid.

## Site preparation and Planting

Site and pre planting preparation is essential for a successful orchard.

Planning roadways and irrigation infrastructure in conjunction with the planting area allows for optimization of row lengths, irrigation runs and material movement throughout the life of the orchard.

Soil testing, drainage plans, deep ripping of planting line, addition of aged compost, banking of planting line are all items to consider.

Recommended spacing for Pomegranates is a 5 meter row width with 3m tree spacing which equate to 660 trees per Ha.

# GROWING OVERVIEW



## Lewis Horticulture trial planting

Wonderful Elite 119

4 months after planting

Note trial with overhead wire and  
no tree guard

Have learnt from this experience

Overhead wire is not needed  
Tree guard is needed

# GROWING OVERVIEW



## Site preparation and Planting continued

Trees should be supported at plant out with a single stake and protective tree guard. Pomegranates are herbicide sensitive and care should be taken with application.

Weed prevention practices are strongly recommended.

Planting into a fertile (pre plant fertilizer based on soil reports), weed free and moist planting line with working irrigation system is recommended for best plant out results.

It is recommended to install soil moisture monitoring equipment throughout the orchard to allowing for irrigation volumes and application timing to be adjusted to suit the orchards demands.

A fertilizer program utilizing a combination of granular, foliar and liquid applications that is site specific should be developed.

This program will promote strong vegetative growth during the establishment and development of the orchard before promoting fruit production as the trees mature.

# GROWING OVERVIEW



## Orchard establishment

During the first 12 months single leader training is recommended and sucker control will be required.

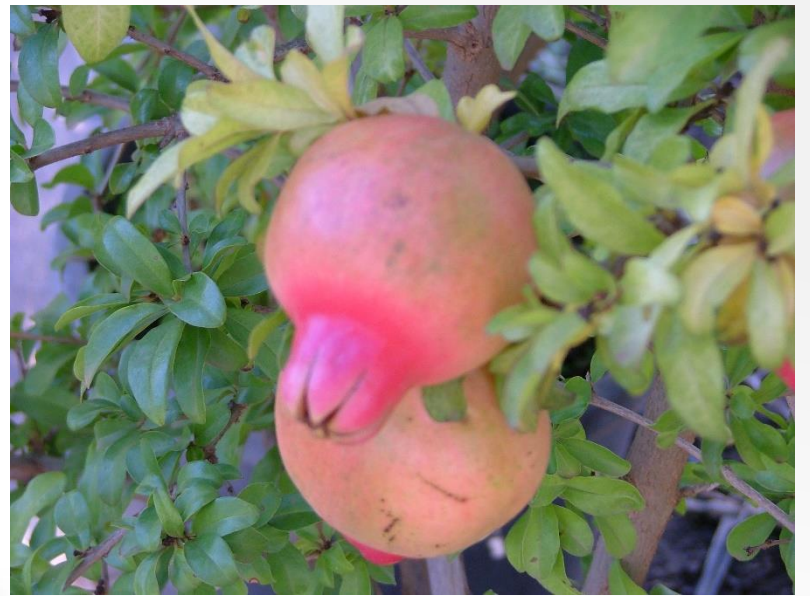
As the tree develops progressively remove suckers to a height of 30 – 50cm above ground level. Once achieved aim to develop a vase shaped tree with 3-5 main branches and maintain a clear base.

Random flowering is likely to occur during the first 12 months following planting, this is unlikely to produce a commercial crop, however it provides an opportunity to understand the fruit development process, refine techniques and prepare for the commercial production that will follow.

Some growers choose to remove these early flowers permitting improved vegetative growth of the tree.



# GROWING OVERVIEW





## Commercial fruit production

With correct planning, varietal selection and management commercial production can commence after 2 winters in the ground.

Once commercial production commences it will approximately double each season until full production is reached in around Year 7.

All growing practices are targeted to maximize the number of first grade fruit in the 300 – 400 gram size.

First grade fruit will have bright red full coloration of outer skin, be relatively free of blemishes and internally the arils will be deep ruby red with a brix level range for early season of 14 rising to 16 – 18 for late season and juice fruit.

Achieving this will require ongoing management of Irrigation, Nutrition, pests and diseases (Fruit Fly, Mites, Grubs, Alternaria) tree canopy and fruit thinning.

Some premium growers choose to grow their trees under protective netting to improve growth, fruit size and quality.

# GROWING OVERVIEW



Wonderful Elite 119 at Lewis  
Horticulture's Buckland Park trial  
planting

Planted November 2006

Photo March 2008

16 months post planting

# GROWING OVERVIEW









# ECONOMIC ANALYSIS

## POMEG-TECH

- Leading Israeli consulting company
- 2010 report found the following based on a best practices 100 Hectare planting in Israel
  - Year 1 and 2 are investment period
  - Cumulative Net Present Value surpasses within 7 years the investment 3.6 times.
  - Year of return on the investment is approximately 5 years
  - The Internal rate of return is over 50% within a period of only 7 years

## AGRIFUTURES AUSTRALIA REPORT MAY 24, 2017

- Less than 1.25% of world Pomegranate fruit production occurs in the Southern hemisphere.
- Of this 1.25% of world production Australia produces only 2% of that 1.25%.
- Global demand in the first decade of the 2000's doubled every 3 years significantly exceeding supply.
- Australia's counter cyclic production is a massive export opportunity.
- In 2013 Saudi Arabia markets were paying the equivalent of AU\$11,000 per tonne of fruit for out of season Pomegranate







# MARKET OVERVIEW

## Australian Market Current Overview

- Imported US fruit supplies local market from October to December approx. 4 – 6000 Tonne first grade fruit. Approx price of \$6 / kg.
- Australian supply fruit from January to October – supply normally exhausted by June.
- Local fruit supply insufficient for national major chains. Significant opportunity for volume, consistent producer.
- Value add opportunities significant.
- Juice and beverage opportunities significant.

