# IMPERIDA: A New Bunching Carrot

by DeLance F. Franklin

### UNIVERSITY OF IDAHO

Agricultural Experiment Station

Published by the University of Idaho, Moscow, Idaho

## IMPERIDA: A New Bunching Carrot

#### By DELANCE F. FRANKLIN\*

A new carrot variety, Imperida (IM per I' da), has been developed at Parma Branch of the Idaho Agricultural Experiment Station, at Parma. The original selections for this variety were made in September, 1940, from a field of commercial bunching carrots grown by Donald W. Tolmie at Donnelly, Idaho. The extreme variability of the carrots in this field indicated that the seed from which this crop was grown had resulted from the chance crossing of Imperator with a relatively small population of another variety, probably Red Cored Chantenay. Among the segregants, numerous individuals were observed which possessed not only roots of outstanding size and length, but in addition, bore tops which were 6 to 8 inches shorter than the field average. By selection and inbreeding, this short top character has been fixed, along with certain modifications in root-size, color, and core.

#### Description

Under southwestern Idaho growing conditions on irrigated land of good fertility, Imperida reaches suitable bunching size in 95 to 100 days, at which time its short, strong tops reach an average of 12 to 15 inches in length. Imperator grown in the same fields under the same conditions has tops averaging 20 to 24 inches. (Fig. 1). The petioles are lettuce green<sup>1</sup>, similar in number to those of Imperator, but slightly finer. The leaflets are grass green, and are slightly coarser than in the Imperator variety. The petioles are tough, and the collar adheres well to the crown in bunching and handling.

The roots of Imperida are slightly longer than those of Imperator. For example, in trials where the average length of Imperator was 7<sup>1</sup>/<sub>4</sub> inches, the average for Imperida was 8 inches. Imperida roots are long-conical in shape, with predominantly square shoulders, level crowns, and medium-to-long root tips. The color of the periderm is typically salmon orange or slightly darker, and that of the cortex is salmon orange to bittersweet orange, mostly bittersweet orange. The core (xylem) ranges from capucine orange to orange in color, mostly orange chrome. Thus, there is little contrast in color between core and cortex. The core size is smaller than that of Imperator, ranging from small to medium. The flavor is mild and sweet.

<sup>\*</sup>Superintendent University of Idaho branch experiment station, Parma, Idaho.

<sup>&</sup>lt;sup>1</sup> All colors used in this description are after Ridgway's classification, Robert Ridgeway, "Color Standards," 1912, Washington, D. C.

In the reproductive stage, Imperida plants tend to be slightly more "leggy" than those of Imperator, and the secondary and tertiary branches have a pronounced tendency to curve out and slightly downward. Despite this, it is a good seed-producer under Idaho conditions.

Random samples of Imperida, left, and Imperator, right, grown side by side and harvested on the same date, showing characteristic tops and roots of each. (Picture courtesy of Pete Olesen).



#### **Principal Value**

Although Imperida has been developed for use as a shipping variety, it would appear to be a good variety for the home gardener. As a shipping variety, its short tops will tend to eliminate the difficulties frequently encountered in the commercial packing of Imperator types which have been produced on soils of high fertility. These carrots frequently produce such bulky tops that the packer is confronted with two highly undesirable alternatives. Leaving the tops long makes it impossible to get enough packing ice to the roots to hold them in prime condition. Shearing the tops so that he can use adequate package ice is his only other alternative. In either case, the pack presents an unsightly appearance that is not pleasing in the markets. The tops of bunching carrots are left on to create an attractive appearance and to give evidence of the freshness of the product. Since a shorter-topped variety such as Imperida would not offer the packaging and icing problems just described, it would probably make a better market appearance. For this reason, and because of the high quality of its roots, Imperida will probably find ready acceptance wherever the Imperator variety is now used as a shipping carrot.

#### Availability of Seed

Seed of the Imperida variety will be available in small quantities to seedmen for trial by March, 1950, and may be had by writing the University of Idaho Branch Experiment Station at Parma, Idaho. As the supply of seed is limited, seed will be sent out in the order that the requests are received until the supply is exhausted. Larger lots of stock seed will be available in January, 1951.

IDAHONIAN, MOSCOW