

Basmati Rice: A New Aspiration for Farmers

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Introduction

Basmati occupies a special status in Rice cultivation. It is a variety of long, slender grained, aromatic rice. In India, Basmati rice is grown in the specific geographical area, at the Himalayan foot-hills confined into few states of India. These states are located at northern parts of our country e.g. Punjab, Haryana, Himachal Pradesh, Uttarakhand, Western UP, Delhi, Bihar. The Basmati rice are differentiated from other aromatic rice in a certain criterion that its length increases twice of their original size after cooking with other characteristics like soft and fluffy texture upon cooking, delicious taste, superior aroma and distinct flavour. The chemical compound responsible for aroma in Rice 2-acetyl-1-pyrroline present @0.09 ppm in Basmati Rice grain which is almost 12 times more than non-Basmati Rice. Hence, Basmati rice is unique among other aromatic long grained rice [1].

Climate Requirement for Basmati Rice Farming

For Basmati Rice cultivation, climatic requirement is as same as normal Paddy cultivation. Basmati Rice requires evenly distributed rainfall throughout its growth and ideal temperature for its cultivation i.e. 20 to 38 degree° C. It also requires clear sky during day and low night temperature. Basmati varieties with superior cooking and eating characteristics can be produced if the crop matures in relatively cooler temperature. The high temperature during grain filling period reduces the cooking and eating quality features of basmati rice like kernel elongation and non-stickiness of cooked rice [2].

Soil Requirement

It can be grown in all kind of soils. However, heavy neutral soils like clay loam is excellent due to its good water holding capacity. The ideal pH range of soil for its better yield is 5.0-8.5 [3].

Selection of Varieties

Selection of good variety is essential for good quality and yield of Basmati Rice. A good quality must ensure few characteristics i.e. 1. More yield 2. Best quality 3. Resistant to insect and disease 4. Short heighted with short ripening duration [4].

Few suggested varieties are as following.

Paddy, 25-30 kg seed is sufficient for one ha. land or 10-12 kg per acre. Seed treatment must be done with 20g Bavistin and 2.5 g Streptocycline taken in 25 litre water solution, kept the solution for 24 hrs & then rice seeds should be spread in a place with wet sack on the seeds, spray water on it. Seeds should be well soaked before sowing in nursery.

2. Nursery preparation: For preparation of nursery, fertile land with good water drainage facility nearby irrigation facility

should be selected. Generally, Nursery prepared from 15th May to 15th June. But for late maturing varieties like Basmati 370,

Basmati 386 it should be prepared within 1st week of June.

For 1 ha of Basmati Rice cultivation, 700 square metres nursery is needed. In Nursery, fill the field with water and use leveller [5].

After 2-3 plough. Divide the field in small & raised beds. Before sowing, apply 225g ammonium or 100 g urea and 200g super phosphate per 10 square metres. Hoeing, weeding, apply irrigation at frequent interval and proper management of disease, insects is needed.

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Conflict of Interest

None

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