## Export Market Current Overview

- Opportunity to export out of season fruit into established Northern hemisphere markets.
- Quality, disinfested fruit can be stored in long life packaging for 4 – 6 months.
- Asian markets continues to grow and has significant opportunities for fresh fruit.
- Main barrier to entry of major export market is sufficient supply of consistent volume of quality fruit.



# MARKET OVERVIEW

Available	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec
Australia												
Chile												
Egypt												
India												
Iran												
Israel												
Sth Africa												
Spain												
USA												

Source : Internet 828 market place "Pomegranate Marketing – Traditional skills for the future" CIHEAM, Alicante 1990

# WHY PARTNER WITH LEWIS HORTICULTURE

## **Australian proven Commercial production varieties**

Range of field tested varieties offering early, mid and late season maturation ideal for fresh fruit and juice markets domestically and internationally.

## **Production capabilities and capacity to meet your projects needs**

Experienced in delivering projects on time and full. All production happens on site. From mother stock, propagation, growing and field hardening, your crop is under our care at all times. Substantial growing areas allow for significant orders to be fulfilled.

## **Experienced in delivering on time and in full**

Having been established since 1973 we have the experience to ensure your project is successful. Mechanised plant handling throughout the nursery ensures even the largest orders can be shipped efficiently and on time.





Young  
Pomegranate  
trees growing at  
Lewis Horticulture



# WHY PARTNER WITH LEWIS HORTICULTURE

## Australian proven Commercial production varieties

### Wonderful Elite 119

Original Genetics – Imported as elite stock from an accredited nursery in Israel

Fruit Appearance

External – Fire engine red with creamy background when ripe

Internal – Ruby red arils. Produce deep pink juice

Harvest timing – Mid season ripening variety.

Fruit crop profile – High cropping variety producing medium to large fruit. Excellent fresh fruit and juice variety.

Flavour profile – Fruit and juice is a sweet / sour profile.

Storability – Excellent storability due to thick outer skin

General comment – Most commonly planted commercial variety internationally due to its early commencement of commercial cropping, heavy crop loads at maturity, desirable appearance, flavour profile and storability.





# WHY PARTNER WITH LEWIS HORTICULTURE

Acco 128

Original Genetics – Imported as elite stock from an accredited nursery in Israel

Fruit Appearance

External – Fire engine red with creamy background when ripe

Internal – Soft seeded Pink / red arils. Produce deep pink juice

Harvest timing – Up to 8 weeks earlier than Wonderful Elite 119.

Fruit crop profile – Medium to High cropping variety producing medium to large fruit. Excellent fresh fruit and juice variety.

Flavour profile – Fruit and juice is a sweet / sour profile.

Storability – Excellent storability, nearly as good as Wonderful Elite 119. Has slightly thinner outer skin.

General comment – Fantastic early season variety producing fruit with all of the key attributes being sought by the market – size, colour, flavor and yield.



# WHY PARTNER WITH LEWIS HORTICULTURE

## Wonderful Elite 116

Original Genetics – Imported as elite stock from an accredited nursery in Israel

Fruit Appearance

External – Fire engine red with creamy background when ripe

Internal – Ruby red arils. Produce deep pink juice

Harvest timing – 2 – 4 weeks earlier than Wonderful Elite 119.

Fruit crop profile – Medium to High cropping variety producing medium to large fruit. Excellent fresh fruit and juice variety.

Flavour profile – Fruit and juice is a sweet / sour profile.

Storability – Excellent storability due to thick outer skin

General comment – Early season variety with very similar attribute to Wonderful Elite 119. Slightly lower cropping levels, desirable appearance, flavour profile and storability.





# WHY PARTNER WITH LEWIS HORTICULTURE

- Trees supplied are container grown providing better establishment and earlier cropping than traditional bare root produced trees.
- Due to superior, uncut root system yields are earlier and heavier.
- All varieties are produced on their own roots to ensure uniformity of genetic material for your orchard.
- All plants are produced from productive, mature cuttings ensuring the earliest commencement of cropping.
- All production methods follow worlds best practice for hygiene and disease control.
- Registered for export to all Australian states and territories.
- All trees are supplied field hardened and suitable for planting all year round with a correctly designed irrigation system.
- Trees are grown in 1.5L, variety specific coloured pots ensuring quality root system and genetic accuracy.
- Supplied trees have a canopy in balance to the root system meaning a tree of around 50cm tall will be provided allowing for optimal plant out in your orchard.

# CONTACT DETAILS

Field hardened planting stock



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