



**Food Security &
Agriculture Dev. Department,
Government of Sikkim.**

**WHEAT (*Triticum aestivum*)
Cultivation Practices**

**Source : Extension and Training
Food Security & Agriculture Dev. Department**



WHEAT (*Triticum aestivum*) Cultivation Practices

In the realm of food crops in the world, Wheat occupies the number one position and one of the major crops of our country.

Climate:

Wheat is a Rabi Crop, mainly grown in winter season. The cool winters and the hot summer are the perfect condition for a good wheat crop.

Soil and Seed rate:

Well-drained loams and clayey loams are considered to be ideal for wheat. Good crops of wheat have also been grown in sandy loams and the black soil. For a good uniform germination, the wheat crop requires a well pulverized but compact seed bed. It is also essential to do timely cultivation and conserve moisture. For timely sowing in one hectare of land, it requires 100 kg of good quality seed and if shown late, it requires around 120 hectare of seeds.

Sowing Season:

Sowing of wheat takes place in October to December and harvesting is done during Feb. to May. The crop remains almost dormant in the cold months from November to March and as the temperature rises in April, the crops starts growing, in the State, Wheat is grown as rain fed crop.

Recommended Varieties:

In the state, most popular varieties are Sonalika, VL 616, HD-2833, HD-2687 etc

Cultivation Practices:

For a good uniform germination, the wheat crop requires a well pulverized but compact seed bed. It is also essential to do timely cultivation and conserve moisture. Seed is sown by hand behind the plough drawn by bullock.

Seed Treatment:

Use available Bio fertilizers for seed coating before planting in soil, it gives 10-15% of more yield Doses: 200 gm of Azobacter/Phosphotika in 400 ml of water for 10-12 kg of seed. Well mixed seed with Bio Fertilizer should be dried in shade before sowing of seed.



Spacing and Planting depth of seeds:

For timely sown seed, the row spacing should be 15 to 22.5 cm (6 to 9 inches)

For late sowing, the Row spacing should be followed as 15 to 18 cm (6 to 7 inches)

Depth should be maintained between 5 to 6 cm (2 to 3 inches) if the variety is draft and for tall variety, the planting depth should be kept to 8-9cm. (3 to 4 inches).

Irrigation:

If there is shortage of water, then the most important time for water requirement is Crown Root Initiation, i.e. 20-25 days after seed sowing. If there is water availability then four times the irrigation are required.

1) Crown Root Initiation. 2) Tillering and late Tillering stage 3) late jointing 4)flowering 5) milk and dough stages.

Plant Protection:

The crop can be infected by rust diseases which can be controlled by consultation with nearby VLW centre for timely control of attack.

Intercropping :

Wheat can be grown along with the Mustard crop in ratio of 4:1 (i.e. 4 lines wheat crop and one line Mustard) incase if is grown under rain-fed condition.

Soil reclamation :

Wheat shows poor performance under acidic condition in the soil. To improve the soil condition from acidic to alkaline, the liming in the form of Dolomite can be done.



Harvesting :

The wheat crop is harvested when the grains harden and straw becomes dry and brittle. The harvesting time varies from Zone to Zone. Crops those grown under rain-fed condition always give lower yield than the crops grown under irrigated condition.

Storage:

Storage life of the grains is directly related to the moisture content. While storing the wheat grains should be thoroughly dried and care should be taken to make the godown moisture free.

Yield:

In the State, the average productivity is 10.02 qtls. per hectare under rain-fed condition (2006-07 annual report of FS & ADD).

Tips :

- Ensure timely irrigation at the time of Crown root initiation (i.e. 20-25 days of seed sowing) for good harvest.
- Give due importance to following stage where the water is needed are at late tillering stage and flowering stage.
- Planting depth have to be regulated depending upon the types of wheat varieties to ensure moisture availability for the seed.
- Delay in planting seed reduces the crop yield drastically.

For more details Please contact :

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