## Banana by-products : An under-utilized renewable food biomass with great potential

## Abstract

Banana (Musaceae) is one of the world's most important fruit crops that is widely cultivated in tropical countries for its valuable applications in food industry. Its enormous by-products are an excellent source of highly valuable raw materials for other industries by recycling agricultural waste. This prevents an ultimate loss of huge amount of untapped biomass and environmental issues. This review discusses extensively the breakthrough in the utilization of banana by-products such as peels, leaves, pseudostem, stalk and inflorescence in various food and non-food applications serving as thickening agent, coloring and flavor, alternative source for macro and micronutrients, nutraceuticals, livestock feed, natural fibers, and sources of natural bioactive compounds and bio-fertilizers. Future prospects and challenges are the important key factors discussed in association to the sustainability and feasibility of utilizing these by-products. It is important that all available by-products be turned into highly commercial outputs in order to sustain this renewable resource and provide additional income to small scale farming industries without compromising its quality and safety in competing with other commercial products.