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Ficus palmata, is a wild plant that has nutritional & remedial value

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Abstract
Wild fig is an under taken advantage of organic product having a few medical advantages. Its significance isn't known to everyday citizens, in this way either not utilized for food purposes or exceptionally restricted. Nonetheless, a few exploration paper and specialists revealed that figs are a fantastic wellspring of minerals, nutrients A, B1, B2 and C, dietary fiber, sugars, fundamental amino acids as well as phenolic substances. It shows excellent tangible worthiness because of its taste, variety and smell. Figs are utilized as medication and furthermore utilized in decreasing the gamble of malignant growth and coronary illness. It is rich in polyphenolic compounds, anthocyanin, and flavonoids principally Kaempferol. It shows powerful cancer prevention agent potential. The *Ficus palmata* plant is utilized in different sicknesses, for example gastrointestinal problems, hypoglycemia, cancer, ulcer, diabetes, hyperlipidemia and contagious diseases. It likewise showed ant proliferative action. Extremely uncommon handling has been completed on fig, subsequently a few future possibilities of fig in food and medication industry.

Keywords: *Ficus* palmate, cell reinforcement potential, restorative role, polyphenols

Introduction
Ficus palmata generally known as 'Phlegra or fig' is a deciduous, moderate-sized tree, 6 to 10 meters in level and has a place with family Moraceae. The species development is restricted to shake and outcrop destinations of the valley natural surroundings types, slants and precipices especially in mountain ledge. Organic product is fig type with meaty container and little one-cultivated drupelets. Completely aged product of wild fig is quite possibly of the most delectable natural product tracked down filling wild in the Mid Himalayan district, so additionally named as Wild Himalayan fig. Mature organic products are profound purple in variety. Ipgri and Ciheam, separated figs onto 5 classes based on variety *viz*. green, yellow, purple, dark, and brown. It is dispersed in Asian nations fundamentally Nepal, Somalia, South Egypt, Promontory and India. In India, it is ordinarily circulated in Northwestern India from the fields to a height of 1560 m over the ocean level in the Himalayas with a greatest focus in lower and hot areas of Himachal Pradesh, Punjab, and Uttar Pradesh Jammu & Kashmir. Completely ready new or somewhat dry natural products are consumable and involved by neighborhood occupants for treatment of blockage. Plastic is added to milk to make yogurt. Fig is delightful, nutritive foods grown from the ground restorative properties like diminishing gamble of malignant growth and coronary illness. Solomon *et al*. Revealed that fig organic product skin was most extravagant wellspring of anthocyanin and polyphenol in contrast with different pieces of fig natural product. Goncalves *et al*. Revealed that fig is a decent wellspring of flavonoids fundamentally Kaempferol. Vallego *et al*. Detailed that fig have higher phenolics content than red wine and tea.

Fig 1: *Ficus palmata*

Blossoming and fruiting period
In the long stretch of spring blossoming starts and go on up to the period of April. From the second fortnight of June fruiting season starts and go on till the primary portion of July. During one season completely developed wild fig tree yields around 25 kg of ready organic products. New fig natural products weight, length and broadness ran between 11.6-36.8 g, 16.7-28.6 cm and 17.3-31.0 cm, individually.

Substance Structure
The past investigations with figs demonstrated that they are a magnificent wellspring of minerals, nutrients A, B1, B2 and C, dietary fiber, sugars, fundamental amino acids as well as phenolic substances (37, 38). Table 1 depicts the general structure and mineral components of products of wild fig. Hegazi *et al*. decided the dietary organization of wild fig. They announced that the wild fig contains 67.82% dampness, 0.89% debris, 2.88% strands, 2.17% protein, 1.12% lipids, 28.74% complete starch and 565.67 kcal / 100 g new wt. energy. They further announced that the mineral substance as 17.33, 208.67, 65.00, 37.67, 3.13, 0.14, 0.37 and 32.76 mg / 100 g new wt. for sodium, potassium, calcium, magnesium, iron, zinc, copper and phosphorus, individually. Genna *et al*. [7] announced that developed fig are the great wellspring of minerals and sugars fundamentally fructose and glucose.

Smell is one of the fundamental credits for the assurance of fig quality. Grison-Pige' *et al*. distributed the principal similar concentrate on fig unpredictable mixtures; they examined twenty distinct figs and recognized 99 unique mixtures, fundamentally terpenoids, aliphatic mixtures and items from the shikimic corrosive pathway. Riu-Aumatell *et al*. Recognized eighty unstable mixtures usiing HS-SPME and GC-MS in the fig tests and sorted into alcohols, aldehydes, esters, acids, terpenes and terpenic compounds and different mixtures. Subjective and quantitative data about unstable mixtures that happened in new and dried fig organic product is expected to assess smell quality that is framed by a mind boggling gathering of various compound substances. The unpredictable profile of new white and dull assortments of Portuguese figs was portrayed by HS-SPME and GC – IT - MS.

