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ENTERPRISE DEVELOPMENT

Working Party on Agricultural Quality Standards

Specialized Section on Standardization of  
Fresh Fruit and Vegetables

Forty-ninth session, 17-20 June 2003, Geneva

Item 3(d) of the Provisional Agenda

PROPOSALS TO REVISE UNECE STANDARDS  
KIWIFRUIT

Transmitted by New Zealand

**Note by the secretariat :** The following document contains information on the progress made on the updating and revision of the Standard for Kiwifruit.

**UN/ECE Standard FFV – 46**  
**concerning the marketing and commercial**  
**quality control of**  
  
**KIWIFRUIT**  
**moving in international trade between and to**  
**UN/ECE member countries**

At the 48<sup>th</sup> session, the proposal was discussed to modify the maturity requirements for the Hayward variety from a Brix value at harvest of 6.2% to a dry matter content that could be measured at any point in the supply chain and would ensure, if set at an appropriate level, an acceptable eating quality kiwifruit.

The concept was considered to be an improvement on a harvest maturity but delegations had reservations on the cost of equipment to non-distinctively measure dry matter content. Even though the cost and the size of the equipment is decreasing, there are still limitations which may not be acceptable to all delegations.

At the International Kiwifruit Organisation meeting and subsequently at the Fifth International Kiwifruit Research Conference, both held in China in September 2002, representatives of the French, New Zealand and Italian industries discussed the proposal, how to resolve the concerns of the various delegations and what would be simple, more reliable methods to ensure good eating quality fruit.

It was concluded that measuring the Brix level of kiwifruit is simple, quick and reasonably reliable. Retail customers, such as supermarkets, are providing specifications for kiwifruit which presents consumers with fruit that is mature (that is will ripen satisfactorily), is almost but not quite ready to eat and will withstand up to handling between their distribution centres and retail supermarkets. A combination of minimum Brix level measured in the distribution chain and flesh pressure within a range of levels would ensure that only reasonably mature fruit would be harvested (as immature fruit would not obtain a sufficiently high Brix level) as well as ensuring that the fruit was not unacceptably hard for consumers.

For information, Hayward kiwifruit is usually consumed at a firmness level of  $0.8 \text{ kg} \pm 0.2 \text{ kg}$  as measured with a 7.9 mm plunger on a penetrometer. Acceptable eating quality kiwifruit, as determined by numerous consumer research projects undertaken over many years by many countries, has a minimum Brix level of  $> 12$  or 12.5% Brix.

These figures have to be worked back in the supply chain for derived levels that are appropriate. The new proposal is for a flesh pressure in the range of [2 – 4] kg (as measured with a 7.9 mm decimetre plunger on a penetrometer) and a minimum Brix level of [11]%, as measured at any point in the retail chain.

The figures have been placed in square brackets because Italian and French delegates wanted to investigate the range that would occur in their 2002/03 harvesting and marketing period, as well as to look back over previous records. Unfortunately, this will not be available until mid to late April. Once this is received, a final recommendation will be made on the precise figures that could be incorporated into the revised standard. New Zealand will also look at the levels in its 2003 crop.

It is recognised that a measurement of quality at this point in the supply chain is a departure from the standard UN/ECE procedure. However it is understood that such a change is being considered for other commodity standards.

Further information will be provided as soon as it is to hand.