

Abstract:

The paper analyses the ability of thin-film tactile sensors in providing information during static compression tests of 'Jonagold' apples (*Malus pumila*) of different ripeness stages. Such sensors are able to measure the contact surface and the interfacial pressure distribution during compression of fruits, this latter being characterised by suitable mathematical parameters. Results of compression tests between two flat steel plates are presented. The differentiated evolution of the pressure distribution according to the fruit maturity is pointed out. Ability of the sensor in evaluating the firmness is also discussed.