Leaves, bark, and heartwood of F. *palmata* contain *β*-sitosterol and a new tetracyclic triterpene - glaunol acetic acid derivation. Also, Glyceryl behenate, lupeol, and *α*-amyrin acetic acid derivation are accounted for from the stem bark of F. *palmata*. Hegazy *et al*. Decided all out phenolic intensifies tannins, anthocyanin, carotenoids, L-ascorbic acid as 12.72, 2.77, 0.169, 9.67 mg/g and 37.00 mg/100g, separately. Yemis *et al*. Described anthocyanin present in 3 new fig assortments developed in Turkey. Four unique anthocyanin's, cyaniding - 3-glucoside, cyanidin-3, 5-diglucoside, cyanidin 3-rutinoside and pelargonidin 3-glucoside were recognized in fig tests.

Table 1: Composition of wild fig

Parameters	Values
Protein content	1.69%
Moisture	85.52%
Total soluble solids	14.12%
Total sugars	7.00%
Titrable acidity	0.69%
Pectin content	0.26%
Total phenol	4.17-6.00 mg / 102 g of pulp
Vitamin C	4.30 mg / 101 g of pulp
Ash content	0.97%.
Crude fat	0.78%
Crude fiber	18.68%
Total Carbohydrate	17.69%
Phosphorus	0.037%
Potassium	0.298%
Calcium	0.076%
Magnesium	0.075%
Iron	0.005%

Utilization of wild fig

Fig organic products are sweet, succulent and scrumptious consumed as crude and furthermore utilized for making different items like squash, jam and jam. It likewise shows astringency, which is because of the presence of white plastic just underneath the epicarp. The astringency can be eliminated by keeping the organic products submerged in water for around 10 to 15 minutes prior to eating. It is additionally made available for purchase at specific spots. New figs are extremely delicate to microbial deterioration, even in refrigerated conditions, and in this way restricted timeframe of realistic usability. Fig natural product is consumed new, dried, saved, canned and candy-coated. The general natural product quality is fantastic. The unripe wild fig leafy foods development is cooked and eaten as a vegetable. They are heated up, the water is taken out by pressing and they are then broiled (16).

Research on fig handling is restricted (45, 46) particularly drying of pre-treated figs. The pre-medicines of figs *viz*. sulphuring and drenching in an answer of citrus extract and ascorbic corrosive diminished drying time fundamentally.

In Mediterranean locale, it is utilized for liquor and wine creation while in Europe for fig espresso planning. Being profoundly transient, fig can't be put away for longer period at surrounding condition. The dried figs can be put away for 6-8 months (Venkataratnam 1988) [41]. Ibrahim *et al*. Detailed that figs pre-treatment with sulfur dioxide brought about higher overflow of unstable mixtures contrasted with non-treated dried figs. Yemis *et al*. announced that around 80% of carotenoids were corrupted in fig following 7 days of sun drying. Extraordinary changes in carotenoids structure and surface tone were seen at aging phase of tree.

Naikwadi *et al*. dealt with drying out of fig. Ready figs were steam treated at 90 ºC / 10 psi / 5 min in autoclave. Steamed organic products were dunked in sucrose, glucose, fructose and reverse sugar syrups at 50 ºB for 24 h for getting wanted all out dissolvable strong substance. The treated natural products were dried to 20% dampness in a bureau dryer at 50-55 ºC. Rearrange sugar treated figs showed great quality dried figs.

Restorative purposes of natural product

Iqbal *et al*. (15) revealed that *Ficus palmata* Forsk extricate had critical cell reinforcement movement, geno protective property, enzymatic action of HMG-CoA Reductase and subsequently plays its part in fighting different oxidative stress related illnesses, including atherosclerosis. Various fig species are utilized in people medication as hostile to growth, mitigating and tonic medicament (23, 22). Microbial sicknesses like epilepsy and jaundice (28, 3), bronchitis, flu outshining hack, tonsillitis, toothache, bacillary looseness of the bowels, enteritis and injuries were additionally answered to be treated by fig separates. The fig organic products contain mainly sugars and adhesive and furthermore goes about as a demulcent and diuretic. The crude figs of F. *palmata* subsp. *Virgata* are utilized as vegetable and matured as organic product for the most part by ancestral and nearby individuals in uneven and timberland regions. They are mainly utilized as a thing of diet in the treatment of stoppage and illnesses of the lungs and bladder (21, 6). They are likewise utilized as a poultice (43, 20, 6). The twigs are utilized as grub. The plastic is supposed to be utilized in coagulating of milk and sap in the treatment of moles (25, 11). Fig is likewise utilized in different illness for example gastrointestinal, hypoglycemic, hostile to cancer, against ulcer, against diabetic, lipid bringing down and antifungal exercises. It is utilized for stomach related messes and to control draining injuries. Simmered figs are taken for loose bowels and diarrhea. Wild fig is utilized generally in the treatment of clogging and illnesses of the lungs and bladder.

Saklani and Chandra revealed that Bark, root, leaves products of the soil of this plant are likewise every now and again utilized for the treatment of different ailments.

