

Table S1. Commercial cultivars used in this work and their source of origin¹.

Reference number	Accession	Breeder	Keeper
19990240	Artur Nick	Limagrain Europe	Limagrain Iberica, S.A.
20090316	Atomo	Limagrain Iberica, S.A.	Limagrain Iberica, S.A.
19970151	Califa Sur	Limagrain Europe	Limagrain Iberica, S.A.
20180178	Ecodesal	INIA/IFAPA/IRTA/ITACYL	IRTA (G. Cataluña)
20090257	Eneas	Different keepers (INIA, IRTA, IFAPA, ITACyL)	Different keepers
20170158	Esperado	INIA-OTRI (INIA, IRTA, IFAPA, ITACyL)	IRTA (G. Cataluña)
20160252	Flish	Eurosemillas	Different keepers
19970152	Galera	Limagrain Europe	Limagrain Iberica, S.A.
20170175	LG Ancia	Limagrain Europe	Limagrain Iberica, S.A.
20160210	LG Antique	Limagrain Europe	Limagrain Europe
20170174	LG Mercurius	Limagrain Europe	Limagrain Iberica, S.A.
20170171	Montemayor	Agrovegetal, S.A.	Agrovegetal, S.A.
20040245	Nogal	Florimond desprez veuve et fils	Florimond desprez veuve et fils
20170185	RGT Chiclanero	RAGT 2n S.A.S	RAGT 2n S.A.S
20130239	RGT Tocayo	RAGT 2n S.A.S	RAGT 2n S.A.S
20180212	Rota	Agrovegetal, S.A.	Agrovegetal, S.A.
20170170	Santaella	Agrovegetal, S.A.	Agrovegetal, S.A.
20060153	Tejada	Agrovegetal, S.A.	Agrovegetal, S.A.
20140229	Tujena	Agrovegetal, S.A.	Agrovegetal, S.A.

¹Variety details at the Spanish MAPA catalogue web[https://www.mapa.gob.es/app/regVar/ResBusVariedades.aspx?id=es&TxtEspecie=TRIGO+BLA
NDO&IDEspecie=2](https://www.mapa.gob.es/app/regVar/ResBusVariedades.aspx?id=es&TxtEspecie=TRIGO+BLANDO&IDEspecie=2)