

Table S3. Analysis of variance ANOVA for Chlorophyll fluorescence at seedling stage of barley genotypes (*H. vulgare* var. *nigricans*, *H. vulgare* var. *rimpai*, and *H. vulgare*), growing in 2021 and 2022.

Trait	Statistical parameter	Seedling stage		
		Year (Y)	Genotype (G)	Y x G
F _v /F _M	df	1	2	2
	F	3.56	27.83	35.75
	p-value	0.0599	< 0.0001	< 0.0001
F _v /F ₀	df	1	2	2
	F	5.72	39.58	51.14
	p-value	0.0172	< 0.0001	< 0.0001
PI _{ABS}	df	1	2	2
	F	6.48	47.86	59.01
	p-value	0.0113	< 0.0001	0.0005
ET ₀ /CS ₀	df	1	2	2
	F	1.50	11.64	21.46
	p-value	0.2207	< 0.0001	< 0.0001
TR ₀ /CS ₀	df	1	2	2
	F	0.21	2.95	14.28
	p-value	0.6441	0.0536	< 0.0001
DI ₀ /CS ₀	df	1	2	2
	F	2.06	15.72	31.62
	p-value	0.1516	< 0.0001	< 0.0001
ABS ₀ /CS ₀	df	1	2	2
	F	1.66	6.35	34.18
	p-value	0.1978	0.0019	< 0.0001
Area	df	1	2	2
	F	0.4332	22.34	25.06
	p-value	0.5108	< 0.0001	< 0.0001