

WATERMELON FARMING



Select Good Location

You have to select a very good location for starting your watermelon farming business. Watermelons grow well in rich, slightly sandy soils with pH levels from 5.5 and 7.0.

The watermelon plants do not like soggy soils. And avoid heavy clay soils with poor drainage and aeration system. Also ensure availability of full sun.

Prepare the Soil

Preparing the soil perfectly is very important for watermelon cultivation. Successful growing of watermelon plants require extensive soil preparation before planting.

The basic soil preparation starts about 5 months before transplanting watermelon seedlings. Plow the soil well at that time.

Plowing improves soil aeration and drainage. At the same time, plowing removes rocks and other undesirable materials from the soil. Till the soil perfectly, right after plowing.

Apply as much organic fertilizer as you can while preparing the soil before planting.

Climate Requirement For Watermelon Farming

Watermelon plants are grown in climates from tropical to temperate. They require temperatures higher than about 25 °C to thrive. Preferable temperature for growing watermelon plants is between 25 °C and 30 °C.

Best Time For Watermelon Farming

Watermelon plants can be grown throughout the year. Exact time vary depending on your location. In cool climates with short growing seasons, start seeds indoors 2 to 3 weeks before your last frost date. Plan to transplant seedlings into the garden about 2 weeks after that date.

In warmer climates with long growing seasons, sow seeds directly outdoors 1 to 2 weeks after your last frost date, as long as the soil temperature has warmed to at least 21 °C. Warmer soil helps prevent poor germination.

Watermelon Varieties

There are several, actually hundreds of watermelon varieties available throughout the world. Not all these varieties are good for commercial watermelon farming business. Try to determine which variety grows well in your area, and has good market demand. You can also consult with an expert in your area for having more ideas.

Purchase Seeds

The watermelon plants are grown from seeds. So, you have to purchase seeds from any of your nearest seed supply stores. Always try to purchase new and good quality seeds. Because good quality seeds always ensure good production. Today, there are some seed supply companies with online stores. So, you can also consider ordering the seeds online.

Seeds Per Acre

You will need about 1.5 to 2 kg of seeds for sowing one acre land.

Planting

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Spacing: Actual spacing distance may vary depending upon sowing method. In pit method, use row to row spacing of 2-3.5 meters and 0.6 meters between 2 plants.

Sowing Depth: Plant the seeds about 2-3 cm deep.

Sowing Method: Different methods are used for sowing. Furrow method, pit method and hill method are most used. Although exact method depends upon climate and season.

Caring

Taking additional caring is very important for watermelon farming. Because the watermelon plants require good caring and other maintenance.

Although, all the caring process of watermelon plants is very easy. Here we are shortly describing about the caring process of watermelon plants.

Fertilizing

Apply as much organic materials as you can while preparing the soil. Watermelon plants love rich soil with lots of organic materials.

Apply Nitrogen@25kg, Phosphorus@16kg and Potash@15kg in form of Urea@55kg, Single Super Phosphate@100kg and Muriate of Potash@25kg per acre. Apply whole amount of Phosphorus, Potash and one third amount of Nitrogen before sowing seed. Apply remaining dose of Nitrogen near vines base, avoid touching it and mixed well in soil during initial growth period.

Irrigation

During the summer season, apply irrigation every week. And give irrigation only when needed during the time of maturity.

Avoid over flooding in watermelon field. Don't wet the vines or vegetative parts of the plants while applying irrigation (especially during flowering and fruit-set).

Avoid frequent irrigation, in heavy soil, as it will promote excessive vegetative growth. Reduce or stop watering 3-6 days before harvesting for better sweetness and flavor.

Mulching

Mulching is very important for growing watermelon plants. Mulching helps to retain moisture into the soil and it also helps to prevent weeds. You can use organic materials (such as dry leaves, straw etc.) or polythene as a mulch.

Weed Control

Keeping the field weed free is very important for watermelon farming business. Weeds consume nutrients from the soil, and the plants will suffer.

Keep the bed weed free during the early stage of growth. In absence of proper control measures, weed can cause yield loss of about 30%.

Carry out intercultural operations, 15 to 20 days after sowing. 2-3 weeding are required depending upon severity and intensity of weeds.

Flowering & Fruiting

Vines produce both male and female flowers separately on the same plant. They often begin producing male flowers several weeks before the females appear.

Don't be concerned if the male flowers fall off. The female flowers will stay on the vine and bear fruit.

Blossoms require pollination to set fruit, so be kind to the bees. As the fruit is ripening, prevent rotting by gently lifting it and putting cardboard or straw between the fruit and the soil.

Pruning

Pruning generally isn't necessary for watermelon plants. But vine productivity may be improved if you do not allow lateral vines to grow and stick to the main vine.

Pests & Diseases

The watermelon plants are susceptible to some diseases and pests. Here we are shortly describing about some common diseases and pests of watermelon plants.

Pests

Common pests that damage the watermelon plants and fruits are listed below.

Aphids & Thrips: These aphids and thrips suck the sap from the leaves. Resulting in yellowing and dropping of leaves. Thrips results in curling of leaves, and the leaves become cup shaped or curved upward.

Fruit Fly: It is a serious pest of the watermelon plants. Females lay eggs below epidermis of fruits. Later on maggots feed on pulp afterward fruits starts rotting.

Anthracnose: Anthracnose affected foliage appears scorched appearance.

You can control all these pests by applying both organic and chemical pesticides. Consult with an expert in your area.

Diseases

The watermelon plants are also susceptible to some diseases. Their common diseases are listed below.

Powdery Mildew: Patchy, white powdery growth appears on upper surface of the leaves. And also on the main stem of infected plant. It parasitizes the plant using it as a food source. In severe infestation it causes defoliation and premature fruit ripening.

Leaf Miner: Maggots of leaf miner feed on leaf and make serpentine mines into leaf. It affects the photosynthesis and fruit formation.

Sudden Wilt: It can affect crop at any stage. Plant get weak and give yellow appearance at initial stage. And in severe infestation complete wilting is observed.

You can apply both organic and chemical ways for controlling these diseases. Consult with an expert in your area.

Harvesting

If tendril near stem gets dried also whitish color of fruit which touch to ground get yellowish then assume that fruit is ready for harvesting.

On thumping melon if it sounds hollow (usually as a dull thump or thud) then it is ready for harvest and immature fruit sounds dense. Don't pick immature fruits as they ripe only when attached to vine.

Immature fruit don't have rich sugar content or color. To harvest ripe fruit, cut stem 1" from fruit with a pair of sharp pruners or knife. Fruit can be stored in a cool humid environment.

Post-Harvesting Tasks

Grade the fruit on the basis of size of fruits. Watermelons can be stored for about 2 weeks at temperature of 15 °C. But remember, do not store watermelon with apples and banana as it developed off flavor along with softening of fruit.

Yield

Exact yield is not possible to tell, because it depends on various factors. On an average, you can expect 7 to 8 tons per acre.