Abstract

Roundness is an important physical parameter of agricultural products that is used products, product in transport mode or storage. In one point on the curve, Radius of curvature is radius of a one of its arc coincides with curve (roundness is the reverse of radius of and developed to roundness of apples. For this purpose all diameters in every direction by a special technique. The first step was to extract the edge of apple technique in image processing. Roundness of apple was determined by image processing in two methods; all directions and that passed on each three points in the edge line three views were 74.8 mm, 74.8 mm and 74.3 method and profile factors show that measurement method doesn't has significant difference effect in 1% level was different in the three profiles. The converted to edge that passed on each three points and its number (n) were determined circles diameter circle diameter, determined. Finally, comparison of mean diameter and roundness, the confirmed that the diameter by this method is a measure for determination of roundness is a fast and accurate method that can be a suitable alternative for handy methods.