



Crop Management Practices

An Agricultural Extension Initiative of **INDORAMA**

Cabbage



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Cabbage



Cabbage is popular throughout the world because of its adaptability to a wide range of climatic conditions, ease of production and storage, and food value. The peculiar flavor in the head is due to the glucocideSinigrin, which carries sulphur also. The open green leaves are more nutritious than cabbage head.

Season and Climate: It grows best in cool moist climate and is very hardy to frost. In areas with comparatively dry atmospheres, its leaves tend to be more distinctly petiole than in the more humid areas. In hot dry atmosphere, its quality becomes poor and much of its delicate flavor is lost. Its germination is best at a soil temperature of about 55 °F to 60 °F.

Soil: It can be grown almost in all types of soil ranging from sand to heavy soils. But small quick growing cabbage varieties do well in sandy soils, while large and late maturing varieties in

heavy soils. Soils intended for cabbage growing, should have good drainage. Acid soils are not good for cabbage. The best PH range for cabbage is between pH 5.5 to 6.5. Lime may be added in acid soil to make it neutral or alkaline for growing good crop of cabbage.

Land Preparation: Land is prepared by ploughing it 3 to 4 times. The first ploughing should be done by soil turning plough, and the bulky organic manures should be spread in the field. Then the land should be ploughing and leveling the land, beds of suitable size and irrigation channels are made.

Seed Rate & Time of Sowing: Cabbage is grown mainly during winter/cool season. In cabbage for good crop 400-500gm/ha seed is required.

Nursing: Seeds can be sown on seed beds, in seed trays or seed boxes. 0.4 kg of seed is required to plant 1 ha of cabbage. Prepare seed beds at 1.2m

wide and any convenient length and then level beds. Water the bed, cover with a 4cm thick layer of dry grass or sawdust and burn to sterilize the soil. Alternatively, solarize soil by covering soil with transparent plastic sheets for 5-8 weeks to sterilize the soil.

Prick out seedlings 6 to 7 days after emergence. Two weeks before planting out on the field, fertilize seedlings with NPK 15-15-15 liquid feed (Prepare solution by dissolving 5g NPK in every 1 litre of water). Apply directly to the soil. Harden seedlings 1 week before transplanting by gradually decreasing shade until at least 1 day full exposure to sunlight and/or by reducing irrigation. Control pests and diseases by applying recommended fungicides and erect insect nets over seedlings.

Layout & Spacing: Ridges & furrow type

of layout is used for crop. Before that seedlings are prepared in nursery bed (Raised bed) & transplanted in main field after 3-4 weeks. Spacing for crop is 45x45 cm to 60x60 cm.

Manures & Fertilizers: Cabbage is a heavy feeder and requires supplemental fertilization in the form of manure or compost, nitrogen, phosphorus and potassium. Fertilizer program should be based on soil analyses and should be developed for each field. Cabbage requires **100 to 150 kg nitrogen per hectare (5-7 Bags of Indorama Gr. Urea)**. **Nitrogen is supplied in split applications**, where 50 % to 66 % is broadcast and ploughed in just before planting. The first application is made together with phosphorus and potassium. The remainder is side-dressed two to three weeks after transplanting and again three weeks later or applied once-off at about six weeks. 50 kg P₂O₅ and 50 Kg K₂O should be applied per hectare.



Irrigation: Irrigation at the time of transplanting is essential. Steady supply of moisture is necessary for good growth and development. Interval between two irrigations depends upon climate, soil and plant growth. In winter season irrigation at an interval of 8-10 days is sufficient.

Harvesting and Yield: In cabbage harvesting is done depending on the maturity of the head and demand in market. Normally harvesting is done when heads are firm. If prices are high in the market harvesting is done earlier when heads are small and loose.

Harvest when heads reach desired size and are firm. This will take around 70 days for most green cabbage varieties. Most early varieties will produce 1- to 3-pound heads. Proper grading is followed before heads are sent to market the yield of cabbage variety

from 15 to 25 tons per hectare. The yield of cabbage depends upon the variety, growing season and management practices, Hybrid cabbage yields upto 50 tonner per hectare The yield of early varieties ranges between 12 to 15 tones/ha. The yield of late season varieties is about 20 to 25 tones /ha.

Post-harvest Handling: Trim off the outer leaves, sort out and grade by sizes. Pack in crates or boxes and keep under well-ventilated shade. Avoid throwing the heads into truck as poor post-harvest handling may lead to loss.

Market Specification: Cabbage must be hard, the head full and conveyed in appropriate containers.



This document is prepared for Farmers to create general understanding of beneficial practices for higher crop production. This manual only provides general range of management options so you can choose alternatives best suited to your operations. For a deeper understanding, please contact a Govt Agriculture Expert. You can reach our Agronomists at the Farmer Service Center: Mr. Magaji: 09087070011, Mr. Peter: 09087070012 Email: basingh@indorama.com.ng