

# ENVIRONMENTAL ASSESSMENT OF NEW DECONTAMINATION AND SANITATION TECHNIQUES FOR FRESH-CUT PRODUCTS - SUSCLEAN PROJECT

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## ABSTRACT

*Chlorine-based compounds are the most widely used disinfectants in MPV (Minimally processed vegetables) industries despite of its environmental and health risks. Water is a scarce resource required for all stages in the decontamination and sanitation processes (washing, rinsing, disinfection) but is also is used in the upward and downward processes of the life cycle of the materials.*

*The SUSCLEAN project aims to develop and test a set of novel sanitation and decontamination strategies and technologies in order to reduce water and chlorine consumption in MPV industries, as well as improve environmental sustainability, and optimise food quality and safety.*

*Several bench-scale and pilot plant tests are carried out in order to determine the effectiveness of the decontamination and sanitation techniques proposed on MPV quality and safety and environmental impact.*

*A Life Cycle Assessment (LCA) approach is using to compare the environmental performance of the techniques proposed in comparison to the standard techniques which use chlorine, considered as Reference Techniques.*

*In this paper the results of LCA for reference technique of decontamination process on MPV industries are presented.*