

Association for Breeding Research and Crop Maintenance **Based on Biodynamic Principles**

Breeding Biography of a Biodynamic Variety



Blue-green autumn leek

Updated: 15/02/2017

HALDOR

German Plant Variety Registry Code:

Breeder:

Michiel GROEN

Variety Description:

HALDOR is distinguished by its especially dark blue-green leaves for an autumn variety, and its very upright leaf position. HALDOR has robust, sturdy leaves, a medium-long shaft with a high white portion. The variety demonstrates low bulb-formation at the base. The marketable yield is comparatively in the middle range. HALDOR is suitable for harvest from October to December.

Breeding History:

HALDOR was bred from ROMIL (Hild), a strain of the blue-green autumn varieties. Breeding work began in 2003 at the biodynamic vegetable farm Willmann. Positive mass selection was used as breeding method. Particular attention was paid to the following criteria:

- long, thick shafts, dark-blue leaves
- upright leaf positioning
- low bulb formation at the base.

The plants were selected from crop stands of about 4000 leeks. From these, 150 to 300 selected plants were chosen and allowed to flower together in a biannual rhythm. Since leek is characterized by a high risk of inbreeding depression, an additional 200 or less second-choice plants from the same stand were also allowed to flower. Only seed harvested from the first-choice selected plants were further used for breeding.

In the spring of 2007, a further selection was made after the overwintering of the selected plants. This selection resulted in a significant step in the breeding process. In addition to the dark foliage color and



Association for Breeding Research and Crop Maintenance Based on Biodynamic Principles

the upright leaf positioning here, special attention was paid to vitality. In 2008, a trial crop stand was propagated at Röllingsen biodynamic vegetable farm in Soest. Selected plants from this stand were then allowed to flower at Willmann.

The variety was approved in 2010 by the German Plant Variety Registry. Maintenance breeding is carried out by M. Groen at Willmann vegetable farm (Ingersheim). The organization of the multiplication and distribution of sale seed is, among other things, the responsibility of the Bingenheimer Saatgut AG.