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Anticancer activity of acetogenins from *Annona muricata* fruit
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Abstract

Medicinal plants become very important in our days for their therapeutic benefits to humankind. It sustains human health, and it is commonly known as herbal medicines since ancient times. *Annona muricata* is a heart-shaped fruit that is consumed raw or as the fruit juice in the tropical area. *A. muricata* is used in traditional and alternative medicine to treat different ailments such as diabetes, hypertension, respiratory and skin illness, inflammation and cancer. *A. muricata* contains essential anticancer agents named acetogenins that play the significant role in various cancer types. Acetogenins are strong nicotinamide adenine dinucleotide oxidase inhibitors of the cancer cell's mitochondrial membrane but showed neurotoxic effects in rats. Therefore, acetogenins need to be further investigated to determine the exact mechanisms of action, long-term safety, optimal dosage, and potential side effects. Given the extensive studies on *A. muricata*, this review focuses on the phytochemistry, medicinal uses, biological activities and the mechanisms of action for the fruit extracts and acetogenins, to stimulate further studies on the fruit pulp used for human consumption. © 2018 Default.

Author Keywords

Acetogenins; *Annona muricata*; Anticancer; Complex I mitochondrial

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