Abstract

The Carrying out effective and sustainable agriculture product has become an important issue in recent years. Agricultural production has to keep up with an ever-increasing population. A key to this is the usage of modern techniques (for precision agriculture) to take advantage of the quality in the market. Classification of rice seeds from the bare human hands is neither cost effective nor recommended. The automatic grading for analysis of quality has become the need of the hour. This paper recommends an add-on approach to quality experts for the quality analysis of INDIAN Krishna Kamod Rice using computer vision and soft computing techniques. Computer Vision provides a grading methodology, non-destructive technique, along with multi-layer feed forward neural networking which achieves high degree of quality than human vision inspection.

References

color and shape grading of star fruit (Averrhoa carambola L.) using Computer vision sensor,
5. Chetna Maheshwari, Kavindra Jain, Chintan Modi, “Novel approach for Oryza sativa
L.(Rice) based on Computer vision technology,” PEPCCI, National Conference ,ISBN
techniques for food quality evaluation.” Trends in Food Science and Technology, 15,230-249,
2004.
7. Du C-J, Sun D-W, “Learning techniques used in computer vision for food quality
8. Gunasekaran Sundaram, Kexiang Ding, “Computer vision technology for food quality
assurance,”. Trends in Food Science and Technology, 7, 245-256, 1996.
1989.
10. Kavindra Jain, Chintan K. Modi, Kunal Pithadiya, “Non Destructive quality evaluation in
spice industry with specific reference to Cuminum Cyminum L (Cumin) seeds,” International
11. M. Kurita and N. Kondo, “Agricultural product grading method by image processing (part
12. Shen Castan, Sian Zhao,”A Comparitive study of Performance of Noisy roof edge
detection”, 5th International conference on Computer analysis of Images and Patterns,
volu.179, pp 170-174
13. Tadhg Brosnan, Da-Wen Sun, “Improving quality inspection of food products by
14. Xiaopei Hu, ParmeshwaraK.M, DavidV. “Development of Non Destructive Methods To
Evaluate Oyster Quality By Electronic Nose Technology”, Springer Science Business Media,
LLC, 2008.

Index Terms

Computer Science Artifical Intelligence

Keywords

Computer Vision, feed forward neural network, Indian Krishna Kamod rice seeds,
non-destructive.