

Onion Analysis and its Shelf Life Increasing System

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Abstract: *This project aims to develop a comprehensive system for analyzing and enhancing the shelf life of onions, employing advanced analytical techniques such as spectroscopy and image processing to assess quality and nutritional content. By integrating cutting-edge technologies with controlled atmosphere storage and ethylene management, the project seeks to create optimal conditions for onion preservation, dynamically adjusting storage parameters based on real-time data to prolong shelf life and minimize waste. Through this interdisciplinary approach, the project aims to contribute to sustainable agricultural practices by reducing post-harvest losses and ensuring a consistent supply of high-quality onions to consumers worldwide.*

Keywords: Onions, Shelf life, Analytical techniques, Controlled atmosphere storage, Sustainability

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