

A Review on Pharmacological Activity of *Psidiumguajava* Linn. Leaves

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Abstract: *Guava (Psidiumguajava Linn.) commonly known for its food and nutritional values throughout the world. The medicinal properties of guava fruit, leaf and other parts of the plant are also well known in traditional system of medicine. Since, each part of guava tree possesses economic value; it is grown on commercial scale. Guava plant is considerable process has been achieved regarding the biological activity and medicinal application of guava and the fruit considered as poor man apple of tropics. The guava plant parts are used for the development of various industrial and pharmaceutical products. In the present review, nutritional value of guava fruit and medicinal properties its various parts have been discussed.* *Guava (Psidiumguajava Linn.) commonly known for its food and nutritional values throughout the world. The medicinal properties of guava fruit, leaf and other parts of the plant are also well known in traditional system of medicine. Since, each part of guava tree possesses economic value; it is grown on commercial scale. Guava plant is considerable process has been achieved regarding the biological activity and medicinal application of guava and the fruit considered as poor man apple of tropics. The guava plant parts are used for the development of various industrial and pharmaceutical products. In the present review, nutritional value of guava fruit and medicinal properties its various parts have been discussed to provide collective information on its multi purpose commercial value to provide collective information on its multi purpose commercial values.*

Keywords: Guava, *Psidiumguajava*, Medicinal Plant, Poor man apple, Pharmacological properties.

REFERENCES

- [1]. Pathak RK, Ojha, CM: Genetic resources of guava, Vol. I, Fruit Crops, Part Advance in Horticulture [C]. Chadha KL, Pareek OP, editors, Malhotra Publishing House, New Delhi, 1993, pp. 143–147.
- [2]. Bailey LH: The standard encyclopedia of horticulture [C]. Vol. II. Macmillan Co., New York. 1960, pp. 1415.
- [3]. Thaipong K, Boonprakob U, Crosby K, Cisneros-Zevallos L, Byrne DH: Comparison of ABTS, DPPH, FRAP, and ORAC Assays for estimating antioxidant activity from guava fruit Extracts. *J Food Compos Anal* 2006; 19: 669–675.
- [4]. Koo MH, Mohamed S: Flavonoid (myricetin, quercetin, Kaempferol, luteolin and apigenin) content of edible Tropical plants. *J Agric Food Chem* 2001; 49: 3106–3112.
- [5]. Rahman M, Begum K, Begum M, Faruque CAA: Correlation And path analysis in guava. *Bangladesh J. Agril. Res.* 2003; 28 (1): 93–98.
- [6]. Durey CH: The useful plants of India [M]. International Book distributors, Dheradun. 1985, pp. 512.
- [7]. Lutterodt GD: Inhibition of Microlax-induced experimental Diarrhea with narcotic-like extracts of *Psidiumguajava* leaf In rats. *Journal of Ethno pharmacology* 1992; 37(2): 151-157.
- [8]. Lutterodt GD, Maleque A : Effects on mice locomotor Activity of a narcotic-like principle from *Psidiumguajava* Leaves. *Journal of Ethnopharmacology* 1988; 24(2-3): 219-231.
- [9]. Batick MJ: Ethnobotany of Palms in the Neotropics. In; Prance GT, Kallunki JA, editors, *Advances in Economic Botany: Ethnobotany in the Neotropics*. New York Botanical Garden, New York, USA, 1984, pp. 9-23.

