

QUALITY ANALYSIS AND CLASSIFICATION OF BANANAS USING DIGITAL IMAGE PROCESSING

SANJAY CHAUDHARY & BHAVESH PRAJAPATI

Department of CSE and IT, L.D College of Engineering, Ahmadabad, Gujarat, India

ABSTRACT

A quality inspection of banana can be done by mainly two ways: either instrumental tools or human inspectors. An interesting alternative is image processing can overcome limitations of these two techniques. Digital Image processing can classify the banana fruit with speed and accuracy. Good algorithms available in image processing which can classify banana based on their color and texture characteristics, but limitation is that they can work well on single banana. Bananas is sold in bunch of dozen and that's why it is important to analyze quality in bunch. This paper presents the technique of digital image processing to classify the banana in group or bunch with accuracy of more than 90%.

KEYWORDS: Instrumental, Inspectors, Texture, Digital Image, Dozen