

Online Resource 2

Results of the analysis of the academic field trial with the derived model (i.e. without maturity related terms). V_a represents the genetic variance component, V_{gl} contains the estimates for the variance component for genotype-by-location interaction, h^2 represents the estimated heritability and %CV tabulates the coefficient of variation

Traits	$V_a (\pm \text{s.e.})$	$V_{gl} (\pm \text{s.e.})$	Error ($\pm \text{s.e.}$)	h^2	Predicted mean ($\pm \text{s.e.}$)	%CV
Shape	0.69 (± 0.08)	0.10 (± 0.03)	0.33 (± 0.03)	0.84	2.88 (± 0.10)	20.0
Size	0.33 (± 0.05)	0.16 (± 0.04)	0.31 (± 0.02)	0.67	6.58 (± 0.09)	8.5
Maturity	1.95 (± 0.21)	0.11 (± 0.04)	0.42 (± 0.03)	0.92	6.73 (± 0.14)	9.6
Underwater Weight	1665 (± 205)	491 (± 82)	504 (± 38)	0.82	344 (± 5)	6.5
CookingType	0.36 (± 0.05)	0.03 (± 0.03)	0.42 (± 0.03)	0.75	2.10 (± 0.10)	30.9
ACD_1h	0.21 (± 0.03)	0.01 (± 0.02)	0.22 (± 0.02)	0.79	6.64 (± 0.07)	7.1
ACD_24h	0.78 (± 0.11)	0.004 (± 0.06)	0.91 (± 0.07)	0.77	5.78 (± 0.14)	16.5
ABD_Nov8c	0.77 (± 0.11)	0.09 (± 0.07)	0.84 (± 0.07)	0.75	6.27 (± 0.14)	14.6
ABD_24hNov8c	0.75 (± 0.13)	0.40 (± 0.10)	0.88 (± 0.07)	0.64	5.86 (± 0.15)	16.0
ABD_Feb8c	0.31 (± 0.06)	0.11 (± 0.05)	0.41 (± 0.04)	0.66	6.43 (± 0.11)	10.0
ABD_Apr8c	0.24 (± 0.06)	0.15 (± 0.05)	0.38 (± 0.04)	0.59	6.62 (± 0.11)	9.3
ABD_Apr4c	0.10 (± 0.05)	0.10 (± 0.07)	0.50 (± 0.06)	0.38	6.68 (± 0.14)	10.6
CookColY	0.23 (± 0.03)	0.01 (± 0.01)	0.17 (± 0.01)	0.83	6.75 (± 0.07)	6.1
FleshColY	0.15 (± 0.02)	0.02 (± 0.01)	0.15 (± 0.01)	0.76	6.58 (± 0.07)	5.9
FryingCol_Nov8c	0.64 (± 0.09)	0.14 (± 0.06)	0.66 (± 0.05)	0.73	6.03 (± 0.12)	13.5
FryingCol_Feb8c	1.11 (± 0.13)	0.13 (± 0.04)	0.38 (± 0.03)	0.88	5.95 (± 0.12)	10.4
FryingCol_Apr8c	0.52 (± 0.08)	0.18 (± 0.05)	0.34 (± 0.03)	0.75	6.02 (± 0.11)	9.7
FryingCol_Apr4c	0.83 (± 0.13)	0.02 (± 0.08)	0.95 (± 0.08)	0.77	5.34 (± 0.15)	18.3
EnzBrow_30min	0.27 (± 0.04)	0.06 (± 0.03)	0.40 (± 0.03)	0.68	6.38 (± 0.09)	9.9