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Wild Fruits: Composition, Nutritional Value and Products

 Springer

Editor

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Preface

Although there have been articles in journals and chapters in books which have described some chemistry, composition, and health issues of wild fruits, a book devoted entirely to subjects such as composition, nutritional value, products, and medicinal uses has not previously been available.

This book presents 41 chapters on wild fruits. The first nine chapters (except Chap. 6) deal with economic contribution of wild fruits in rural people's income, sustainable rural development, and implications of wild fruits on food security and poverty alleviation. Chapter 6 describes wild fruits domestication using participatory methodology. Chapter 10 deals with wild fruits medicinal use and health benefits, as wild fruits are the potential supply of human health due to its energetic compounds that are chargeable for its various antioxidant, antidiabetic, antibacterial, antimalaria, and anticancer activities. Chapters 11–41 cover different contents from Africa to Asia to South America, investigating the phytochemical constituents, bioactive compounds, and traditional and medicinal uses of different selected wild fruits.

This book has been written to ensure that it will be of benefit to the industry, medicine, and food scientists. In addition, the book should appeal to academic scientists who require a good source of applications and a good set of references. Since wild fruits have diverse uses, it is hoped that the use of the book will not be limited to the food and medicine industry but will extend to related industries such as the pharmaceutical industry.

Ghibaish, Sudan

Abdalbasit Adam Mariod

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Chapter 25

Artocarpus heterophyllus (Jackfruit): Composition, Nutritional Value and Products

Raquel P. F. Guiné and Sofia de Guiné e Florença

25.1 Introduction

Jackfruit (*Artocarpus heterophyllus* Lam.) is a fruit commonly found in tropical areas. The fruit itself is protected by a case that can be of large dimensions, 30–50 cm long for the greater fruits, and which contains inside up to 500 individual fruits, with a golden colouration. The aroma can be quite strong, and therefore it may displease some people. However, when the fruit is dried this drawback is eliminated. Because of the high perishability of the jackfruit, a high index of post-harvest loss is observed, and therefore dehydration is frequently an alternative method for its preservation. This method reduces moisture content, decreasing the growth of microorganisms and preventing biochemical reactions that depend on moisture, and in addition reduces the costs of storage and transportation (Oliveira et al. 2011).

The edible part of jackfruit includes fruits and seeds. The fruit can be consumed either raw or cooked in multiple ways. The pulp is consumed in its almost totality *in natura* by the most diverse layers of the population in diverse countries. When the fruit is young, and due to its considerable amount of carbohydrates, it is frequently cooked as a vegetable. Along maturation the fruit becomes sweeter, being for that reason eaten raw when fully ripe, although it can also be eaten after cooking. The rind can be used to produce a jelly and the seeds can be consumed cooked, either boiled or roasted, having flavour and textural characteristics comparable to chestnuts. Alternatively, the seeds can be ground into a powder and incorporated into biscuits or other bakery products' formulations, due to their high starch and protein.

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