



Methods for measuring Mushroom quality

The whiteness of mushrooms is a valuable indicator of quality and freshness. A camera-based system, however, delivers more accurate and objective data than a human using a colour card. This is one of the conclusions from a research project, by Wageningen Food & Biobased Research, under the umbrella of the GreenCHAINge Program. Using standardized quality measurements will ensure only quality product is offered to the consumer.

The GreenCHAINge project developed an innovative “smart chain”, with the overarching goal of improving the quality of fresh produce on the shelf. Work Package 4 focused on the assessment and prediction of mushroom quality under varying conditions during cultivation (e.g. compost) and across the chain (e.g. temperature). Mushrooms are highly perishable fresh produce, turning brown very quickly.

Two new methods

The scientists developed two new methods to measure the whiteness of mushrooms. A handy colour card displaying different gradations of white, and camera software that can detect even the smallest differences in white colour, as well as brown discoloured areas. Both methods help with quality assessment in research as well as in practice, but the camera system provides objective and more-accurate measurements compared to quick and low-cost assessment using the colour card.



Objective method for measuring whiteness and discolouration by using image analysis.

For detailed information about this project result please visit www.wur.eu/greenchange.

 GreenCHAINge



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