

Knowing When To Pick Your Olives *April 2001*

By Glenda Minty

LIKE all fruit, olives perform best when picked at the right time for the purpose.

Green pickling olives are best picked mature but yellow-green. Ripe and semi-ripe picked olives are picked mature and colored. But how do you tell the right ripeness and maturity?

Different varieties of olives perform best when pickled at different maturities: Barouni, a North African variety much grown in California, is easy to pickle green, but much harder to pickle when ripe.

South Australian Verdale pickle well at all stages of ripeness, but increase markedly in size from mature green to fully ripe.

Some very large table varieties, like Nab Tamri and UC13A6 (California Queen), can become very soft when pickled fully ripe, so must be processed when semi-ripe for best results.

As olives ripen, the quality of the oil within changes. Oil from unripe olives is strong, green and high in polyphenols, pungency and fruitiness, with a very good keeping ability.

Oil from ripe olives is milder, yellower and lower in polyphenols, pungency and fruitiness, with less keeping quality. After olives mature, the quantity of oil increases with ripeness, with maximum yield when fully ripe.

Oil content often appears to increase after full ripeness, but is really due to dehydration of the fruit.

As you can see these two facts cause a dilemma. Do you pick early for a high quality, but low volume of oil? Or do you pick for a lower quality, higher volume of oil?

The ripeness that gives you the highest yield with a still acceptable high quality of oil may be the point to aim for and can be called the Optimum Ripeness Point (ORP). But when do olives reach this point?

Knowing the stages of ripeness

The International Olive Oil Council (IOOC) has a standard scale for judging ripeness and maturity.
0=fully green, dull, hard flesh.

1=skin yellowy green, loss of the full green color, flesh hard.

2=skin beginning to show pink/purple/red color, flesh still firm

3=skin mostly pink/purple/red, but with some yellow/green usually at one end, flesh starting to soften.

4=skin fully colored but with flesh still fully green/cream/white.

5=skin fully colored with a small amount of pigmentation, up to 1/3, of flesh.

6=skin fully colored with flesh showing some cream/white, flesh softer.

7=skin fully colored with flesh fully colored to the pit, flesh soft and creamy.

To judge the maturity of a whole crop, 100 fruit are picked at random and sorted as to ripeness on the scale above. Each fruit of Ripeness Zero are given the value 0, each at 1 given value 1 and so forth up to ripeness 7 given the value 7. (So 50 fruit at ripeness 1=50 points and 50 ripeness 2=100 points).

The points are totalled up (50+100=150) and divided by 100 (150/100=1.5) to give the ripeness of the crop. The ripeness at which to pick your olives

It is easy to judge the ripeness for pickling as green olives are pickled at Ripeness 1, semi-ripe at late

Ripeness 3 to early Ripeness 5, and fully ripe at or after late Ripeness 6.

Olives for oil is more difficult as the Optimum Ripeness Point (ORP) varies with variety and cultivation and climate. Generally, in the European literature it has been shown by tests to be Ripeness 4 or Ripeness 5.

Olives in the North East however, seem to race from Ripeness 1 to 4 very quickly and linger before eventually moving on to Ripeness 5.

This may be in response to high levels of UV, causing the skin to “tan”.

It does mean that growers must be very sure that the fruit is actually as ripe as it appears.

Recent local extractions seem to imply that Ripeness 5 or 6 may be ORP for the main oil varieties.

Detailed research must be done to establish ORP for varieties grown in the North East.

Water content can be a problem

As was shown in the 2000 season, fruit water content over 60 per cent reduces the extractable oil as the oil and water emulsifies and becomes unextractable by mechanical means.

Zero yields can be expected when water percentages approach 80 per cent.

High water content also leads to shrivelling during pickling.

Growers need to take into account the water content of the fruit when deciding on the harvest time.

Riper fruit tend to have a lower water content, so excessive wet fruit may have to be left to pass the ORP so that there can be hope of a reasonable yield.

Growers should use the maturity index and lab testing for oil and moisture content to judge when exactly to harvest. Keep records of your experiences.