

UNDERUTILIZED INDIGENOUS FOOD RESOURCES FOR FOOD SECURITY AND NUTRITION

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Introduction:

Fruits are considered as luxurious part of our diet. Underutilized fruits are those fruits which are not grown commercially and do not have a trade potential because of lack of mass production. For urbanization only few fruit species are popular in the market while a number of fruits remain unexplored. Though India is home of wide variety of underutilized fruit crops, and many tropical, subtropical and temperate fruits, but about 75 percent of the cultivated area under fruits is covered by banana, citrus, guava, grape, papaya, mango, pineapple and apple.

Many of these underutilized fruits are popular in the rural regions owing to their nutritive and medicinal value. Indigenous people living in rural areas often possess and consume underutilized fruits resources that are not completely understood by mainstream agriculture and health sectors. This means that the usual processes of nutrition assessment and identification of food-based strategies for micronutrient promotion fail to take these resources fully into full consideration. They are good source of proteins, carbohydrates, dietary fibre and energy. However, the underutilized fruits are rich source of minerals, vitamins, folic acid, fibre and also many medicinal properties. Thus, the consumption of underutilized fruits can add the nutritive value of rural and poor families which can reduce the problem malnutrition

related diseases like anaemia, kwashiorkor, marasmus, hidden hunger and others owing to their nutrition dense properties. These fruits can be converted to many value-added processed products like jam, jellies, pickles, and squashes etc which are of great economic potential. The present analysis represents the future scope of such nutrient dense underutilized fruits.

These horticultural crop products are highly rich in nutraceutical value. Most of them have wondrous medicinal properties and have been used in Ayurveda for centuries. The main reason behind unrecognition of their nutritious value is poor consumer awareness and lack of knowledge on food and nutrition. Yet, many of these fruits are highly nutritious and offer tremendous opportunities to enhance food security and nutrition – and rural livelihoods. If we can successfully improve information on utilizing such indigenous fruits – including more effective marketing – rural producers, including indigenous communities, will benefit greatly in terms of improved health, nutrition, well-being, and poverty reduction

Table 1. Representation of Active Ingredients in Various Underutilized fruits

Name of fruit	Active Ingredient	Medicinal properties	Reference
Aonla	Vitamin C	Antioxidant Anti-inflammatory Antipyretic Analgesic effect Anti-diabetic Anticancer and antiulcer effects Antimicrobial	Neeraj <i>et al.</i> , (2017)
Bael	Riboflavin	Fractures Healing of Wounds Swollen Joints High Blood Pressure Jaundice Diarrhoea	Sawale <i>et al.</i> , (2018)
Ber	Phosphorus Iron Vitamin B	Antioxidant Anti-inflammatory Anticancer Antidiabetic	Sonalika <i>et al.</i> , (2018)

		Anti-inflammatory Hepatoprotective	
Carambola	Vitamin B9 Vitamin C	Antioxidant Anti-inflammatory Anticancer Antidiabetic Anti-inflammatory	Anita <i>et al.</i> , (2018)
Jackfruit	Vitamin C Vitamin B6	Anticarcinogenic Antimicrobial Antifungal Anti-inflammatory Wound healing Hypoglycemic properties	Ranasinghe <i>et al.</i> , (2019)
Jamun	Vitamin C	Antioxidant effective in prevention of cardiovascular diseases Anticarcinogenic Neurodegenerative	Akhila and Hiremath(2018)
Karonda	Folic acid Vitamin C	Significant for anti-ulcer activity Fights anemia Gastro-protective Antipyretic	Anupa <i>et al.</i> ,(2018)
Phalsa	Vitamin A Vitamin C	Antioxidant Gastro-protective Anti- inflammatory Immune System Strengthens Good vision	Krishan and Singh (2018)

Furthermore, with advancement in processing of these highly nutritious neglected fruits the problem of perishability can be prevented. Apart from processing of juice, jam, pickle etc, these fruits can be turned into wine. Wine, being oldest, traditional and convenient



alcoholic beverage, is always in demand in local as well foreign market, can easily fetch good market price. Hence, these underutilized crops have the prospective for giving economic security by generating employment and can fetch good returns from the production of various value-added processed products.

