

Title Non-destructive and objective methods for the evaluation of the maturation level of olive fruit

Author José M. Garcia and Khaled Yousfi

Citation European Food Research and Technology 221 53-469 538-541. 2005.

Keywords Colour; Firmness; Maturity; Ripening; *Olea europaea*

Abstract

The maturation level of two olive varieties (*Olea europaea*, cvs. Arbequina and Picual) was objectively evaluated using two non-destructive methods: checking the fruit firmness using a hand densimeter, and the skin colour with a portable colourimeter. These methods were compared with the Ripening Index (RI), habitually used by olive oil industry, and based on the subjective determination of skin and flesh colour. The values of skin colour [$L^*(b^*-a^*)/100$] only monitor the olive maturation in both varieties, when the olive is losing its initial green colour, while fruit firmness is decreasing throughout the maturation process. Fruit firmness is directly related to RI and could be useful in objectively estimating the maturation level of the olives.