

## NATIONAL THIRD - PLANT VARIETY

Durga 4 - Improved Variety of Carrot

Madan Lal Devada Jodhpur, Rajasthan

Parmer, Madan Lal Devada (50), has developed an improved carrot variety through selection method. The carrots are long, red in colour with sweet taste, high vitamin content and long leaves.

Madan Lal, who has studied up to class ten only, owns about 40-50 bighas of land where he cultivates carrot. He leases another 40-50 bighas for carrot cultivation. Apart from carrot he also cultivates radish, castor, cumin, bajra and wheat in his fields. His family comprises his wife and two sons. His three daughters are married and settled. The family sells carrot at a large scale to all parts of Rajasthan as well as to Delhi, UP, MP, Gujarat and Maharashtra. He also sells seeds of this variety to farmers living in neighboring villages and districts.

## Genesis

In 1998, he brought the seeds of a local carrot variety from a farmer living near his village. He planted the seeds and found some of the plants superior to others in terms of health and yield quality. He selected those plants and grew them for seed production through root-to-seed- method of propagation. The seeds thus produced were planted in the next season and selection undertaken. In this manner, he has been selecting the best plants for seed

production for the last 15-20 years. He sorts the seeds into various grades uses the best ones for planting.

The improved carrot variety

The special characteristics of the variety are long carrots (up to 60 cm), red colour with sweet taste, high vitamin content and long shelf life. The long leaves of this carrot variety can be used as green fodder for animals. A field trial was carried out to test the



performance of the variety in farmers' fields where the performance of Durga – 4 (542.5 q/ha) was at par with national check (550.8 q/ha) and far superior than local check varieties. The variety was also found to be free from disease and pest incidence, very sweet in taste with less forked roots. In the biochemical analysis carried out at CALF Lab (National Dairy Development Board, Anand),  $\beta$ -carotene content in Durga 4 was found to be 72.08 mg/kg, the iron content at 95.8mg/kg and the vitamin E content was found to be 52.1 IU/

kg. The field experiments for performance evaluation under Jaipur conditions are being conducted by RARI, Jaipur during Rabi 2016 and report is expected by February end, 2017 or March 2017.

This variety is being grown by farmers of Mathaniya block of Jodhpur and adjoining districts also. The farmers cultivating this variety mention that the yield is good, the germination is early and the quality of produce is good. Leaves are broad hence the fodder is also good.

