

ANABP 01 Variety – Composite Grade Fruit Quality Specification – 2021 Season

ANABP 01 apples must meet the following minimum quality specifications to be classified as Composite Grade ANABP 01 apples.

Composite grade fruit will include all sound ANABP 01 apples which did not meet the *Premium Grade ANABP 01 Quality Specifications – 2021 Season*.

Composite grade fruit will be packed under instruction from the Licensed Marketer.

General

All ANABP 01 apples must be treated with 1-Methylcyclopropene (SmartFresh™) within 7 days after picking.

The use of DPA is **not permitted**.

Harvest Maturity Indices

Maturity Indices	Requirement
Flesh firmness	Average greater than 8.0kg at harvest (minimum 7.5kg)
Sugar content (%TSS) Brix	No more than 5% fruit less than 11 Brix

Quality Parameters After Packing

Fruit Quality Characteristics	Requirement	Tolerance	Interpretation
Eating characteristic	Free of foreign taints and foreign matter	Nil	Crisp, sweet, firm, juicy

Apple Sizing

Description	Apple Count	Carton/kg	Fruit Diameter mm
X-Large	44	12	88-90
	50	12	85-87
	54	12	82-84
Large (Market preferred)	60	12	79-81
	65	12	78
Medium (Market preferred)	70	12	75-77
	76	12	72-74
Small	82	12	69-71
	90	12	66-68
X-Small	-	-	55-65

Quality: Defect Assessment

Major Defects

Total of Major Defects must not exceed 2% i.e. maximum 2 defective apples per 100

Defect	Allowable level	Interpretation
Bruising	One bruise less than 1 cm ² per apple	Permanent or discoloured bruising
Chemical Burn	Nil	
Diseases	Nil	Fungal or bacterial diseases / decay
Insects	Nil	No live or dead insects
Physical /Mechanical Damage	Nil	Unhealed stem punctures, cuts, cracks or insect damage
Physiological Disorders	Nil	Bitter pit/ Tree pit, lenticel breakdown

Minor Defects

Total of Minor Defects must not exceed 40% i.e. 40 defective apples per 100

Defect	Allowable level	Interpretation
Cracks (Healed)	One crack 5 mm or less per apple. No more than 20%	May include calloused or healed calyx or stalk cavity splitting
Greasiness	No more than 40%	
Hail Marks	No more than 40%	Marks less than a total of 1 cm ² per apple
Russet	No more than 40%	Area from stem should be less than 20 mm diameter (diameter of 50c coin)
Skin Blemish	Blemish no more than 2 cm ² of surface area	Blemish doesn't detract from overall appearance of fruit
Storage disorders	No more than 40%	Shrivel, scald, flesh browning or temperature damage
Sunburn	No more than 20% with minor colour bleaching	Doesn't detract from overall appearance of fruit
Superficial Bruising	One bruise less than 1 cm ² per apple	Light flattening of skin surface

Glossary of terms

Bruising – skin marks and possible indentation of the fruit resulting from pressure; as

- **Superficial bruising** – temporary marks (not discoloured) that disappear when removed from packaging; or
- **Discoloured bruising** – dark coloured obvious indentions resulting in permanent flesh and appearance damage.

Cracks (unhealed) – any unhealed fruit or skin splitting which exposes the flesh.

Cuts – break of the skin exposing the flesh.

Defect – a permanent abnormal development of the fruit, either external or internal, caused by physiological or physical factors that impact on any stage of fruit development including at harvest and during storage.

Flesh firmness – the pressure required, measured in kilograms, to depress the flesh of the fruit (with skin removed) using an 11 mm penetrometer probe.

Fungal / Bacterial Diseases – includes Black Spot, Fusicadium and Bulls Eye Rot.

Greasiness – greasy/oily feel of the skin resulting from fruit being picked too late; with maturities too advanced or retarded.

Insect damage – any damage or defect to the external or internal parts of the fruit, caused by an insect.

Lenticels – the small dots (pores) on the skin of fruit whereby apples breathe and transpire. Apple lenticels can be distinctive and decorative and appear as raised circular or elongated areas.

Puncture – break of the skin exposing the flesh.

Residue – milky white coating that may or may not be attributed to harvest sprays and dipping.

Russet – any brown skin marks at the stem end.

Skin blemish – a superficial skin mark including mechanical injury, healed superficial skin damage or healed insect damage that will not affect storage quality of the fruit or detract from the appearance.

Storage disorders – any abnormal physiological condition which affects skin or flesh e.g. skin shrivel (wrinkling of the skin because of dehydration in storage) scald or flesh browning.

Sugar content – is the measure of the percentage of total soluble solids (%TSS) of juice extracted from the fruit using a refractometer.

Sunburn – where the fruit surface is permanently discoloured as a bronze, burnt brown or scalded white appearance; which may lead to flesh discolouration and reduce shelf life.

Date of Approval: 25 February 2021



Rohan Prince

Director,

Horticulture & Irrigated Agriculture, DPIRD