

**Title** Pomegranate fruit and juice color as influenced by variety and year  
**Author** Zaouay F., Ben Abda J., Mena P., Garcia-Viguer C., Mars M.  
**Citation** Abstracts of 7<sup>th</sup> International Postharvest Symposium 2012 (IPS2012). 25-29 June, 2012. Putra World Trade Centre (PWTC), Kuala Lumpur, Malaysia. 238 pages.  
**Keywords** pomegranate; colour

### **Abstract**

Color is one of the most important indicators of maturity and quality in pomegranates. This parameter is also one of the main sensory characteristics that powerfully impacts on consumer behavior. This work aimed to study the fruit and the juice color as well as anthocyanin pigmentation of four Tunisian pomegranate varieties ('Zehri', 'Rafrafi', 'Zaghouani' and 'Gabsi'). Pomegranate varieties showed differences in their total anthocyanin levels which ranged from 84.37 to 428.70 mg L<sup>-1</sup>. 'Zehri' with red-colored peel provides the less colored juice, while the variety of 'Rafrafi' had the highest anthocyanin content. The total anthocyanins were found correlated with chromatic parameters (a\* value, chroma and hue angle). In addition, positive correlation was observed between the juice visual color and color indices of CIE L \*a\*b\* which emphasize the efficiency of the grading color scale to determine the color of pomegranate juice in the absence of the CIE system. The evaluation of the stability of internal and external pomegranate fruit color over four years indicated that these characteristics were significantly influenced by variety and year. Values of regression bi coefficient indicated that 'Zaghouani' had the highest stability of skin and juice color (bi=0.68 and 0.8 respectively). These results would be a guide in the selection of potential genotypes for fresh market pomegranates.