

**Table S1.** Mean values and ANOVA of results of betacyanin (mg g<sup>-1</sup> DW) and betaxanthin (mg g<sup>-1</sup> DW) content of 15 different genotypes of beetroot grown in three research stations within the trial year 2017 and 2018. Results represent the mean values ± standard error. Means followed by at least one identical letter were not significantly different from each other

Genotype	Betacyanin (mg g <sup>-1</sup> DW)	Betaxanthin (mg g <sup>-1</sup> DW)
Akela	6.42 <sup>ac</sup> ± 0.58	4.52 <sup>ab</sup> ± 0.38
Betina	6.16 <sup>ac</sup> ± 0.56	4.54 <sup>ab</sup> ± 0.38
Bona	5.73 <sup>bc</sup> ± 0.52	3.95 <sup>b</sup> ± 0.33
Bordo AS	6.39 <sup>ac</sup> ± 0.58	4.45 <sup>ab</sup> ± 0.37
BoRu1	6.57 <sup>ac</sup> ± 0.60	4.57 <sup>ab</sup> ± 0.38
Burpees Golden	1.13 <sup>d</sup> ± 0.14	0.04 <sup>d</sup> ± 0.01
Carillon RZ	5.91 <sup>bc</sup> ± 0.54	4.05 <sup>b</sup> ± 0.34
Cervena Kulata	5.35 <sup>c</sup> ± 0.49	3.81 <sup>b</sup> ± 0.32
Detroit 3	6.60 <sup>ac</sup> ± 0.60	4.74 <sup>ab</sup> ± 0.40
Jawor	5.46 <sup>c</sup> ± 0.50	3.99 <sup>b</sup> ± 0.34
Monty RZ F1	7.89 <sup>a</sup> ± 0.72	5.49 <sup>a</sup> ± 0.46
Nobol	6.49 <sup>ac</sup> ± 0.59	4.49 <sup>ab</sup> ± 0.38
Nochowski	7.75 <sup>a</sup> ± 0.70	5.51 <sup>a</sup> ± 0.46
Ronjana	7.39 <sup>ab</sup> ± 0.67	5.32 <sup>a</sup> ± 0.45
Sniezna Kula	0.08 <sup>e</sup> ± 0.01	0.09 <sup>c</sup> ± 0.01
Factor	<i>p</i> -value of the F-test of the corresponding factor	
Location	0.0056	0.0009
Year	n.s.	0.0045
Genotype	<0.0001	<0.0001
Location × year	0.0277	0.0069