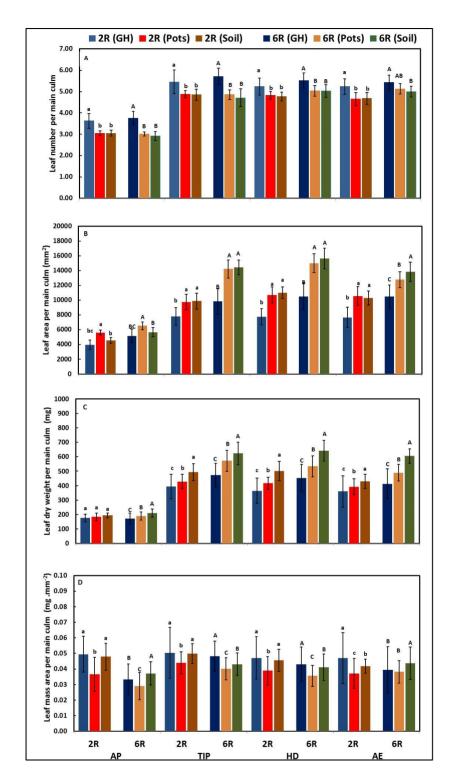
## **Supplementary**

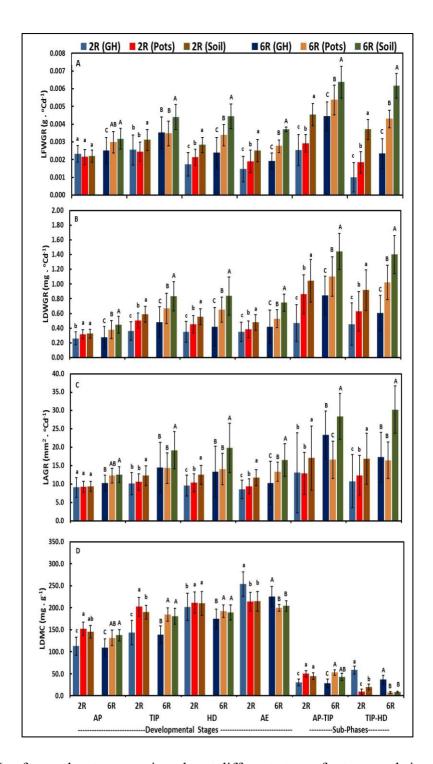
**Table S1.** Coefficient of variation (CV %) for leaf traits at different developmental stages and sub-phases in two- and six-rowed barley.

Developmental Stages/Subphase *	Coefficients Of Variation (CV %)					
	(GH)	Two-Rowed (Pots)	(Soil)	(GH)	Six-Rowed (Pots)	(Soil)
‡ <b>LA- AP</b>	27	17	16	28	16	22
LA-TIP	73	24	31	32	24	28
LA-HD	80	14	28	41	24	31
LA-AE	74	18	35	27	21	23
LDW-AP	25	29	18	20	29	26
LDW-TIP	40	24	24	26	26	25
LDW-HD	46	20	27	33	27	23
LDW-AE	57	28	22	40	23	17
LMA- AP	73	68	55	73	70	60
LMA-TIP	65	49	39	61	53	50
LMA-HD	79	70	47	58	57	62
LMA-AE	84	78	33	76	57	72
LFWGR-AP	20	27	16	21	25	24
LFWGR-TIP	33	22	25	32	23	25
LFWGR-HD	27	22	26	37	28	24
LFWGR-AE	33	29	29	33	24	24
LFWGR (AP-TIP)	74	50	48	64	58	43
LFWGR (AP-HD)	76	67	46	56	49	53
LDWGR-AP	28	22	19	32	16	25
LDWGR-TIP	34	20	24	30	22	24
LDWGR-HD	32	27	19	37	26	31
LDWGR-AE	37	30	22	38	23	30
LDWGR (AP-TIP)	75	31	37	51	43	31
LDWGR (AP-HD)	53	42	30	50	33	40
LAGR-AP	30	16	14	22	16	19
LAGR-TIP	29	21	26	29	26	26
LAGR-HD	29	24	23	22	30	34
LAGR-AE	29	22	25	28	20	27
LAGR (AP-TIP)	83	44	51	53	61	43
LAGR (AP-HD)	67	44	41	39	61	48

<sup>\*</sup> AP: awn primordium, Alqudah and Schnurbusch [30]; TIP: tipping, Z49; HD: heading, Z55; AE: anther extrusion, Z65, Zadoks, Chang and Konzak [34]; ‡ LA: leaf area; LDW: Leaf dry weight; LMA: Leaf mass area; LFWGR: Leaf fresh weight growth rate; LDWGR: Leaf dry weight growth rate; LAGR: Leaf area growth rate; GH: greenhouse.



**Figure S1.** Leaf traits per main culm at different stages for two- and six-rowed barley at different growth conditions. (A) Leaf number; (B) leaf area; (C) leaf dry weight; and (D) leaf mass area. Small and capital letters differentiate two-rowed and six-rowed barley, respectively. Same letters for each row-type are not significantly different at  $p \le 0.05$  according to Least Significant Difference. Bars indicate standard deviation (n = 14 and 18 for two- and six-rowed barley in each growth condition, respectively). AP: awn primordium, Alqudah and Schnurbusch [30]; TIP: tipping, Z49; HD: heading, Z55; AE: anther extrusion, Z65, Zadoks, Chang and Konzak [34]. GH: greenhouse; 2R: two-rowed and 6R: six-rowed.



**Figure S2.** Leaf growth rate per main culm at different stages for two- and six-rowed barley at different growth conditions. (**A**) Leaf fresh weight growth rate (LFWGR); (**B**) leaf dry weight growth rate (LDWGR); (**C**) leaf area growth rate (LAGR); and (**D**) leaf dry matter content (LDMC). Small and capital letters differentiate two-rowed and six-rowed barley, respectively. Same letters for each row-type are not significantly different at  $p \le 0.05$  according to Least Significant Difference. Bars indicate standard deviation (n = 14 and 18 for two- and six-rowed barley in each growth condition, respectively). AP: awn primordium, Alqudah and Schnurbusch [30]; TIP: tipping, Z49; HD: heading, Z55; AE: anther extrusion, Z65, Zadoks, Chang and Konzak [34]. GH: greenhouse; 2R: two-rowed and 6R: six-rowed.