

**Table S1.** The results of the analysis of variance of the effect of variety and the disease of Chlorophyll a, b, Total Chlorophyll, Carotenoid, Greenness, Catalase, Guaiacol peroxidase, Polyphenol oxidase, Photosynthesis, Root length, Shoot and Root fresh weight, Shoot and Root dry weight.

	Genotype	Treatment	Genotype×Treatment	CV (%)
DF	4	5	20	-
Chlorophyll a	28.82**	30.18**	1.92**	16.36
Chlorophyll b	22.42**	25.62**	2.08**	14.52
Total Chlorophyll	122.32**	111.28**	7.92**	12.09
Carotenoid	10.53**	3.91**	1.93**	21.78
Greenness	5574.48**	1042.55**	228.30**	8.12
Catalase (CAT)	7.105**	0.307**	0.338**	9.29
Guaiacol Peroxidase (GPX)	6.42**	0.371**	0.349**	8.44
Polyphenol Oxidase (PPO)	9.18**	0.373**	0.414**	23.40
Photosynthesis	26.19**	4.39**	0.83**	14.006
Root length	68.36**	324.96**	20.07**	7.61
Shoot fresh weight	39.28**	35.78**	2.45**	18.56
Root fresh weight	4.09**	3.63**	0.343**	13.16
Shoot dry weight	0.53**	0.56**	0.031**	10.18
Root dry weight	0.33**	0.40**	0.03**	15.06

\*\* Significant at %1 probability level

**Table S2.** Combined analysis of variance was conducted on cyst and egg data from two experiments involving fourteen sugar beet enotypes, along with a susceptible (Jolgeh) and a resistant (Sanetta) cultivar as control.

Source	DF	Adj MS	
		Cyst	Egg
Treat	15	71465.1**	601058015**
Error	90	48.4	1033957
Total	335		

**Table S3.** Combined analysis of variance comparing two experiments of cyst and egg data for four selected genotypes along with Jolgeh as the susceptible cultivar.

Source	DF	Adj MS	
		Cyst	Egg
Treat	4	3253.79 **	44814539**
Disease	3	41.27*	1243482**
Error	112	5.67	95743
Total	239		