

## PRODUCTION GUIDELINES FOR CABBAGE

Crop	Cabbage
Botanical Name	<i>Brassica oleraceae var. capitata</i>
Number of Seeds per kg	280 000 - 350 000
Number of Seeds for Direct Sowing (kg/ha)	1
Number of Seeds for Transplanting (g/ha)	300
Sowing Depth (cm)	0.5 - 1.5
Optimum Soil Temperature for Germination	20-22
Temperature Range for Germination	15-27
Days to Emergence	6-10
Days from Germination to Transplant	28-42
In Row Spacing (cm)	40-70
Between Row Spacing (cm)	60-90
Population per Hectare	30 000 - 40 000
Temperature Range for Growth	15-20
Sensitivity to Frost	Hardy
Days to Maturity	70-160
Expected Yields (ton/ha)	60-80
Harvest Period	35 days
Effective Rooting Depth (cm)	45-60
Optimum Soil Type	Loam
Soil pH	5.5 - 6.8
Sensitivity to Salinity	Moderately sensitive
Total Water Requirement (mm)	440
Weekly Water requirement (mm)	30-38
Storage Temperature (°C)	0
Ideal Humidity for Storage	98-100
Storage Duration	Maximum 30-120 days
Perishability	Good Storage
Pests	American Bollworm , Aphids, Bagrada Bug, Diamond Back Moth, Greater Cabbage Moth, Nematodes, Red Spider Mite
Diseases	Bacterial Spot (Warm water treatment of Seed), Black Rot ( <i>Xanthomonas campestris</i> ) (Warm water treatment of Seed), Black Leg ( <i>Leptosphaeria maculans</i> , <i>Phoma lingam</i> ) (Warm water treatment of Seed), Black Ring (Virus-Control Aphids), Cabbage Yellows (Caused by high temperatures, Clubroot ( <i>Plasmodiophora brassicae</i> ) (Fumigate - Methyl Bromide), Damping Off, Downy Mildew ( <i>Peronospora parasitica</i> ), Mosaic Virus (Control aphids), Ring Spot, Soft Rot (Secondary Infection), Stem Rot, White Blisters, White Rust.
Physiological Disorders	Oedema (Overwatering and high humidity), Frost Damage (Exposed leaves become waterlogged, Brown Bead, Hollow Stem (Boron or Calcium deficiency).
Nutrient Application: Nitrogen (N)	>200 kg/ha
Phosphorus (P)	60-80 kg/ha
Potassium (K)	>200 kg/ha
Micro-element Sensitivity: Low	Zinc (Zn), Copper (Cu), Iron (Fe)
Medium	Manganese (Mn)
High	Boron (B), Molybdenum (Mo)