

Supplementary tables

Table 1. List of the 48 rapeseed and mustard genotypes used in the experiment

Accession Number	Name of genotypes	Source	Species	Accession Number	Name of genotypes	Source	Species
GPB M/5	M-119-5	BAU	<i>Brassica campestris</i>	GPB M/71	M-109-6-1	BAU	<i>Brassica campestris</i>
GPB M/7	M-340	BAU	<i>Brassica campestris</i>	GPB M/94	M-428	BAU	<i>Brassica campestris</i>
GPB M/10	M-395	BAU	<i>Brassica campestris</i>	GPB M/101	M-440	BAU	<i>Brassica campestris</i>
GPB M/13	M-399	BAU	<i>Brassica campestris</i>	GPB M/103	BARI Sharisha -9	BARI	<i>Brassica campestris</i>
GPB M/16	Agarni	BAU	<i>Brassica campestris</i>	GPB M/110	M-16	BAU	<i>Brassica juncea</i>
GPB M/19	M-262	BAU	<i>Brassica campestris</i>	GPB M/178	M-414	BAU	<i>Brassica napus</i>
GPB M/20	M-283	BAU	<i>Brassica campestris</i>	GPB M/182	M-418	BAU	<i>Brassica napus</i>
GPB M/21	M-285	BAU	<i>Brassica campestris</i>	GPB M/190	BARI Sarisha -14	BARI	<i>Brassica campestris</i>
GPB M/26	M-293-1	BAU	<i>Brassica campestris</i>	GPB M/191	Binasarisha -6	BINA	<i>Brassica campestris</i>
GPB M/29	M-294-2A	BAU	<i>Brassica campestris</i>	GPB M/205	NAP-0724-2	ORC, BARI	<i>Brassica napus</i>
GPB M/40	BARI Sarisha -6	BARI	<i>Brassica campestris</i>	GPB M/206	NAP-0721-1	ORC, BARI	<i>Brassica napus</i>
GPB M/41	Tori-7	BARI	<i>Brassica campestris</i>	GPB M/210	NAP-0741-1	ORC, BARI	<i>Brassica napus</i>
GPB M/42	Kalyania	BARI	<i>Brassica campestris</i>	GPB M/211	NAP -206 x NAP-248	ORC, BARI	<i>Brassica napus</i>
GPB M/47	Candle	BAU	<i>Brassica campestris</i>	GPB M/223	BD-6951	PGRC, BARI	<i>Brassica napus</i>
GPB M/54	M-27-E3-9-4	BAU	<i>Brassica campestris</i>	GPB M/225	BD-6953	PGRC, BARI	<i>Brassica napus</i>
GPB M/55	M-32-E3-1-2	BAU	<i>Brassica campestris</i>	GPB M/226	BD-6954	PGRC, BARI	<i>Brassica napus</i>
GPB M/58	M-39-1	BAU	<i>Brassica campestris</i>	GPB M/229	BD-7114	PGRC, BARI	<i>Brassica napus</i>
GPB M/60	M-41-12	BAU	<i>Brassica campestris</i>	GPB M/232	BD-7118	PGRC, BARI	<i>Brassica napus</i>
GPB M/61	M-43-7	BAU	<i>Brassica campestris</i>	GPB M/244	BD-10108	PGRC, BARI	<i>Brassica napus</i>
GPB M/62	M-37-1	BAU	<i>Brassica campestris</i>	GPB M/245	BD-10109	PGRC, BARI	<i>Brassica napus</i>
GPB M/64	M-100-7	BAU	<i>Brassica campestris</i>	GPB M/246	BD-10110	PGRC, BARI	<i>Brassica napus</i>
GPB M/65	M-100-8	BAU	<i>Brassica campestris</i>	GPB M/248	BD-10112	PGRC, BARI	<i>Brassica napus</i>
GPB M/66	M-101-12	BAU	<i>Brassica campestris</i>	GPB M/252	BD-10455	PGRC, BARI	<i>Brassica napus</i>
GPB M/68	M-103-3	BAU	<i>Brassica campestris</i>	GPB M/254	BD-7113	PGRC, BARI	<i>Brassica napus</i>

Table 2. List of genotypes which are selected for oil and fatty acid content determination

Accession Number (New entry)	Name of variety/genotypes
GPB M/5	M-119-5
GPB M/10	M-395
GPB M/19	M-262
GPB M/41	Tori-7 (Maghi Sarisha)
GPB M/190	BARI Sarisha -14
GPB M/225	BD-6953
GPB M/226	BD-6954
GPB M/248	BD-10112
GPB M/252	BD-10455
GPB M/254	BD-7113

