



Importance of persimmon fruit and their cultivation

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Introduction: Persimmons are red-brown or orange fruits that grow on trees like plums and look like a small, rather flat tomato capped by a calyx. The two varieties are stringent and non-astringent, the latter being pleasingly sweet. To avoid bitterness, the paler varieties should be eaten only when very ripe, usually peeled. Persimmon is Japan's national fruit and that's where it originated (American persimmons are mostly ornamental). Persimmon seeds first came to the United States when Commodore Perry sent them from Japan in 1856. In India the fruit was introduced by European settlers around twentieth century.

The persimmon (*Diospyros kaki*) belongs to family Ebenaceae. In India Persimmon is locally called Japani Phal, the Japanese fruit. It is the most important temperate deciduous tree. The major producers of persimmon are China, Japan, Brazil and Italy while U.S.A, Spain, Egypt, Australia and India are the states like Himachal Pradesh, Uttarakhand, Jammu and Kashmir and Tamil Nadu. Persimmon makes its debut when not many fruits are available and enjoy the different delight besides being full of fragrance and rich in sugar. Persimmon fruits are delicious when still fresh, or they can be used in a variety of baked goods such as puddings, breads and cookies. The non-astringent varieties such as Fuyu and Jirg, may be consumed when the fruits have developed full colour. The non-astringent fruit can be eaten while still-firm. The tree has a compact spreading growth habit and low maintenance requirements. The ornamental beauty of its orange coloured fruit and bright red foliage in the fall makes it an attractive plant in the local landscape of the area where it is grown. The suitability of Persimmon in West Kameng district is very good.

Uses of persimmon fruit: The fruit can be used in cakes, gingerbread, cookies, gelatine, desserts and

puddings. Jam or marmalade can also be made out of fruit pulp. The pulped pulp can be blended with cream, cheese, orange juice and honey.

Health benefits of persimmons: The vitamin A shows itself to be a powerhouse in nutrition, offering 55 per cent of the daily value in the persimmon. Vitamin C runs a close second with 21 per cent, plus excellent amounts of manganese, a co-factor for the enzyme superoxide dismutase, for healthy mucous membranes and skin, as



well as a known protectant against lung and mouth cancers. Persimmons are an excellent source of fibre, which helps keep the body regulated. B-complex vitamins are present to stabilize the metabolic system, along with copper and phosphorus. Persimmons have 7 major benefits for health, they protect our body.

Nutrient: Persimmons are high in important vitamins and minerals, including vitamins A, C and B, potassium and manganese. They also contain beneficial plant compounds like tannins and flavonoids. Persimmon having several nutrients as; Calories: (118), Carbohydrate: 31 grams, Protein: 1 gram, Fat: 0.3 g, Fibre: 6 g, Vitamin A: 55% of the RDI, Vitamin C: 22% of the RDI, Vitamin E: 6% of the RDI, Vitamin K: 5% of the RDI, Vitamin B6 (pyridoxine): 8% of the RDI, Potassium: 8% of the RDI, Copper: 9% of the RDI, Manganese: 30% of the RDI.

Excellent source of powerful antioxidants: Persimmons are an excellent source of powerful antioxidants like carotenoids and flavonoids. Diets rich in these compounds have been linked to a reduced risk of certain diseases, including heart disease and diabetes.

May benefit heart health: Persimmons contain flavonoid antioxidants and tannins, which benefit heart health by reducing blood pressure, lowering inflammation and decreasing cholesterol levels.

May help reduce inflammation:

Persimmons are rich in the powerful antioxidant vitamin C, which helps lower inflammation, a common cause of many diseases.

Rich in fibre : Fibre-rich foods like persimmons can help lower cholesterol, reduce blood sugar levels and keep your digestive system healthy.

Support healthy vision:

Persimmons are high in vitamin A, lutein and zeaxanthin — all nutrients that support healthy vision.

Delicious and easy to add to your diet: Persimmons taste great in both sweet and savory dishes, including oatmeal, meat dishes, baked goods and smoothies.

Planting: Young plantation should be laid at a wide range spacing 4m x 4m to 6m x 6m depending on the habit of the cultivar. A proper lay out should be worked out prior to planting. In hilly terrain contour system should be adopted. Seedlings planted in good soil and a sunny location can begin fruiting in about 5 years. In India grafted plants are transplanted with the one set of spring.

Fertilizer: Good results have been obtained with a fertilizer mixture of 4 to 6%N, 8-10%P and 3-6% K at the rate of 500g per tree per years of age. The fertilizer is usually applied in spring, but some growers apply half dose in the spring and the other half dose in the spring and the other half in July. Over fertilizers or excessive amount of nitrogen fertilizers should be avoided as it causes shedding of fruits.

Pruning: Young tress should be pruned back to a height of 2.5-3 ft, when planted and later the new shoots are thinned with a view to forming a well-shaped tree. Avoid



development of weak branches which break way when they bear fruit. Annual pruning during the first 4 to 5 winters is done. If a tree tends to over bear and shows signs of decline, it should be drastically cut back to give it a fresh start.

Irrigation: Plants should be irrigated every three weeks on light soil and every month on heavier soil until the fruit is ready for harvest. During rainy seasons

irrigation may be omitted.

Varieties: Some varieties are available for cultivation are: *Non-astringent varieties:* Fuya, Izu, Jiro, Goshu, Suruga, Okugoshu, Mackawajiro and Imoto.

Astringent varieties: Hachiya, Honan red, Saijo, Tamopan, Eureka and Tanenashi.

Propagation: Seedling rootstocks are chip-budded either at the beginning of August or tongue grafted at the beginning of April. The best results are obtained with chip budding performed in April.

Pest and disease: Occasionally some pests included white flies, Thrips which cause skin blemishes and a mite that is blamed for the brown lace collar near the calyx. Premature fruit fall is observed due to infestation by the mite. Spraying with seven 85 PPM intervals right after petal fall control the mite.

Harvesting and yield: Generally month of October is the right time for harvest. When the fruit is soft but not completely ripe. The yield of persimmon around 150-210 kg fruit annually.

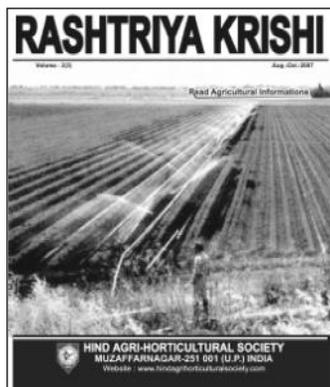
Storage: It can be stored for two to three months at a temperature of 0-2°C.

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