



Department of  
Primary Industries and  
Regional Development

## Journal of the Department of Agriculture, Western Australia, Series 3

---

Volume 6  
Number 6 November-December, 1957

Article 5

---

11-1957

### A guide to the harvesting of plums for export

F. Melville

J. S. Bloomfield

Follow this and additional works at: [https://library.dpird.wa.gov.au/journal\\_agriculture3](https://library.dpird.wa.gov.au/journal_agriculture3)

---

#### Recommended Citation

Melville, F. and Bloomfield, J. S. (1957) "A guide to the harvesting of plums for export," *Journal of the Department of Agriculture, Western Australia, Series 3*: Vol. 6: No. 6, Article 5.  
Available at: [https://library.dpird.wa.gov.au/journal\\_agriculture3/vol6/iss6/5](https://library.dpird.wa.gov.au/journal_agriculture3/vol6/iss6/5)

This article is brought to you for free and open access by the Agriculture at Digital Library. It has been accepted for inclusion in Journal of the Department of Agriculture, Western Australia, Series 3 by an authorized administrator of Digital Library. For more information, please contact [library@dpird.wa.gov.au](mailto:library@dpird.wa.gov.au).

## To the Harvesting of Plums for Export

By F. MELVILLE, Senior Adviser (Fruit)  
and

J. S. BLOOMFIELD, Senior Packing Instructor

**W**ESTERN AUSTRALIA is well situated geographically to supply the demand for plums on the Singapore market and over the past 10 years, a substantial export trade has been developed. Growers have found this outlet profitable, and increased plantings of suitable varieties have been made. During the 1957 season—a record export year—almost 40,000 boxes were shipped.

The export of plums is very different from local marketing in that the fruit must undergo a period of cold storage prior to and during transit, and several weeks may elapse before it reaches the consumer. Plums picked when immature will fail to ripen properly after storage, whereas forward fruit may break down in transit. This necessitates careful selection at picking time to ensure that the plums are at the best stage for handling. To assist growers in this regard, the accompanying colour plates have been prepared depicting the various stages of ripening of two of the main export varieties, namely Narrabeen and Wickson. For each variety, eight stages are shown ranging from immature (No. 1) to ripe (No. 8.)

### **NARRABEEN**

In assessing the maturity of the Narrabeen variety, firmness and ground colour are the main points to be considered. The red colour is not a good guide to maturity. Plums on the exposed portion of the tree can be red and yet too immature for harvest, whereas those in the sheltered part may fail to develop any degree of redness until too ripe for export. Fruit from trees of declining vigour will also develop more red colour than vigorous young trees.

