



Hardneck Garlic

FROLIA

German Plant Variety Registry Code:
KNO 20

Breeder:

Christine NAGEL

Variety Description:

This garlic variety, which is planted in the autumn, forms medium-sized bulbs of a grey-white color and shows a slightly violet color flaming upon maturation. The bulbs hold the approximately seven to ten cloves well together; the brown clove skin is firm and can be easily peeled. FROLIA is a hardneck type garlic, which means it forms the blooming stalk in June where, in addition to stunted blossoms, it develops bulbils. The growth of the bulb is promoted by timely cutting of these stems in June.

FROLIA belongs to the middle-late maturing group of garlic and should reach maturity by about the end of July. FROLIA's flavor has been described by consumers as very aromatic and of a pleasant intensity. In addition, it has from good to very good storage capacity.

Breeding History:

Breeding work on FROLIA began in 1999 with just a few bulb specimens from the private collection of Hellmuth FROMME from Gatersleben. These bulbs were further propagated from 1999 to 2001 on the vegetable farm of the Lebensgemeinschaft Bingenheim ("Living Community" for the handicapped), which has been for many years stewarded as a biodynamic farm. Starting in 2001 the propagation and breeding development took place in Eichstetten near Kaiserstuhl, at the breeding garden of Ch. Nagel under biodynamic conditions.

The risk of virus infestation in garlic and its further transmission through vegetative propagation is very high, which is why meristem propagated garlic is almost the only commercially available, that is, by means of a laboratory method of cell tissue propagation. Virtually all garlic varieties have lost the ability to flower and form seed, which would be of great importance to maintaining health of the variety, since seed is usually free from viruses. Even the bulbils from the hardneck varieties usually have less virus

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infestation. For this reason, the bulbils are used in breeding work as stock bulbs to refresh the variety. Through the propagation of individual heads and their bulbils, it is possible to separate vital and less vital lines despite a purely vegetative reproduction. With FROLIA it is possible to get bulbs with sufficiently large cloves, even in the first year after planting the bulbils.

Health maintenance consolidated over time as certain other criteria like size, circular form, clove formation, and reduction of double-sprouting cloves were worked upon in the breeding work. Through intensive use of the biodynamic preparations and plant care products an attempt was made to strengthen the variety over the generations.

FROLIA was admitted as a variety in 2009 by the German Plant Variety Registry. Production of propagation stock for further reproduction takes place on the same breed garden. The Bingenheimer Saatgut AG is responsible, among other things, for the organization of the reproduction and commercialization of the plant material for propagation.