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Abstract

Mangosteen (Garcinia mangostana var. mangostana) is an obligate apomictic species which does not require a fertilization process to produce seeds. The absence of male plants of mangosteen brings about an interest to find out the origin of mangosteen. Determining the parents is important in any improvement program to produce better quality products. Several hypotheses were proposed since the 1990s, and the most popular and frequently cited one stated that mangosteen was a product of hybridization of G. mangostana var. malaccensis and G. celebica. This hypothesis then became the groundwork for later experiments to further study the origin of mangosteen. The methods used included morphological comparison between Garcinia species, molecular marker analyses from the internal spacer, chloroplast sequencing, and microsatellite and internal transcribed spacer (ITS) sequence analysis. This review discusses the different approaches taken to study the origin of mangosteen and suggestions for future work in order to verify the original parents of mangosteen. © 2022, The Author(s), under exclusive licence to Springer Nature B.V.

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