Table 3: Correlation coefficient between yield and yield attributing characters in rapeseed and mustard genotypes

	FDF	D50%F	DSF	PlantHt	LPB	LSB	NoPB	NoSB	NoTB	Totals	NoSMA	NoSPB	NoSSB	NoSTB	NoSPS	LenS	Y/Plant	1000SW
D50%F	0.666***																	
DSF	0.745***	0.686***																
PlantHt	0.431***	0.536***	0.428***															
LPB	0.262**	0.296***	0.357***	0.622***														
LSB	0.03	-0.057	0	0.281***	0.624***													
NoPB	0.13	0.141	0.172*	0.203**	0.334***	0.24**												
NoSB	0.13	0.059	0.206**	0.254**	0.551***	0.532***	0.661***											
NoTB	-0.02	-0.096	-0.09	0.255**	0.357***	0.575***	0.121	0.398***										
Totals	0.205**	0.165*	0.212***	0.551***	0.668***	0.651***	0.484***	0.721***	0.646***									
NoSMA	0.16	0.243**	0.157	0.525***	0.318***	0.223**	0.077	0.115	0.219**	0.519***								
NoSPB	0.291***	0.289***	0.335***	0.528***	0.637***	0.415***	0.659***	0.686***	0.395***	0.87***	0.476***							
NoSSB	0.10	0.019	0.081	0.423***	0.583***	0.728***	0.297***	0.675***	0.736***	0.914***	0.32***	0.617***						
NoSTB	0.02	-0.041	-0.036	0.263***	0.28***	0.478***	0.183*	0.308***	0.470***	0.567***	0.187*	0.312***	0.605***					
NoSPS	0.175*	0.156	0.145	0.208**	0.067	0.002	0.255**	0.118	0.104	0.133	0.115	0.166*	0.069	0.095				
LenS	0.10	0.204**	0.181*	0.29***	0.233**	0.027	0.147	0.13	0.041	0.178*	0.153	0.261**	0.08	-0.022	0.446***			
Y/Plant	0.276***	0.208**	0.228**	0.468***	0.562***	0.517***	0.502***	0.652***	0.482***	0.762***	0.378***	0.665***	0.704***	0.386***	0.116	0.208*		
1000SW	0.15	0.144	0.082	-0.008	0.034	0.019	-0.002	0.041	0.021	0.009	0	-0.004	0.018	0.001	-0.149	-0.027	0.157	
Maturity	0.262***	0.256**	0.227**	0.474***	0.319***	0.152	0.146	0.273***	0.144	0.292***	0.08	0.275***	0.279***	0.05	0.194*	0.314***	0.387***	0.075

Legend ***, **, * = Significant at 0.001, 0.01 and 0.05 level of probability. FDF = First day of flowering, D50%F = Days to 50% flowering, DSF = Days to silqua formation, PlantHt = Plant height, LPB = Length of primary branch, LSB = Length of secondary branch, NoPB = Number of primary branch, NoSB = Number of secondary branch, NoTB = Total number of tertiary branch, Totals = Total number of seed, NoSMA = Number of silqua in main axis per plant, NoSPB = Number of silqua in primary branch, NoSSB = Number of silqua in secondary branch, NoSTB = Number of silqua in tertiary branch, NoSPS = Number of seed per silqua, LenS = Length of silqua, Y/Plant = Yield per plant, 1000SW = 1000 seed weight, Maturity = Days to maturity.

¹ All the abbreviations for morphological characters were defined in the footnote of table 3

Table 4. The mean of clustering groups for 19 selected traits

Variable	FDF	D50%F	DSF	PlantHt	LPB	LSB	NoPB	NoSB	NoTB	TotalS	NoSMA	NoSPB	NoSSB	NoSTB	NoSPS	LenS	Y/Plant	1000SW	Maturity
Cluster1	29.1	33.9	32.5	100.8	82.2	37.4	5.3	12.0	2.9	229.9	33.0	118.1	77.9	1.0	17.9	6.1	6.3	2.3	90.6
Cluster2	29	33.5	32.2	110.4	92.9	52.6	6.7	17.2	10.9	420.1	40.4	181.4	182.5	15.9	19.8	6.1	9.8	2.6	91.1
Cluster3	28.4	33.1	31.8	89.1	62.8	24.7	4.5	6.3	0.6	105.6	26.6	65.3	13.4	0.2	18.0	5.6	3.2	2.5	87.5