



## Watermelon Production in Tamilnadu-At a Glance

### KEYWORDS

Cultivation pattern, Health benefits, Watermelon

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**ABSTRACT** Watermelon (*Citrullus Lanatus*) is the short time cash crop in Tamilnadu. It is one of the most important fruits cultivated in the tropics. It is thought to be native of the Kalahari Desert in Africa. This study shows that the Cultivation pattern of watermelon in Tamilnadu, International production of watermelon, and Health benefits of watermelon. The conclusion of this study is: watermelons are considered optimum for eating when their flesh matures to produce a sweet flavour, crisp texture and deep red colour. It has high medicinal values. Day-by-day the summer days have been increasing in Tamilnadu. Due to the climatic conditions the domestic demand for watermelon has been steadily increasing during the last decade. One who cultivate the watermelon in the month of December - February they can get an assured profit.

### INTRODUCTION

Watermelon (*Citrullus Lanatus*) is thought to be native of the Kalahari Desert in Africa. The crop is grown commercially in areas with long frost-free warm periods (Prohens and Nuez, 2008). The global consumption of the crop is greater than that of any other cucurbit (Adeoye et al., 2007). Watermelon is also used in many versatile preparations such as jelly, pie, mouses, salsa, sherbet, muffin, sauce, cake and sandwich. Watermelon rinds also edible and sometimes used as a vegetable. In china they are stir-fried, stewed or often pickled. When stir fried, the de-skinned and de-fruited rind is cooked with olive oil, garlic, chilly, peppers, scallions, sugar and rum. Every part of the fruit is edible. In some Asian countries roasted seeds are seasoned to make a snack or ground and made into bred. The seeds are a rich source of protein. Watermelon juice can also be made into wine. It is also commonly used to make a variety of salads, most notably fruit salad. They are used to make jams due to their high content of pectin. The utility of watermelon rises in the month of Ramzan. The juicy and succulent fruit is sought after those adhering to the code of fasting. China, turkey, Brazil, United States, Egypt and Russian Federation are the major watermelon producers. It is one of the most widely cultivated crops in the world at large and the global production in the year 2010 reached 7,34,90,835 metric tonnes (FAO 2010). In the year 2011, 3,53,500 metric tonnes of watermelon are produced in India. Watermelons are mainly cultivated in Maharastra, Karnataka, Tamilnadu, Punjab, Rajasthan, Madyapradesh and Uttar Pradesh. They are being grown in several places in Tamilnadu including Erode, Ariyalur, Tuticorin, Villupuram, Salem and Coimbatore.

### CULTIVATION PATTERN OF WATERMELON

Watermelon is a warm seasonal crop. Optimal crop growth if temperature is above 38°C. Optimum temperature for germination is 28-32°C. Watermelon not only tolerates hot weather but for best growth requires more heat than any other vegetables. It requires hot dry climate and plenty of sunshine. In rainy season it does not grow well but now a days it has been cultivating throughout the year. Continuous rainfall will reduce the sugar content in the fruit. When the temperature rises, the sugar content will also be increased. Watermelon may be grown wide variety of soils. Sandy and sandy loam soils give best growth to this crop, because loam has high-yielding potential. Alluvial soil is also give more yield. The more than 500 varieties of watermelon are grown worldwide (Zohary and Hopf, 2000). A very large number of watermelon varieties are grown in india. Noorjehani, Anarkali, Sharbat-e-Anar ect., are cultivated in banks of the Ganga and Yamuna. Sugar baby an American variety is very popular in Maharastra. Asahi Yamto a Japanese variety is cultivated in West Bengal.

Arkajyoti, Arkamanik varieties are cultivated in Karnataka and Durgapura Kesar, Durgapura Meetha varieties are cultivated in Rajastan. Ria, Apoorva, Kasish, Kiran, Ice Box, Sugar baby, Bejo 2000, NS 295, Sindoori etc., are cultivated in Tamilnadu.

