

Increase in grain protein and gluten contents of bread wheat by the introgression of a *T. timopheevii* segment into chromosome 2A

EUPHYTICA

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Technological properties of grain and dough in the substitution lines S29 (821 2A) under field conditions in Novosibirsk. D1, D2 – sister disomic lines

Genotypes	¹ Vitreousness, %	¹ Particle size, µm	¹ Alveograph				² Farinograph				
			Dough strength, J*10 ⁻⁴	Tenacity, P, mm	Extensibility, L, mm	P/L ratio	Water absorption, %	Dough development time, sec	Dough stability, sec	Dough softening, u.f.	Valorimeter number, u.v.
S29	81.4	20.4	342.3	124.8	87.7	1.5	74.2	250	85	95	58
S29 (821 2A) D1	86.0	19.2	377.7	124.7	103.9**	1.3	74.2	275*	85	82*	61*
S29 (821 2A) D2	83.4	20.0	315.0	108.6	105.0**	1.1*	73.0	260	95	78*	60*
F ₀₅	ns	ns	ns	ns	8.13	3.74	ns	9,5	ns	6.34	6.24
F _G	3.68						4.25				
LSD ₀₅	-	-	-	-	9.8	0.3	-	13	-	11	2

* - P<0.05; ** - P<0.01

¹ - seasons 2016 – 2020; ² - seasons 2018 - 2020