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A novel polymorphism in the 5' UTR of *HvDEP1* is associated with grain length and 1000-grain weight in barley (*Hordeum vulgare*)

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Table S1. Diversity panel cultivars, their origin and grain length range (mm) across TOSs

Line	Origin	Grain length	Line	Origin	Grain length
Varieties with <i>HvDEPI-B</i> allele			Lockyer	<i>Aus</i>	8.48-9.63
02043-20	<i>Aus</i>	7.82-8.89	Maltstar	<i>Aus</i>	7.76-9.22
90S205-125-19	<i>Aus</i>	8.72-9.71	Mundah	<i>Aus</i>	8.89-9.93
Alestar	<i>Aus</i>	8.27-9.33	Navigator	<i>Aus</i>	7.06-9.03
Bass	<i>Aus</i>	8.38-9.18	Optic	<i>UK</i>	8.01-9.1
Baudin	<i>Aus</i>	8-9.07	Oxford	<i>UK</i>	6.98-8.51
Bentley	<i>Can</i>	8.02-9.33	Pewter	<i>Den</i>	8.57-9.19
BmnL-281	<i>USA</i>	7.64-8.66	Rosalind	<i>Aus</i>	7.59-9.01
Bmnl-375	<i>USA</i>	7.6-8.71	Ruti	<i>Czech</i>	7.64-9.12
BmnL-852	<i>USA</i>	8.1-8.89	Schooner	<i>Aus</i>	8.01-8.71
Bolron	<i>USA</i>	7.29-8.81	Scope CL	<i>Aus</i>	8.39-9.15
Bowman	<i>USA</i>	8.21-9.86	Shepherd	<i>Aus</i>	7.55-8.86
Buloke	<i>Aus</i>	7.72-9.24	Spartacus CL	<i>Aus</i>	7.43-8.22
C2-05-10/263	<i>Uru</i>	8.39-9.82	SY Rattler	<i>Aus</i>	7.82-9.01
Capstan	<i>Aus</i>	8.39-9.23	Tallon	<i>Aus</i>	7.55-8.67
Charger	<i>Aus</i>	8.1-9.32	VB0916	<i>Aus</i>	8.87-9.62
Commander	<i>Aus</i>	7.71-9.18	VB9104	<i>Aus</i>	8.29-9.27
Compass	<i>Aus</i>	8.04-9.52	Westminster	<i>UK</i>	8-9.29
Czech Landrace243	<i>Czech</i>	7.79-10.36	Wimmera	<i>Aus</i>	7.94-8.81
Fairview	<i>Aus</i>	7.85-9.1	Yagan	<i>Aus</i>	8.24-10.53
Fathom	<i>Aus</i>	8.87-9.62	05S744D-192	<i>Aus</i>	7.14-8.64
Fleet	<i>Aus</i>	9.2-10.27			
Flinders	<i>Aus</i>	7.72-8.51	Varieties with <i>HvDEPI-V</i> allele		
Gairdner	<i>Aus</i>	8.51-9.47	AC Metcalfe	<i>Can</i>	8.14-9.04
GrangeR	<i>UK</i>	8.47-9.34	BmnL-286	<i>USA</i>	6.52-9.24
Grout	<i>Aus</i>	8.19-9.24	Harrington	<i>Can</i>	7.68-9.44
Hamelin	<i>Aus</i>	7.6-9.33	IGB1115	<i>Aus</i>	7.87-8.3
Hannan	<i>Aus</i>	7.61-8.63	IGB1120	<i>Aus</i>	7.14-7.94
Hindmarsh	<i>Aus</i>	7.78-8.5	Litmus	<i>Aus</i>	8.17-9.25
IGB1244	<i>Aus</i>	8.34-9.27	Nevada	<i>Can</i>	7.6-8.76
Keel	<i>Aus</i>	7.94-9.68	Vlamingh	<i>Aus</i>	7.38-8.4
Klaxon	<i>UK</i>	7.73-8.76	WABAR2234	<i>Aus</i>	8.48-9.99
Landlord	<i>UK</i>	8.13-9.03	05S744D-122	<i>Aus</i>	7.57-8.23
La Trobe	<i>Aus</i>	7.6-9.01	05S744D-215	<i>Aus</i>	7.49-8.42

Aus: Australia; *Can*: Canada; *Uru*: Uruguay; *Czech*: Czech Republic; *UK*: United Kingdom; *Den*: Denmark

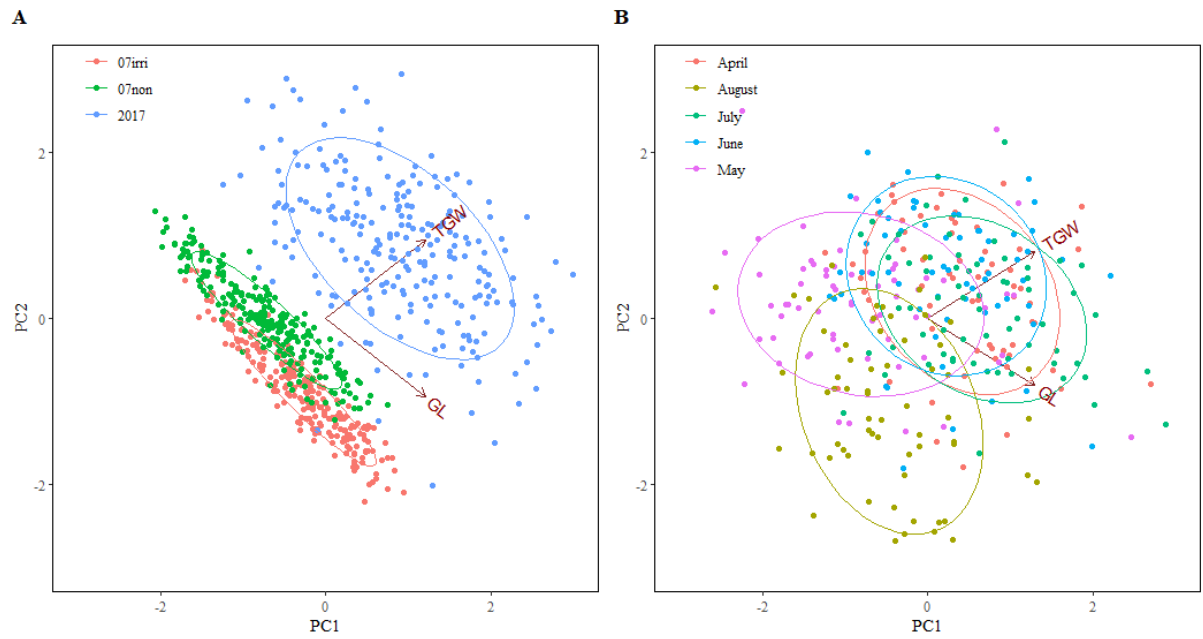


Fig. S1. Scaled principle component analyses of thousand grain weight (TGW) and grain length (GL) in **A.** DH population in 2007 (irri: irrigated; non: rainfed trials at Horsham) and 2017 South Perth. **B.** diversity panel TOS trials