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COMPARISON OF PHOTOSYNTHETIC PIGMENT EXTRACTION CAPABILITIES OF ORGANIC SOLVENTS FROM COMMONLY CONSUMED LEAFY VEGETABLES

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This study was undertaken to compare the photosynthetic pigment extraction capabilities of different organic solvents namely 80% acetone, 95% ethanol, DMSO and methanol from commonly consumed leafy vegetables Amaranthus viridis, Argyreia populifolia, Centella asiatica, Dregea volubilis, Glinus oppositifolius, Moringa oleifera, Pisonia alba, Sauropus androgynus, Sesbania grandiflora and Solanum trilobatum. It was found that both DMSO and methanol are best for the extraction of chlorophyll except from Glinus oppositifolius, Pisonia alba, Sesbania grandiflora and Solanum trilobatum. DMSO was found to be the suitable extracting solvent for chlorophyll b from many of the studied leafy vegetables except from Amaranthus viridis, Argyreia populifolia, Pisonia alba and Sauropus androgynus. The best extracting solvents for carotenoids from most of the studied leafy vegetables were found to be 80% acetone and 95% ethanol except from Argyreia populifolia and Dregea volubilis.

Keywords: Pigment Extraction, Organic Solvents, Leafy Vegetables

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