Plump fruits are a vital part of the human diet giving mandatory vitamins, minerals and other health encouraging compounds. Quality assessment and finding of fruit ripeness is a major concern in agriculture business and becomes a growing research concern in computer vision. Image processing is an advanced field which led to a higher demand to reduce the high rate of errors and given more possible results. Therefore, the objective of many types of research is to standardize and reduce manual work in the classification of tomatoes ripeness. One of the most important feature of an image is color. Estimating the ripeness of fruits via color can be performed as it is the dominant feature in describing the information of the image. However, each color models have been given a different performance when used in the experiment. This paper is a survey of different techniques that are deployed over different varieties of fruit images in order to detect maturity stages for ripening, fruit region estimation and also, the effect of different color models and other features on detecting ripeness was studied in this literature survey.
References


Index Terms

Computer Science  
Image Processing

Keywords
Fruit classification, maturity detection, segmentation, classification, feature extraction. Ripeness detection.