

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

Breeding Biography of a Biodynamic Variety



Cherry tomato for greenhouse cultivation

Updated: 15/02/2017

TRIXI

German Plant Variety Registry Code: **TOT 401**

Breeder:

Silke WEDEMEYER

Variety Description:

TRIXI is a cherry tomato with delicious, sweet, small red fruits. Each fruit weighs approximately 18-20 g. The attractive, oval-round fruits with a small pointed tip hang in long, in part doubled-, clusters on this harmoniously formed plant. The open, finely divided growth permits a good aeration of the crop stand and allows for low maintenance and ease of harvest. Maturity period is early to middle-early. The fruits are not prone to splitting are also unmottled and therefore not prone to green shouldering. TRIXI is characterized by good plant health and a high tolerance to Cladosporium.

Breeding History:

In 2004, seed from the variety FAVORITA F1 was harvested and in 2005 further propagated. Appealing single plants were selected, from which a wide assortment of different breeding lines was created after persistent propagation of these lines. Over many years, the lines were observed, selected and separated into different types. The objective of the selection work, in particular, was excellence in flavor, high fruiting quality and no splitting. Further selection criteria included the general cultivation suitability, yield and a harmonic growth form.



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TRIXI was able to prove its merits in cultivation trials at many locations of professional farmers. These are: very good flavor, good fruit quality, firmness, good plant health, high yield and convenient qualities for crop management.

Through analysis with picture-forming methods (rising-picture and copper-chloride crystallization), TRIXI demonstrated a high fruit-like potential (high substance activity¹) but with not yet sufficient forming-force (an average forming intensity²). This discrepancy could be restored using winter-force (buried in winter) and eurythmy treatments. The crystallization images of the untreated samples demonstrated only little recognizable central coordination, out-raying, and structured needle chains. The treated samples, on the other hand, showed integrated, widely spread, center-coordinated, dynamic images without zonal stagnation. Formative force examination also demonstrated an improved inner quality of TRIXI.



Image 1: Untreated (400 mg juice)



Image 2: Untreated (500 mg juice)

¹ In the case of low substance activity, a larger quantity of testing substance is required for the production of the images in order to obtain corresponding images with a higher needling (branching) density and plate coverage in the crystal images or sustain the formation of comparable "sheath-forms" in the case of the rising-picture method.

² Forming intensity demonstrates the ability to form the overall image without stagnation, with flow, transmission, and integration.



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Image 3: Treated (400 mg juice)



Image 4: treated (500 mg juice)

During the breeding of TRIXI, the farm was certified organic (Bioland). Already at the time, however, the biodynamic preparations were being used. Since then the farm has joined the Demeter Association so that maintenance breeding is sustained under biodynamic conditions.

The variety TRIXI was approved in 2014 by the German Plant Variety Registry as an "amateur variety". Maintenance breeding is carried out by Silke Wedemeyer. The organization of the multiplication and commercialization of the sale seed is, among other things, the responsibility of the Bingenheimer Saatgut AG.