



Carrot

DOLCIVA

German Plant Variety Registry Code:
MOG 278

Breeder:

Sativa Rheinau AG

Variety Description:

DOLCIVA is an open-pollinated, population variety of the Nantaise type. The carrot is cylindrical with a blunt end and has a growing season of approximately 130-140 days. It is appropriate for fresh or whole marketing, and as a storage carrot. After 140-150 days it is also suitable for processing.

North of the Alps it can be sown from early April to mid-July. The variety develops rapidly, with vigorous foliage, and has a good *Alternaria* tolerance. The root has a pronounced shoulder and is not prone to greening. It reaches a length of approximately 20-22 cm and has a blunt end. The skin is medium-smooth and resists splitting and cracking. DOLCIVA has an intense orange color both outside and inside. Analysis with picture-forming methods has shown it has a middle-range vitality and ripening ability. With respect to flavor, it has an above average balance of sweetness and aroma; the Brix value (soluble dry substance) is about 0.5 points higher than all similar varieties.

Breeding History:

The genetic basis of DOLCIVA is formed by five older, medium-sized open-pollinated varieties of the Nantaise type (including Fanal), as well as 12 new hybrids of the Bolero F1 type. The varieties flowered together for the first time in 2005. The pollen sterility observed in some hybrids diminished as expected with each un-isolated flowering. The current portion of pollen-sterile plants is now at natural levels.

The observed dissociation in type, form and color was less than one could expect in succeeding generations of hybrid varieties. On the other hand, it was striking that some plants formed over-long, late, or not blunted roots with thick stem insertions at the collar.

KULTURSAAT e.v.

Association for Breeding Research and Crop Maintenance
Based on Biodynamic Principles

It was first cultivated on the rather light, biodynamically-stewarded soil of the Gut Rheinau Farm in the north of Switzerland, and later on larger crop stands on neighboring Demeter Farms. Selection took place in each generation, first based on positive mass selection in the field, and then how they fared after the winter storage selection was based on the Nantaise type. From those roots selected (1000 specimens), a further selection was carried out based on a high Brix value, measured using a refractometer. The remaining carrots were then taste-tested for sweetness and aroma. The minimum population size at flowering was, in all generations, at least 300 plants.

Maintenance breeding of DOLCIVA is sustained by the Sativa Rheinau AG. To increase the selection intensity, selection for maintenance breeding takes place on large market-crop stands, during the machine harvest. DOLCIVA has gradually found its place in small and medium-sized organic farms due to its reliability as a crop and its outstanding flavor.

The DOLCIVA variety was approved in 2014 by the German Plant Variety Registry. The organization of the multiplication and commercialization of sale seed is, among other things, the responsibility of the Bingenheimer Saatgut AG.