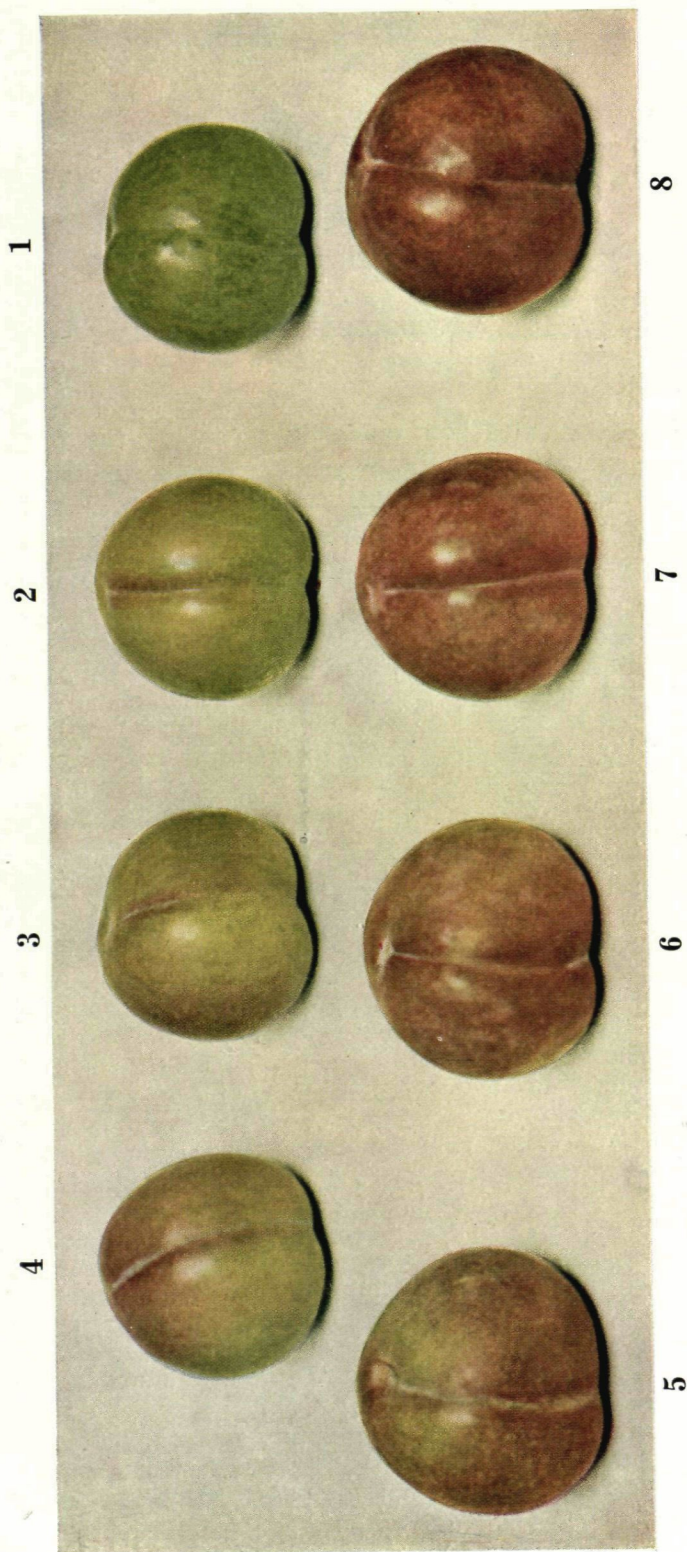
In referring to the accompanying plate, the emphasis should therefore be on changes in the ground colour rather than red. The ideal stages are 4 and 5 and as far as possible picking should be confined to this type of fruit. Stage 3 may be included only if the fruit is showing signs of losing its immature hardness or, as it is often termed, developing some "give." Care must be taken in including Stage 5 that no softening has taken place. In the Narrabeen, softening commences around the stem end.

### **WICKSON**

During ripening, the Wickson plum undergoes a series of colour changes which may be used as a positive guide in assessing maturity. Ripening takes place by a gradual diffusion of yellow into the green ground-colour commencing at the tip, spreading along the suture and finally extending to the whole fruit. As this change proceeds, a red colouration appears on the tip of the plum and gradually spreads until the ripe plum is completely red.

The optimum export picking maturity is depicted by Stage 4 in the accompanying plate. Fruit to comply with this stage of maturity should have developed a definite break in the ground-colour but still retain a considerable amount of green.





### NARRABEEN—Stages of Ripening

- 1.—Hard, green; 2.—Tinge of yellow on suture; 3.—Diffusion of yellow over half the fruit—slight give; 4.—Yellowish green—slight blush; 5.—Yellowish green—increased red blush; 6.—Yellow with green tinge—red blush; 7.—Yellow—full blush—some softening; 8.—Red—ripe



### WICKSON—Stages of Ripening

- 1.—Hard, green; 2.—Slight tip yellowing; 3.—Extension of yellowing along suture;  
 4.—General break in the ground colour; 5.—Yellowish green with yellow rib; 6.—Red  
 tip; 7.—Half red; 8.—Full red



Stage 5 shows the development of yellow along the rib of the plum while the rest of the fruit is still largely green. This stage may be included, provided the fruit is being cool stored promptly. There should be no signs whatsoever of a red tip. Where undue delay in placing the fruit in cool store is likely, due for instance to distance of transport, or when weather conditions are unfavourable during the packing period, it is preferable to pick closer to Stage 3.

The plates for both Narrabeen and Wickson plums have been prepared as a guide to growers of export plums on the

basis of experimental trials conducted over a number of years. It must be emphasised however, that if satisfactory results are to be achieved, there must be a minimum of delay from the time the fruit is picked until it is packed and delivered to the cool store. During handling operations the fruit should be kept as cool as possible.

In both the Narrabeen and Wickson varieties bleaching and yellowing of surfaces exposed to the sun may occur particularly on trees with limited foliage. This change in colour must not be confused with colour changes due to ripening.