

New Tomato Lines Type Cherry Obtained at V.R.D.S. Buzău

Costel VINATORU, Eliza NEICU

Vegetable Research – Development Station Buzau, 23 Mesteacanului Street, 120024, Buzau,
 Romania; costel_vinatoru@yahoo.com, neicu_eliza@yahoo.com; Fax: 0040238722560

SUMMARY

Lately, in Romania, has increased the consumer's interest for the tomato cherry variety; this variety has been neglected until now by the nowadays ameliorators. According to the producer's and consumer's interest for this tomato variety, the main objective of the Amelioration Laboratory of V.R.D.S. Buzău was to ameliorate this variety in order to obtain varieties, genitors and valuable hybrids adapted to the climatic condition from our country. Nowadays, the collection field from V.R.D.S. Buzău at this party (undetermined growing – SP⁺ – and cherry type fruits) contains 32 genotypes belonging to the following species: *Lycopersicum esculentum*, *Lycopersicum peruvianum* and *L. hirsutum*, varieties of the *spontaneum* and *subspontaneum* subspecies: *racenigerum*, *pinpinelifolium*, *cerasiforme* and *pruniforme*; among these, 8 of them are in an advanced amelioration stage. In the amelioration works from the laboratory, the crossfertilize between wild species and ameliorated forms manifested a great interest. The hybrid combination that manifested interest were stabilized by specific selection works during 7 – 8 generations. Inter specific hybridizing constitutes the superior form in order to obtain new varieties, genitors and valuable hybrids; through this method there were obtained new forms with superior qualities. After the intensive amelioration works at this species, made at V.R.D.S. Buzău during 1996 – 2010, there were obtained 8 tomato lines type cherry (Tab. 1), stabilized from the genetic point of view and with superior qualities. The lines created have distinct and stable characters, which offer personality and identity to each creation.

Tab. 1

The main characteristics of the plant

N ^o	Followed characters	Line							
		L _{2M}	L _{3M}	L _{4M}	L _{6A}	L _{26C}	L ₃₄	L ₃₅	L ₇₆₄
1	No. of leaves from the first inflorescence	4	3	4	4	4.5	5	5	3
2	No. of in flowering/plant	13	10	11	10	11	9	10	11
3	Distance between inflorescences	20	30	22	22	22	26	24	25
4	Fruit's weight (g)	5.18	22.85	20.4	25.71	32.18	38.8	17.64	3.87
5	Nr. fruits/inflorescence	59	14	12	15.5	16	11	16	100.7
6	Mature fruit's color	yellow orange	red	yellow orange	auburn	red	auburn with yellow fleck	yellow	red
7	Fruit's shape	round	round	round	round	round	rounded high	ovoid	round
8	Fruit's height	2.05	3	3.08	3.23	3.7	4	3.63	1.69
9	Fruit's diameter	2.08	3.6	3.34	3.67	3.93	3.97	2.87	1.87
10	No. of locular cavity of fruits	2,19	2.38	2	2.12	2.78	2.96	3.02	2
11	Fruit's firmness	good	medium	good	medium	good	low	medium	medium
12	Keeping resistance of fruits	>150	26	>150	21	27	20	20	23

Keywords: tomatoes, cherry, amelioration, hybridization, genotypes