

NEW BULGARIAN SUNFLOWER HYBRID “LINZI”

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Abstract

The conventional sunflower hybrid “Linzi” was developed at Dobrudja Agricultural Institute, General Toshevo. It is a single interline hybrid. The mother line 217A was created in DAI. The father line 99R was developed using the method of induced parthenogenesis, combined with embryo culture from experimental hybrid 132 x 98. In 2013, the hybrid “Linzi” was included in unified competitive variety trials (UCVT) after two years testing in competitive trials. The average seed yield of hybrid “Linzi” in two UCVT was 382.7 kg/da, which exceeded with 16.6% the mean standard of hybrids San Luka, Klarisa and PR 64F50. The seed oil content was 52.5% and the protein content was 28.1%. In 2014 and 2015 it was tested by the Executive Agency for Variety Testing, Field Inspection and Seed Control. In 2017, the Patent Office issued the certificate №11125P2 for the hybrid. The plants height is 140-145 cm. The vegetation period is 118 days. “Linzi” belongs to the group of middle early hybrids. The head diameter is 25-27 cm. The head position is vertical and it is slightly convex. The seeds are black with weakly expressed grey stripes on their edges. Thousand seeds weight is 60g. The percentage of hull content is 20%. The hybrid is resistant to downy mildew/ race 731/ and broomrape. It possesses middle resistance to phoma and phomopsis. The hybrid needs no special requirements for cultivation and the traditional scheme for seed production could be applied. The optimum plant density is 65000 -71000 per hectare. Both the parental lines flower on the same time and they could be planted together during seed production of the hybrid. The hybrid “Linzi” was tested for two years in Moldova, and registered in 2017.

Keywords: sunflower, hybrid, oil and protein content disease resistance