



A mat-type nursery is a prerequisite for machine transplanting. It establishes seedlings on a layer of soil-FYM mixture at a firm surface. Seedlings are ready for planting within 15-20 days after sowing of seed. Based upon methods of preparation, it is of two types, (i) Wet-bed nursery and (ii) Dry-bed nursery.

Preparation of mat-type nursery

Materials required: Polythene sheet, wooden or iron frame, sieve to have stone-free soil (for dry-bed mat-type nursery), well decomposed FYM, sprouted and treated paddy seed, watering can, sickle/sharp knife to cut mat nursery into convenient sized pieces and ice cutter or thick handled needle for piercing polythene sheet.

Frame: Removable frame is used to ensure uniform sized mats. The dimension of the mat frame should be 1.2m x 1.2 m and thickness should be 0.5 inch (1.25cm) for wet bed and 0.75 inch (1.9 cm) for dry bed. Wooden staff or aluminum bar (1.5m x 10 cm x 10 cm) may be used to drag extra soil and FYM mixture to maintain uniform thickness and level the top of the bed.

Seed quality: Good seed is clean (contains no pebbles, soil particles, weed seeds), genetically pure (contains only grains of one variety), and healthy (well filled, of same color, without cracks, and no obvious disease or pest damage).

Seed Selection: Seeds are immersed in plain water and stirred well. Seeds those sink are selected and those float are rejected.

Seed treatment

Once the selection process is done the seeds should be soaked directly in one of the following fungicidal suspensions for 12 hours. One liter of fungicidal solution is required to treat one kg of seed. Treated seeds should be kept in incubation for 48 hrs.

Fungicide	Dose (g/kg seed / liter of water)	Use
Mancozeb	2.5	To avoid damping off, wilt and root-rot in seedling stage
Captan	2.5	
Carbendazim	2.5	