- [10]. Liu HN: Chinese Medicinal Herbs of Hong Kong. Vol. 2. Hang Chiewing As Kwang, Hong Kong. 1988, pp. 104-105.
- [11]. Chulasiri M, Suthienkul O, Pavaro C, Wongkrajang Y: Herbal extracts for diarrheal treatment: antibacterial Activity in vitro. Journal of Public Health 1986; 16: 21-35.
- [12]. Goncalves JLS, Lopes RC, Oliveira DB, Costa SS, Miranda MMFS, Romano MTV et al.: In vitro anti-rotavirus activity Of some medicinal plants used in Brazil against diarrhea. Journal of Ethnopharmacology 2005; 99(3): 403-407.
- [13]. Wang B, Jiao S, Liu H, Hong J: Study on antioxidative Activities of Psidiumguajava Linn leaves extracts .Wei Sheng Yan Jiu. 2007; 36(3): 298-300.
- [14]. Chulasiri M, Suthienkul O, Pavaro C, Wongkrajang Y: Herbal extracts for diarrheal treatment: antibacterial Activity in vitro. Journal of Public Health 1986; 16: 21-35.
- [15]. Mukhtar HM, Ansari SH, Ali M, Naved T, Bhat ZA: Effect of Water extract of Psidiumguajava leaves on alloxan-Induced diabetic rats. Pharmazie 2004; 59(9): 734-735.
- [16]. Abdelrahim SI, Almagboul AZ, Omer ME, Elegami A: Antimicrobial activity of Psidiumguajava L. Fitoterapia 2002; 73(7-8): 713-715.
- [17]. Roy CK, Kamath JV, Asad M: Hepatoprotective activity of Psidiumguajava Linn. Leaf extract. Indian J Exp Biol. 2006; 44(4): 305-311.
- [18]. Ojewole JA, Awe EO, Chiwororo WD: Antidiarrhoeal Activity of Psidiumguajava Linn. (Myrtaceae) leaf aqueous Extract in rodents. J Smooth Muscle Res. 2008; 44(6): 195-207.
- [19]. Wang B, Jiao S, Liu H, Hong J: Study on antioxidative Activities of Psidiumguajava Linn leaves extracts .Wei Sheng Yan Jiu. 2007; 36(3): 298-300.
- [20]. Akinola OB, Oladosu OS, Dosumu OO. Ethanol extract of The leaves of Psidiumguajava Linn enhances sperm output In healthy Wistar rats. Afr J Med Med Sci. 2007; 36(2): 137-140.
- [21]. Grover IS, Bala S: Studies on antimutagenic effects of Guava (Psidiumguajava) in Salmonella typhimurium. Mutat Res. 1993; 300(1): 1-3.
- [22]. Conde Garcia EA, Nascimento VT, and Santiago Santos AB: Inotropic effects of extracts of Psidiumguajava L. (guava) leaves on the guinea pig atrium. Braz J Med Biol Res. 2003; 36(5): 661-668.
- [23]. zozoya X, Meckes M, Abou-Zaid M, Tortoriello J, Nozzolillo C, Arnason JT: Quercetin glycosides in Psidiumguajava L. Leaves and determination of a spasmolytic principle. Arch Med Res. 1994; 25(1): 11-15.
- [24]. Wei L, Li Z, Chen B: Clinical study on treatment of infantile Rotaviral enteritis with Psidiumguajava L. ZhongguoZhong Xi Yi Jie He ZaZhi. 2000; 20(12): 893-895.
- [25]. Chen KC, Peng CC, Chiu WT, Cheng YT, Huang GT, Hsieh CLEt al.: Action mechanism and signal pathways of PsidiumGuajava L. aqueous extract in killing prostate cancer LNCaP Cells. Nutr Cancer 2010; 62(2): 260-270.
- [26]. Sato J, Goto K, Nanjo F, Kawai S, Murata K: Antifungal Activity of plant extracts against Arthriniomsacchari and Chaetomiumfunicola. J BiosciBioeng. 2000; 90(4): 442-446.
- [27]. Shaheen HM, Ali BH, Alqarawi AA, Bashir AK: Effect of Psidiumguajava leaves on some aspects of the central Nervous system in mice. Phytother Res. 2000; 14(2): 107-111.
- [28]. Kaileh M, Berghe WV, Boone E, Essawi T, Haegeman G: Screening of indigenous Palestinian medicinal plants for Potential anti-inflammatory and cytotoxic activity. J Ethnopharmacol. 2007; 113(3): 510-516.
- [29]. Qadan F, Thewaini AJ, Ali DA, Afifi R, Elkhawad A, Matalka KZ: The antimicrobial activities of Psidiumguajava and Juglansregia leaf extracts to acne-developing organisms. Am J Chin Med. 2005; 33(2): 197-204.
- [30]. Mandal S, Sarkar R, Patra P, Nandan CK, Das D, BhanjaSKnEt al.: Structural studies of a heteropolysaccharide (PS-I) Isolated from hot water extract of fruits of PsidiumGuajava (Guava). Carbohydr Res. 2009; 344(11): 1365-1370.
- [31]. Soares FD, Pereira T, Marques MOM, Monteiro AR: Volatile and non-volatile chemical composition of the White guava fruit (Psidiumguajava) at different stages of Maturity. Food Chemistry 2007; 100(1): 15-21.