

Table S4. Mixed model analysis of the effect of vernalization, population differences and their interaction effects (Vern. x Pop.) on growth, phenology and leaf traits in 14 *Arabidopsis thaliana* populations from the Swiss Alps that were grown in a greenhouse; the models included family (genotype) identity as a random effect. RDV, rosette diameter after three weeks; RLN, rosette leaf number after three weeks; DTF, days to flowering (flowers open); RDF, rosette diameter at flowering, LFA, leaf area; SLA, specific leaf area; SUC, leaf succulence.

Traits	Vernalization (nom.df ^a =1)			Population (nom. df ^a =13)			Vern. x Pop. (nom.df ^a =13)		
	F	P	denom.df ^b	F	P	denom.df ^b	F	P	denom.df ^b
RDV	24.5	8.6 * 10 ⁻⁰⁷	1167	22.5	<1*10 ⁻¹⁴	169	4.062	1.41*10 ⁻⁶	1167
RLN	13.8	0.0002	1167	44.7	<1*10 ⁻¹⁴	169	5.382	1.67*10 ⁻⁹	1167
DTF	5899	<1*10 ⁻¹⁴	1166	69.8	<1*10 ⁻¹⁴	169	28.3	<1*10 ⁻¹⁴	1166
RDF	1724	<1*10 ⁻¹⁴	1167	57.9	<1*10 ⁻¹⁴	169	40.7	<1*10 ⁻¹⁴	1167
LFA	3.037	0.0820	540	18.7	<1*10 ⁻¹⁴	127	5.513	1.90*10 ⁻⁹	540
SLA	378	<1*10 ⁻¹⁴	540	24.9	<1*10 ⁻¹⁴	127	7.947	1.24*10 ⁻⁹	540
SUC	233	<1*10 ⁻¹⁴	532	51.6	<1*10 ⁻¹⁴	127	14.7	<1*10 ⁻¹⁴	532

^a nominator df, ^b denominator df