**Effect of Light on Postharvest Storage of Leafy Vegetables**

Light is one of the most important environmental factors affecting plant development and morphology. LED lighting technologies for plant cultivation and postharvest storing are also rapidly evolving, and lamps are designed to optimize their light emissions in the photosynthetically active spectrum. Under these light regimens, however, little information is available in literature about minimum photosynthetic photon flux density (PPFD) for indoor production and storage of leafy vegetables and herbs. Plant leaves are the important physiological parameter related to plant growth, photosynthetic capacity, and used as stress and disease damage identifiers. The Raman spectrum analysis of leaf is a reliable, quick, and non-destructive method, which can be used for biochemical sensing of plant’s metabolism, reproduction, and growth in plants under stress or unfavourable condition. This study aims at defining the optimal PPFD for storage of leafy vegetable at super market shelves. The effects of light quality on biomass and internal quality is examined by Raman Spectroscopy.

Experimental results states that in leafy vegetables, kept under 200 μmol m-2 s-1 antioxidant capacity were higher as compared with plants supplied with PPFD = 100 μmol m-2 s-1. Furthermore, Carotenoids, Nitrate and Phenylalanine are the antioxidant and secondary metabolite which changes under different light intensity.