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CHAPTER - 4

FOOD WASTE MANAGEMENT STRATEGIES FOR REDUCTION AND VALORISATION

Mitu Saini¹ and Anshu Sharma²

¹Assistant Professor, School of Biotechnology, IFTM University, Moradabad, 244102, U. P

²Assistant Professor, Pt. Laxmi Narayan Memorial Mahavidyalaya, Aligarh, U. P.

Abstract

Food waste valorisation is a growing science toward the waste-to-wealth conversion. A significant increment in food waste from various sources like food industry, agriculture industry and household, causes by the rapid growth of the global population. Approximately, 1/3rd of the food produced is wasted annually. Food wastes are potential source of organic matter, which is managed properly, can helps to increase economical growth of any country but improper management of food waste causes serious threat to human health and environment. However, various types of food waste like fruit and vegetables waste, cereal waste, animal waste, restaurant and catering waste, domestic waste, beverage industry waste, dairy industry waste and other food production and processing wastes, have potential bioactive compounds such as phenolic compounds, alkaloids, flavonoids, carbohydrates, proteins, essential oils, flavouring agent, colouring agents, dietary fibre, vitamins, minerals and organic acids. These bioactive compounds help to conversion the food waste into value-added products like nutraceutical foods, edible coatings, edible films, bioplastics, bioenergy, biosurfactants, manure and biofertilizers and compost. This chapter concluded the latest insights into the research and review articles of food waste and the potential of using bioactive compounds to convert it into value-added products. This chapter are focussing on the challenges of management