

BELLARY ONIONS

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Onion is one of those profitable crops which have always a ready market. It is an article of every day diet for the poor as well as for the rich. It is one of those crops which can be stored and kept for some time.

Onions belong to the category of spices and they may be broadly classified into two groups, the country variety—the small sized onions and the big sized Bellary onions. Of the latter there are two varieties the white and the red. The red variety is generally liked by people and it is about this that a short description about its cultivation, etc. is attempted below.

Bellary onions are commonly grown by ryots in the northern districts of the Presidency. In Bangalore it is very common. Now its cultivation has gradually extended to the southern districts; namely Salem, Coimbatore, Trichinopoly, etc.

Season.—Onions can be grown at any time throughout the year but the cold weather crop thrives and yields best. Nursery for the Bellary onion may be sown in September and seedlings transplanted in October. It is a five months crop including the period spent in the nursery.

Soil.—Bellary onion can be grown on any kind of soil excepting alkaline lands. However, as it is an irrigated crop and has to develop its bulbs underground a free working soil with good drainage is the best. Deep sticky soils are quite unsuited to the crop. Its cultivation should also never be undertaken in low lying lands where there is a likelihood of water stagnation during the rainy season.

Seed and Sowing.—The crop is best grown from transplanted seedlings. To plant an acre under this crop 2 lbs. of seed will be required costing about Rs. 8. The seed-bed must be carefully prepared. The land chosen for the nursery must be somewhat a high level ground with provision for good drainage. About 6 cents will be enough for sowing the seed necessary to plant an acre. The bit of ground should be dug out well with a mammutti removing all weeds, grasses, etc. completely. Clods should be pulverised and a fine tilth obtained. One to two cartloads of well rotten farm yard manure may be put on and incorporated well into the soil by again working with a mammutti. The seed-bed should be levelled very evenly (which is very necessary) and laid into longitudinal beds, the width being conveniently put at 3 to 4 feet, the idea being to reach the centre of the bed easily from either side for subsequent weeding.

Having thus prepared the seed-beds, the seed which will go into each bed is obtained by dividing it by the number of beds prepared and it is taken mixed in a vessel with a good quantity of sand and strewn over the seed-bed four times either way the idea being to secure even sowing.

The seed is sown similarly in all the other beds and it is lightly covered by passing fingers' ends over the seed-bed. The beds should be irrigated slowly. The force of the current may be lessened by providing some obstructing material like paddy straw, etc., at the entrance and the water let in slowly. This precaution is very necessary. Otherwise the seeds being very light will be washed off to one corner of the bed. For the same reason the beds also have to be quite even. In two to three days the seeds will germinate. Particular care should be taken to sow the nursery on a clear day, and when we do not expect heavy rains for about a week subsequently. If rainfall is apprehended at night, the seed-beds may be covered by mats, and the mats removed next morning.

The nursery may be irrigated twice a week. Ordinarily water should never be allowed to stagnate in the seed-bed. Otherwise the seedlings will rot and die. Two weedings will have to be given once a fortnight. The day before weeding, the seed-bed should be irrigated and the weeding done carefully without disturbance to the young seedlings from the bunds on either side of the seed-bed.

Preparation of Land.—As soon as nursery is sown, the land intended for transplanting should be given cultivation. Four to five ploughings should be given at intervals. The clods should be broken and a fine tilth obtained. Fifteen to twenty cart-loads of Farm Yard Manure should be used. The land is laid into ridges and trenches of convenient length according to flow of water. Ridge to ridge it may be 2 feet apart with trenches about 9 inches wide at the bottom.

Transplanting.—The seedlings are 35 to 40 days old when they are transplanted by which time they are about 6 inches high. The seed-beds are watered first and after a good soaking the seedlings are carefully lifted without breaking their tiny roots. Seedlings whose roots have been torn away should be rejected then and there. Water is let in the trenches and the seedlings are transplanted in the evenings in *single seedlings* on both sides of the ridge about 5 ins. to 6 ins. apart. Never make the mistake of planting in twos. The optimum width is found to be 5 to 6 inches but not further apart if maximum yield is to be obtained. All the seedlings take root and failures are usually uncommon and there is no necessity for filling up gaps. Single seedling: on both sides of the ridge: and 5 to 6 inches apart: these are the most important points to be borne in mind in the cultivation.

A light irrigation may be given on 3rd day and subsequent irrigations once in five days or so about a month till the seedlings get established. A good weeding and hoeing should be given after a month. Afterwards irrigations once a week and hoeing once a fortnight are all that are necessary.

Bulbs begin to form in the 3rd month or so after transplanting. They will be visible outside and they should not be earthed up and covered with soil. For their development they seem to like exposure to sun and air. Bulbs that are covered with earth while growing do not develop inside the soil and this has been found by experience to lessen the yield considerably. This is again another important point to be noted in Bellary onion cultivation.

Harvesting.—About four months after transplanting the crop matures and will be ready for harvest. The signs of maturity are the leaves turning yellow and beginning to lodge. The bulbs would be filled up and the outer coats getting dry and peeling off easily. Two to three days before harvest the crop may be irrigated. This serves to increase the weight of the bulbs, and also renders harvest easy. Harvesting is done by lifting the bulbs. If hand hoe is to be used particular care should be taken not to injure the bulbs for injured bulbs tend to show signs of rotting when stored. After lifting, the leaves are cut off from the bulbs. One acre of the crop yields on an average 15,000 lbs. per acre which valued ordinarily at Re. 1 per maund of 25 lbs. cost Rs. 600. Very good yields of 20 to 25 thousand pounds per acre have also been recorded under favourable conditions of season and soil. Sometimes when there is a good demand the price goes up to Rs. 1-4-0 per maund. The produce may be taken in lots to a good market near by and disposed off. Bellary onion keeps well for a month or so without appreciably decreasing in weight.

The best plants may be left for seed-heads to ripen and these seed heads may be removed in a week's time, dried and the seed collected.

To sum up, this crop requires clean cultivation. It succumbs to weeds easily. Timely irrigations should be given. Only single seedlings should be planted, not on one side of the ridge but on both sides of the ridge and not more than 5 ins. to 6 ins. apart. Bulbs when they are developing should not be earthed up. They should be left exposed as such. Bearing these points in view, the crop may be profitably cultivated. Profit per acre varies with season and locality.

Cost of cultivation per acre.

	RS	A	P
Cost of raising nursery to plant an acre	11	5	0
5 ploughings (12½ pairs)	12	8	0
15 cart loads of farm yard manure	15	0	0
Spreading manure—5 men			
Breaking clods and levelling, with Guntaka—½ pair 5½ men	2	1	0
Forming ridges and furrows—½ pair and 10½ men			
Pulling out seedlings and planting—12 women at 3 annas each	2	4	0
Weeding—10 women	1	14	0
Hoeing 4 times—40 women	7	8	0
Irrigations 20 including planting irrigation, 60 pairs and 60 men to guide water	78	12	0
Lifting bulbs, removing sheaves, carrying, etc., 16 women	3	0	0
Total	139	2	0

or Rs. 140.

Produce	600 Mds.
Valued at one rupee per maund	600 Rs.
Net gain per acre	460 „

If the ryot cultivates the land on *varam* system he will get for his share Rs. 230 as his profit.