Pharmacological action of fig: The *Ficus palmata* natural products showed critical cell reinforcement potential utilizing free extremist rummaging and ferric diminishing exercises.

Cell reinforcement action

Cancer prevention agent exercises were additionally detailed for *Ficus* removes (1, 5). Alqasoumi*et al*. Exhibited the ethyl acetic acid derivation portion (Table 2) had the option to diminish the stable free extremist DPPH, to yellow-shaded DPPH at low focuses (50 and 100 g / ml). The impact was practically like that of the standard ascorbic corrosive. The higher fixations (500 and 1000 g/ml) of the unrefined concentrate and chloroform part had the option to decrease the DPPH albeit the lower focuses showed just frail action. Saklani and Chandra revealed that *Ficus palmata* is a rich wellspring of polyphenolic compounds, flavonoids, which are liable for solid cell reinforcement properties that assistance in counteraction and treatment of different oxidative pressure related sicknesses like neurodegenerative and hepatic illnesses.

Hegazy *et al* [12]. Confirmed that 1.1 mg / ml centralization of fig showed 40% hindrance of DPPH. Be that as it may, 45% hindrance was displayed in hydrogen peroxide rummaging measure. Caliskan and Polat (5) broke down phytochemicals and cancer prevention agent limit of green, yellow, purple and dark fruited fig. They detailed that cancer prevention agent limit of fig was related with the polyphenols and anthocyanin content of natural product. Dark fig showed 2 overlap more noteworthy cell reinforcement limit, 15 crease more noteworthy all out anthocyanins and 2.5 overlay more prominent phenolics than green and yellow figs though fructose, glucose and sucrose is higher in brown and purple figs. Fructose (56%) was the primary sugar alongside glucose (43%). Kamiloglu and Capanoglu (17) detailed 9.26 and 1.22% of the underlying absolute cancer prevention agent limit of the entire yellow and purple fig, separately after *in vitro* processing.

The cell reinforcement exercises of *Ficus palmata* natural product were resolved utilizing DPPH rummaging movement and viewed as 104.9 mg Catechin reciprocals / 100 g in methanol separate while 146.9 mg Catechin counterparts/100 g in CH3)2CO remove. The ABTS cation searching movement was viewed as 557.09 mg Butylated hydroxyl anisole/100 g in the methanol remove, while, in CH3)2CO separate, it was 729.45 mg Butylated hydroxyanisole / 100 g. Ferric lessening action was viewed as 77.6 mg Ascorbic corrosive / 100 g in the methanol separate while in CH3) 2CO extricate, it was 146.67 mg Ascorbic corrosive / 100 g (33, 2). Complete phenolics (463.00 mg GAE / 100 g of new weight), flavonoids (45.60 mg CE / 100 g) and anthocyanins (27.30 mg / 100 g) of fig were tracked down in methanol / HCl dissolvable evaluated by spectrophotometric estimation (38).

Vinson *et al*. (42) detailed critical cell reinforcement action in dried products of *Ficus carica* Linn. These discoveries propose that dried organic products ought to be a larger piece of the eating routine as they are thick in phenol cell reinforcements and supplements, most presumably fiber.

Anti-proliferative action

The ant proliferative movement of the natural product extricate was dissected against cervical malignant growth cell lines, to be specific C33A, HeLa and one typical Fringe Blood Mononuclear (PBM) cells utilizing colorimetric 3-(4, 5-Dimethylthiazol-2-yl)- 2, 5 Diphenyltetrazolium Bromide (MTT) examines. C33A and HeLa cells were refined with a concentrate focus identical to 0.667, 1.66, 3.33, 5.0 and 6.67 mg/ml of natural product while essential culture of PBMCs was brooded with 5.0 and 6.67 mg/ml organic product removes. Every one of the concentrates showed intense anti proliferative action against C33A cells. The concentrates didn't show anti proliferative movement against HeLa cells. CH3)2CO separate showed most elevated anti proliferative movement while it was low for methanol remove (33). The high anticancer impacts of CH3) 2CO concentrates of *Ficus palmata* were upheld by its somewhat higher ellagic corrosive substance as uncovered by RP-HPLC investigation. Ellagic corrosive was before displayed to have anti proliferative movement against cervical disease cells [24].

Khodarahmi *et al*. [19] detailed that concentrates of various types of *Ficus* are cytotoxic to some human harmful cell lines. In this way, natural product, leaf, with ethyl acetic acid derivation and dichloromethane and plastic concentrates were ready through permeation and after 24 h brooding at 37 °C, the cells were treated with various groupings of the concentrates or plastic. The practicality of the not entirely settled by the decrease of 3-(4, 5-dimethylthiazol-2-yl)- 2, 5-diphenyl tetrazolium bromide (MTT) from formazan following 48 h brooding and the plastic and various concentrates of *Ficus carica* upsides of the ethanolic, ethyl acetic acid derivation and dichloromethane concentrates of the leaves and organic products.

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