

Onion

Propagation

Nursery Bed Preparation

Onion seeds are sown on nursery beds to raise seedlings for transplanting in the field. Raised beds of size 3 x 0.6 m and 10-15 cm in height are prepared. About 70 cm distance is kept between two beds to carry out operations of watering, weeding, etc. The surface of beds should be smooth and well levelled. Raised beds are necessary to avoid problem of water logging in heavy soils. In sandy soils, however, sowing can be taken up in flat beds. To avoid mortality of seedlings due to damping off, drenching of the beds with Bavistin (15-20 g/10 litres of water) is effective.

Season of Planting

The sowing and transplanting time in different areas are as follows-

State/Season	Month of sowing	Month of transplanting
Maharashtra & Gujarat.		
Kharif	May-June	July-August
Late Kharif or early Rabi	August-September	September-October
Rabi	November-December	December-January
Tamil Nadu, Karnataka and A. P		
Early kharif	February-April	April-June
Kharif	May-June	July-August
Rabi	September-October	November-December
Rajasthan, Haryana Punjab, U. P & Bihar		
Kharif	May-June	July-August
Rabi	October November	December-January
West Bengal & Orissa		
Kharif	June-July	August-September
Late kharif	August-September	October-November

Raising of Seedlings

In case of common big onion, 8-10 kg seeds are sufficient for raising nursery required to plant one hectare. Thus 100-110 beds of size 3 x 0.6m would be required for sowing 8-10 kg seeds. Prior to sowing seeds are treated with fungal culture of *Trichoderma viride* (4 g/ kg of seed) or Thiram (2g/kg of seed) to avoid damage from damping-off disease. Sowing should be done thinly in lines spaced at 5-7

cm distance. Seeds are sown at a depth of 2-3 cm and covered with a fine layer of soil followed by light watering by water can. The beds should then be covered with dry straw or grass or sugarcane leaves to maintain required temperature and moisture. The watering should be done by water can as per the need till germination is completed. The cover of dry straw or grass is removed immediately after germination is complete.

The seedlings are ready for transplanting within 6-7 weeks of planting for kharif and 8-9 weeks old for rabi.

Raising small Bulblets:

This method is used for getting early crop in the kharif season so as to meet the demand of green onion for salad in early winter. For this purpose, small onion bulblets of kharif onion varieties like Agrifound Dark Red, Baswant 780, N-53 and Arka Kalyan raised in the previous season are used for planting. Raised beds or flat beds are prepared depending upon the soil type. To cover one square metre area of the bed 15 g of seed are sufficient. . The best time of sowing of seeds for getting quality bulblets is mid January to the beginning of February depending upon the area. The plants are left in the nursery bed up to April-May till their tops fall. Harvesting is done along with the tops and selected bulblets (1.5 to 2.00 cm in dia.) are stored by hanging method till July in a well-ventilated house. Such well stored bulblets are used for transplanting in the Kharif season