Irrigation is very important for watermelon production. It must be done at regular intervals. At the time of flowering proper irrigation is warranted. Good irrigation is essential for proper development of fruits also. When the fruits are fully matured moderate irrigation is needed so as to prevent the fruits from explosion. Two types of irrigation method is followed in Tamilnadu i.e., flood irrigation and drip irrigation. Drip irrigation is better than the flood irrigation, because it gives more yield.

There are two types of sowing patterns followed by the farmers; direct sowing method and mulching method. In direct sowing method the land is ploughed three or four times by the tractor. Pits are dug for sowing. The size of the pits is one centimeter in length, breadth and depth. The pits are filled with DAP, Borate and farm yard manure. Two or three seeds are sowed into each pit. One kilogram of seed is required for two and a-half acres. Weeding is done twice, manually. For the first fifteen days pot watering is carried out and then flood irrigation is followed by the farmers. After one month raised beds are made with a distance of six centimeter between each bed. Complex, Urea and DAP are applied three times to the plants.

In mulching method, land is ploughed three or four times by the tractor. Ten tones of farm yard manure is added to the land. Soil is softened with the help of rotator. Raised beds are made manually or with the help of machine. The breadth of raised beds is two centimeters, and the distance between each bed is 10 cm. Raised beds are covered by mulching sheet with holes in it. In this method seeds haven't sowed directly into the pits, because germination problem may be there. Hence seedlings are planted into the pits. In pro tray nursery method seedlings are produced in the trays. One tray has 98 pits. Pits are filled by coco pit and pseudomonas, and then seeds are sown into the pro-trays. Seedlings are produced within 12 days and it will be transplanted in the holes of the mulching sheet.

Drip irrigation system is followed in the mulching method. For the first fifteen days daily irrigation is done for one hour duration, for the next fifteen days for two hours duration, and thereafter, until harvesting, for three hours duration. Though the farmers weeded the land two times, weeding is not necessary to this method. Bacterial Mosaic virus, sucking insects,

pests, beetles, and fruit flies affect the veins, buds and fruits. The application of Malathion 50 Ecl, Rogar, and Endosulphen control these pests and diseases.

**Table 1**  
**INTERNATIONAL PRODUCTION OF WATERMELON**

S. NO	COUNTRY	PRODUCTION	SHARE
1.	China	5,66,49,725	63.54
2.	Turkey	36,83,100	4.13
3.	Iran	34,66,880	3.89
4.	Brazil	18,70,400	2.10
5.	United states of America	18,66,660	2.09
6.	Egypt	16,37,090	1.84
7.	Uzbekistan	11,82,400	1.33
8.	Russian Federation	11,51,580	1.29
9.	Mexico	10,36,800	1.16
10.	Algeria	9,46,200	1.06
	Total	7,34,90,835	100

Source: Food and Agricultural Organisation(FAO 2010)

### HEALTH BENEFITS OF WATERMELON

- ✧ Watermelons have 92% water by weight. It is a thirst quencher in hot summer days. It is a nature's gift to beat the scorching summer heat.
- ✧ It is an excellent fruit, which can work wonders for human skin. It acts as a natural moisturizer as well as a toner and keeps the skin cool, glowing and fresh.
- ✧ It has a good source of potassium; which helps in controlling blood pressure thereby ensuring the health of one's heart.
- ✧ Watermelon also rich in lycopene an antioxidant it may help the body fight cancer and prevent disease. Studies have also shown that lycopene protects skin damage from UV rays and from prostate cancer.
- ✧ Watermelon is an excellent source of vitamin A; which helps to protect from lung and oral cavity cancer.
- ✧ Watermelons are very low in calories and fat, which considered an ideal diet food and is high in energy, making it a great energy boost.
- ✧ Watermelon contains high on calcium. It helps build up strong bones.

### CONCLUSION

Watermelons are considered optimum for eating when their flesh matures to produce a sweet flavour, crisp texture and deep red colour. It has high medicinal values. Day-by-day the summer days have been increasing in Tamilnadu. Due to the climatic conditions the domestic demand for watermelon has been steadily increasing during the last decade. One who cultivate the watermelon in the month of December - February they can get an assured profit.

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