

CT-VIEU An AI based Conveyorized Machine Vision Solution for Quality Analysis of Chilli

Quality Attributes of Chilli(Export Standard):

- ⊙ Colour: Must be bright red
- ⊙ Length: Greater than 5cm (less than 5cm allowed only 5% by weight)
- ⊙ Foreign Matter: Less than 2%
- ⊙ Broken Chillies: Less than 7%
- ⊙ Loose Seeds: Not more than 2%
- ⊙ Damage and Discolored Pods: Allowed up to 6%
- ⊙ Pods without Stalks: Not more than 8%



Different types of dry red chillies

Problems with present Manual method of Analysis:

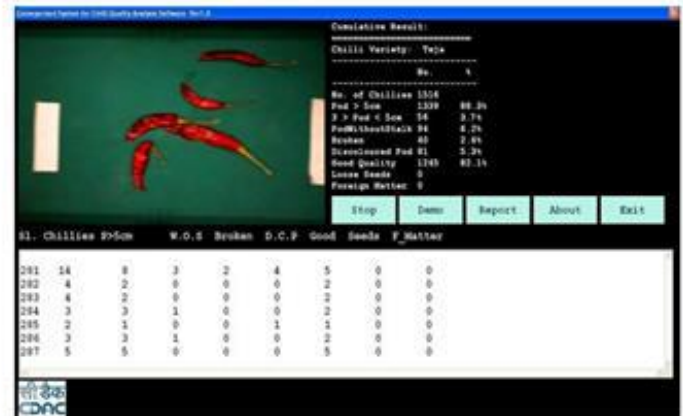
- ⊙ Process involves human perception, which is highly subjective and prone to errors
- ⊙ Time consuming process

CT-VIEU - Chilli Assaying Machine

An AI and Image Processing based Quality Assaying Solution for Appearance based Quality Attributes



Conveyorized Chilli Quality Assaying Machine



Software Screen Shot for Analysis of Chillies

System Features:

- ⊙ Conveyorized machine vision system with computer based solution
- ⊙ Automatic sample handling and spreading arrangement
- ⊙ Image acquisition by digital camera with controlled LED based illumination
- ⊙ Online Image analysis with graphical user interface (GUI).
- ⊙ Estimation of quality based on count and correlation with weight
- ⊙ Instant Analysis & Report Generation with email/printing facility
- ⊙ Quantification of Chilli Quality parameters.
- ⊙ Can be customized for other spices, say Cardamom, turmeric, etc

Target Beneficiaries:

- ⊙ Farmers, Traders and Exporters
- ⊙ APMCs, Mandies and Processing Industries
- ⊙ Commercial Agriculturists
- ⊙ Research and Quality Control Laboratories
- ⊙ Govt. Authorities and Stakeholders of Agri-Marketing at all levels

Benefits:

- ⊙ Image processing based non-invasive technique.
- ⊙ Fast and reliable
- ⊙ Buyers would be aware of Quality before buying.
- ⊙ Farmers would get better prices