

ONIONS, FIELD/BULB

Cultural Information

General

Climate Requirement: Bulb onions of all vegetable crops are most sensitive to location and production timeslot. They require a combination of correct day length and temperature to produce the bulbing response, this will require manipulation of varieties and sowing dates.	
Frost Sensitivity: While not considered frost tender extreme cold will damage young plants.	
Seed Requirement Direct Plant (kg/ha): 3-4	Seed Planting Depth (cm): 1.5
Seed Requirement Transplant (g/ha):	Seeds per gram (approx): 280-300
Plant Population: 200000-650000 per Ha	
Row spacing: 3-5 rows on a 1.5-2 m bed	Plant Spacing: 10-20 plants per m of row
Potential Disease Problems: Leaf, stem and root diseases particularly fungal diseases such as Downy Mildew Botrytis, Aspergillus, Fusarium are a problem with some onion crops.	

Germination Information

Germination Temperature: Range 5-34 C, Optimum 20-26 C	
Days to Emergence: 7-10 days	Emergence to Transplant: 30-60 days
Plant to Maturity: Dependant on variety season and area 100-200 days	
Transplant Recommendation: Transplanting of onions is seldom practised although possible. Direct seeding is the usual method of sowing.	

Soil and Nutrition

Salinity Sensitivity: Moderately tolerant	Optimum pH: 6-6.8
Nutrient Removal (kg/ha) (At average yield, greater if yield is higher)	
Vegetative: N 48 Kg, P 16 Kg, K 38 Kg, per Ha	
Harvested Product: N 63 Kg, P 30 Kg, K 45 Kg, Ca 17 Kg, Mg 5 Kg. per Ha	
Total Nutrient Removal	
N 111 Kg, P 46 Kg, K 83 Kg, Ca 17 Kg, Mg 5 Kg. per Ha	
Fertiliser Application: Applications of up to 65% of the total as a pre plant banded application and the balance as two high N side dresses, the last just before bulb initiation have shown good results.	

Irrigation Requirement

Irrigation System: Fixed or mobile overhead sprinklers, flood are common or trickle on some soil types.
Water Usage (average): 2.6-3.8 Ml per Ha

Yield Potential

Average Yield: 2500 bags per Ha
Packing: Onions are usually sold size graded in red net bags of 12 kg, some specialist lines are packed in cartons.

This information is subject to the following disclaimer.