

Review article

Documenting conservation status and medicinal potential of selected non-edible fruit-bearing plants in the Bangladesh Agricultural University Botanical Garden

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ABSTRACT

Non-edible fruit-bearing plants are particularly fascinating due to their remarkable adaptability to diverse ecological conditions, their utilization in traditional medicine, and their potential contributions to pharmaceutical development. A total of 38 non-edible fruit plant species, spanning 36 genera and 20 families, were documented. The Euphorbiaceae family exhibited the highest diversity, with six species, followed by Fabaceae, Lecythydaceae, Malvaceae, and Bignoniaceae, each represented by three species. Families such as Annonaceae, Celastraceae, Clusiaceae, Fagaceae, and Rubiaceae had two species each, while ten families included only a single species. At the genus level, Lithocarpus and Mallotus were the most prominent, each represented by two species, while the other 34 genera were represented by a single species. The study revealed that 76% of the species were indigenous, whereas 24% were exotic. In terms of conservation status, 8% of the species were classified as vulnerable, 3% as endangered, 52% as least concern, 8% as data deficient, and 29% had not been evaluated globally. The plants were used to treat a wide range of common diseases, including cancer, cardiovascular, gastrointestinal, and respiratory disorders, as well as infections, and more. This paper provides the conservation status and collective information on the medicinal uses of these non-edible fruit plants.

Key words: BAUBG, conservation status, medicinal uses, non-edible fruit-bearing plants