

Wild Rice (*Zizania sp.*): A Potential Source for Functional Foods and Nutraceuticals

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Abstract : Wild rice (*Zizania sp.*) is an annual cross-pollinated, emergent, aquatic grass that mainly grows naturally in the Great Lakes region of the North America. The nutritional quality attributes of wild rice are superior to the conventional brown rice (*Oryza sativa L.*) in terms of higher contents of important minerals (especially phosphorous, potassium, magnesium and calcium), B-complex vitamins, vitamin E and amino acids. In some parts of the world, wild rice is valued as a primary food source. The lipids content of wild rice is reported to be low in the range of 0.7 and 1.1%, however, the lipids are recognized as a rich source of polyunsaturated fatty acids (including linoleic and α -linolenic acid) and phytosterols in addition to containing reasonably good amount of tocopherols. Besides, wild rice is reported to contain an appreciable amount of high-value compounds such as phenolics with antioxidant properties. Presence of such nutritional bioactives contributes towards medicinal benefits and multiple biological activities of this specialty rice. The present lecture is mainly designed to focus on the detailed nutritional attributes, profile of high-value bioactive components and pharmaceutical/biological activities of wild rice leading to exploring functional food and nutraceutical potential of this food commodity.

Keywords : alpha-linolenic acid, phenolics, phytosterols, tocopherols, wild rice lipids

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