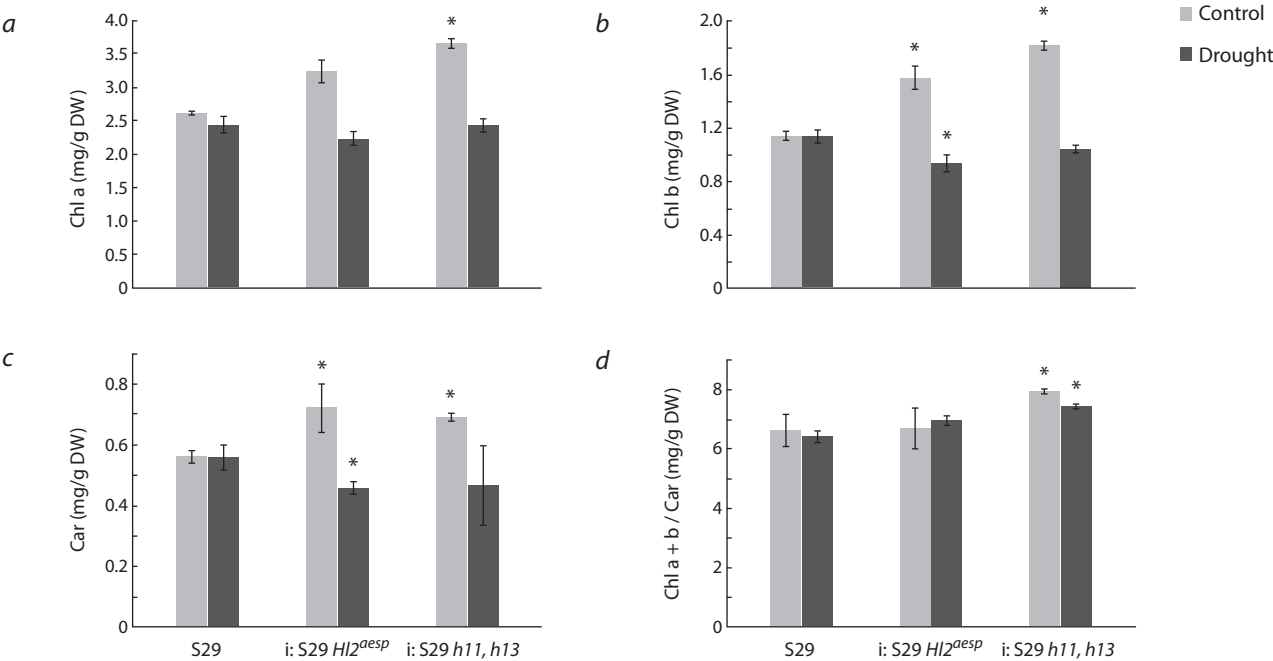


SUPPLEMENTARY MATERIALS

to the article S.V. Osipova, A.V. Rudikovskii, A.V. Permyakov, E.G. Rudikovskaya, M.D. Permyakova, V.V. Verkhoturov, T.A. Pshenichnikova “Physiological responses to water deficiency in bread wheat (*Triticum aestivum* L.) lines with genetically different leaf pubescence”

Supplement 1



The average content of leaf pigments in cv. S29 and lines i: S29 *HL2^{aesp}* and i: S29 *hl1, hl3* under normal irrigation and under drought.

* significant differences with S29, $p < 0.05$.

Supplement 2

Evaluation of the drought tolerance level of cv. S29 and near-isogenic lines i: S29 *HL2^{aesp}* and i: S29 *hl1, hl3* by physiological characteristics using the tolerance coefficients (IT)

IT, %	S29	i: S29 <i>HL2^{aesp}</i>	i: S29 <i>hl1, hl3</i>
Chlorophyll a	94.2	69.0	66.8
Chlorophyll b	100.0	59.5	57.7
Chlorophyll a + b	97.6	65.7	63.8
Carotenoids	100.0	63.9	68.1
Chlorophyll a + b / Carotenoids	97.1	104.2	93.6
Ascorbate peroxidase	136.7	155.2	144.0
Glutathione reductase	250.3	49.8	110.0
Dehydroascorbate reductase	167.9	57.9	116.3
Superoxide dismutase	106.9	137.9	77.7
Y(II)	103.8	104.2	80.6
ETR	106.7	105.9	79.6
ETR _{max}	177.9	102.7	73.0
Ik	156.1	106.6	68.0
PI ^{abs}	105.3	111.5	91.1

Here and also in Suppl. 3: Y(II) – real quantum yield of PSII; ETR – rate of electron transport; ETR_{max} – maximum electron transport rate; Ik – intensity of illumination, expressing the beginning of PAR saturation; PI^{abs} – PSII performance index.

Supplement 3

Principal component (PC) analysis based on drought tolerance coefficients (ITs) of pigment content in leaves, enzymes activity and chlorophyll fluorescence parameters. The contribution rates of PCs and the input of individual traits are presented

Physiological characteristics	PC ₁	PC ₂
Chlorophyll a	0.109	0.066
Chlorophyll b	0.173	0.089
Carotenoids	0.145	0.075
Chlorophyll a + b	0.132	0.025
Chlorophyll a + b / Carotenoids	0.014	0.088
Ascorbate peroxidase	−0.061	0.073
Glutathione reductase	0.755	−0.213
Dehydroascorbate reductase	0.377	−0.358
Superoxide dismutase	−0.043	0.516
Y(II)	0.032	0.223
ETR	0.041	0.251
ETR _{max}	0.358	0.416
Ik	0.263	0.455
p _l ^{abs}	0.003	0.183
Contribution rate, %	84.9	15.1