

Table S1. Classification of tested hybrids into groups based on total carote-noid content in the grain.

G1	G2	G3	G4	G5
<15 µg/g DM	15-20 µg/g DM	20-25 µg/g DM	25-30 µg/g DM	>30 µg/g DM
Bc Institut Bc 323	Bc Institut Tesla	Bc Institut Agram	Bc Institut Bc 418	Bc Institut Bc 415
NS seme 3022	DKC 4670	Bc Institut Alibi	Bc Institut Bc 424	Bc Institut Bc 572
NS seme 4051	DKC 4943	Bc Institut Bc 344	Bc Institut Bc 525	Bc Institut Majstor
NS seme 6012	DKC 5830	Bc Institut Kekec	Bc Institut Instruktor	Bc Institut Pajdaš
PIO Os 4015	KWS Kashmir	DKC 4920	Bc Institut Thriler	KWS Kolumbaris
	KWA Smaragd	DKC 5068	DKC 5031	
	LG 30.3115	DKC 5075	DKC 5182	
	LG 31.322	DKC 5093	KWS Konfites	
	LG 31.545	DKC 5685	KWS KxB 8386	
	NS seme 4051	KWS Kapitolis	LG 368/08	
	PIO Os 3150	KWS Kollegas	MAS 34B	
	PIO Os 3450	KWS KxB 8453	MAS 48L	
	PIO Os 4014	KWS Orlando	PIO Os 3114	
	PIO Os 522	LG 30.315	PIO Os 378	
	PIO Tomasov	LG 31.377	Pioneer P9889	
	Pioneer P0164	LG Shannon	Pioneer P9978	
	Pioneer P0217	MAS 56A		
	Pioneer P9241	NS seme Haris		
	Pioneer P9300	PIO Jablan		
	Pioneer P9363	PIO Os 3850		
	Pioneer P9415	PIO Os 398		
	Pioneer P9757	PIO Posavac 36		
	RWA ES Inventive	PIO Velimir		
	RWA Glumanda	Pioneer P0200		
	RWA Hexagon	Pioneer P0216		
	RWA Ulyxxe	Pioneer P0412		
	RWA Persic	Pioneer P0725		
	RWA Tweetor	Pioneer P9903		
	Syngenta Sy Senko	Pioneer P9911		
		RWA Ajowan		
		RWA Gladiator		
		RWA Inclusiv		
		RWA Urbanix		

Syngenta Sy Atomic

Syngenta Sy Bilbao

Syngenta Sy Carioca

Syngenta Sy Chorintos

Syngenta Sy Kreon

Syngenta Sy Lucius

Syngenta Sy Photon

Syngenta Sy Premeo

Syngenta Sy Sandoro
