

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

Breeding Biography of a Biodynamic Variety



Savoy cabbage for autumn harvest

Updated: 15/02/2017

SMARAGD

German Plant Variety Registry Code: **KOI 78**

Breeder:

Arne von SCHULZ

Variety Description:

SMARAGD is a middle-early to late savoy cabbage with good storage characteristics for the early and middle storage period. It has dark-green leaves that are strongly curled and crinkled. The head is flatround to round, and the inner stem is medium-long to long.

Sowing can take place in the months of April, May, and June, and the planting from May to July at a distance of 50 x 75 cm. Harvest until December. At harvest maturity in September/October, SMARAGD should not remain on the field, since it may split.

Breeding History:

The original breed stock for SMARAGD was the variety HAMMER, which is described in the "Complete Handbook for Vegetable Cultivation" ("Handbuch des gesamten Gemüsebaus") by Becker Dillingen in 1956 as follows: "HAMMER, DÜSSELDORFER HAMMER, HAMMER SEPTEMBER. Middle-late to late, not winter hardy. Head flat-round, medium-sized, medium-stark crimped, outer leaves quite dark. Similar to VERTUS. Requires good soil. Planting distance 60 x 60 cm. Vegetative time planting till harvest 120 – 130 days.

The variety appears in the EU lists from 1987, 1990 and 1992. As of 1995 HAMMER does not appear there anymore. The variety was registered in 1987 in Germany, Netherlands, Great Britain and also in 1990/92 in Germany and Netherlands. The name Adolf Aders is mentioned as the breeder.

In the year 2000, A. von Schulz began breeding work on the biodynamic farm Fredeburg Domain. Original seed stock was a sample denominated "HAMMER GROEP 1" from the CGN Wageningen Seed



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

Bank (NL). After screening, the selection began in 2001. Attention was paid in the process to a harmonic leaf positioning, short outer trunk, no splitting, harvest uniformity and color (emerald green). After three generations (6 years) of positive mass selection, the candidate variety was entered at the end of 2006 for registry trial. In the autumn of 2008 SMARAGD was identified as a new variety from the German Plant Variety Registry.

Evaluation in a 2005 trial at Obergrashof Farm in Dachau, Munich:

"SMARAGD develops rapidly, and nevertheless shows some frost hardiness. The medium green, strongly crimped leaf encloses a solid, round head. The crop stand in 2005 was very uniform and the harvest rate was high (about 90%). The flavor was very good; a commercially viable variety."

Since 2008 maintenance breeding and production of the derived stock seed is carried out by A. von Schulz at Fredeburg Domain. The Bingenheimer Saatgut AG is responsible, among other things, for the organization of the seed multiplication and commercialization of sale seed.