

# AUSTRALIAN LYCHEE INDUSTRY GRADING GUIDE

**HARVEST FRUIT THAT IS MATURE AND FIRM WITH A GOOD COLOUR (RED OR PINK SKIN) OR THE COLOUR OF THE VARIETY. FRUIT SHOULD BE HYDRATED TO PREVENT BROWNING AND COOLED BETWEEN 5°C AND 10°C FOR TRANSPORTATION.**



## GRADING FOR PREMIUM, EXPORT AND FIRST GRADE FRUIT:

- Fruit should be clean with no pulled stems or stings
- Fruit should have minimal dark blemish - no more than 5% dark blemish over entire fruit
- Fruit surface should have no more than 25% of light blemish, silvering or light browning
- The skin colour should be typical of the variety of fruit being harvested
- The fruit surface should have no more than 25% of yellowing
- Fruit must be at least 30 mm diameter across the widest part of the fruit (refer to diagram)
- Small seeded varieties should be at least 25 mm diameter across the widest part of the fruit (refer to diagram)

## GRADING FOR SECOND GRADE FRUIT:

- Fruit should be clean with no pulled stems or stings
- Fruit should have no more than 10% dark blemish
- Fruit surface should have no more than 50% of light blemish, silvering or light browning
- The skin colour should be typical of the variety of fruit being harvested
- The fruit surface should have no more than 50% of yellowing
- Wai Chee must be at least 30 mm diameter across the widest part of the fruit (refer to diagram)
- All other varieties should be at least 25 mm diameter across the widest part of the fruit (refer to diagram)

## SIZING-DIAMETER OF FRUIT FOR GRADING



< width >  
30 mm & 25 mm  
(refer to grading specifications)

## MINOR OR OTHER DEFECTS

**FLATID** - Fruit badly infested from Flatid egg mass, nymphs on fruit or fruit blemished with the black sooty mould may be unsaleable and rejected at the packing stage. (Fruit with light infestation may be successfully scrubbed & cleaned prior to packing and graded accordingly)



**SOOTY MOULD** - Sooty mould is a fungus that grows on the sugary secretions produced by scale, mealy bug or flatid insects. The dark mould should be scrubbed & the fruit cleaned prior to packing. (The sooty mould should be graded as a dark blemish)



**WIND RUB OR ABRASION** - The visual appearance or skin of the lychee fruit can be damaged by leaves, twigs and other fruit rubbing during windy conditions. (The fruit is still saleable but the skin damage should be graded as a light or dark blemish)



**LIGHT BROWNING & SILVERING** - Light browning or silvering on the skin of the lychee fruit is caused by hot dry weather and more common on Kwai Mai Pink and Tai So. (The fruit is still saleable with the fruit being graded as light or dark blemish)



**PEPPER SPOT** - Pinhead-sized black lesions (about 1 mm in diameter) appear on the surface of the fruit, usually across the shoulders around the stem end. In severe cases, the spots may merge to cover the surface of the fruit. The Kwai Mai Pink lychee variety appears to be more susceptible to Pepper Spot damage especially if grown in wetter, humid coastal areas. Pepper Spot damaged fruit can be graded at time of packing although only very minor dark blemish (less than 5% solid or scattered) would be acceptable in Premium, Export or First grade cartons. (Fruit with no more than 10% would be acceptable in Second grade cartons)



**ALL MAJOR DEFECTS ARE TO BE REJECTED DURING THE GRADING PROCESS WITH MINOR OR OTHER DEFECTS BEING GRADED ACCORDINGLY USING THIS GUIDE. A 2% MARGIN IN PREMIUM/FIRST GRADE & A 5% MARGIN IN SECOND GRADE OF MINOR OR OTHER DEFECTS SHOULD BE CONSIDERED ACCEPTABLE.**

## MAJOR OR REJECTED DEFECTS

**PULLED STEM** - Harvest fruit with a small part of the stem intact. If the stem is pulled off, the skin will tear and the fruit will lose moisture and dehydrate. (Fruit is not suitable for sale and should be rejected prior to packing)



**MACADAMIA NUT BORER** - The Macadamia Nut Borer larvae bore through the skin and into the seed of the lychee. The entry point can be found on the shoulder or near the peduncle of the fruit. Mature fruit damaged by macadamia nut borer may weep and stain other fruit. (Fruit is not suitable for sale and should be rejected prior to packing)



**FRUIT PIERCING MOTH STING** - The Fruit Piercing Moth will damage fruit by piercing small circular holes in the skin of the fruit. Juice may squirt from the hole when the fruit is squeezed. (Fruit is not suitable for sale and should be rejected prior to packing)



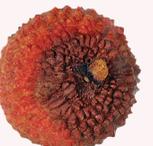
**ERINOSE MITE (ACERIA LITCHII)** - The Lychee erinose mite is a serious pest that deforms the underside of the leaves, the lychee flowers and eventually the lychee fruit. Fruit with severe erinose mite damage will be distorted with raised dark, spikey lumps. (Fruit is not suitable for sale and should be rejected prior to packing)



**ANTHRACNOSE FUNGI** - The Fungi will cause round, dark brown to black lesions on the surface of the fruit and will penetrate the fruit flesh. (Fruit is not suitable for sale and should be rejected prior to packing)



**STEM-END ROOT** - The fungus appears as browning of the skin at the stem end of the fruit and will rapidly spread. (Fruit is not suitable for sale and should be rejected prior to packing)



**SPLIT FRUIT** - Fruit splitting on trees occurs due to extreme weather conditions and uneven or inadequate watering. After harvest, care is needed when handling the fruit as dropping the fruit will result in the skin of the fruit splitting. (Split fruit is not saleable and should be rejected prior to grading & packing)



**GREEN SHIELD SCALE** - The eggs from the female green shield scale insect are small and yellow and can be easily confused with mealy bugs. The young stages of the scale are green. (The scale needs to be rejected in Premium, Export or First grade cartons. For second grade, it may be possible to clean the fruit prior to packing and grade accordingly)



**GROWERS SUPPLYING PREMIUM GRADE FRUIT TO WOOLWORTHS, COLES, ALDI AND OTHER DIRECT SALES OUTLETS WOULD NEED TO FOLLOW THE REQUIRED GRADING SPECIFICATIONS SET BY EACH OUTLET**



**Hort Innovation**  
Strategic levy investment

**LYCHEE FUND**

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