

Table S1. List of oat genotypes included in SSR analyses.

No.	Genotype	Origin	Releasing	Pedigree	Seed (glume colour, hull/naked)
1	Ábel	CZ	1993	Unnanem_7760 × Adam	naked
2	Adam	CZ	1988	Bento × 67-II	naked
3	Adler	S	2001	Seget × Von Lochowls – Gelbhafer	white
4	Ardo	CS	1990	Unnamed_7766 × KR-678	yellow
5	Argentina	I	1970	Argentina × Unknown	white
6	Aragon	D	1952	-	yellow
7	Arnold	D	1967	Lang-Dorflers-Weihenstephaner-Weishafers × Halle	white
8	Atego	CZ	2002	Gramena × Auron	yellow
9	Auron	CZ	1991	Unnamed_7766 × Veles	yellow
10	Auteuil		1997		brown
11	Aveia Peluda	P	1987	-	yellow
12	Avenuda (Jakub)	CZ	2001	KR-83-4057 × Semu581.1	naked
13	Avesta	A	1996	Selma × Sirene	brown
14	Azur	CZ	2001	Unnanmed_7776 × S325/81	yellow
15	BE 201 700	D	-	-	yellow
16	BE 202 299	D	-	-	yellow
17	BE 211 301g	D	-	-	yellow
18	Borka	D	1986	Selma × Erbgraf	yellow
19	Bug	RUS	1987	M9H61645 × Grundi	yellow
20	Coach	D	2001	-	yellow
21	Consul	A	-	-	yellow
22	Cyril	CZ	2001	Unnanmed_7839 × Zlaták	yellow
23	Dagny	S	2001	-	white
24	Dalimil	CZ	2001	Unnanmed_7785 × Unnanmed_7831	yellow
25	Detvan	SK	2002	KR-88-8110 × KR 4057	naked
26	Eberhard	A		Dula × Flamingsnova	yellow
27	Edit	S	1990	-	white
28	Edmund	A	2001	Unnanmed_11609 × Panther	white
29	Euro	A	1995	-	yellow
30	Expander	A	1995	Dula × Flamingsnova	yellow
31	Expo	A	2001	Expander × Austral	yellow
32	Flämingslord	D	1997	STMG3054 × STRPBE-48-75D	white
33	Flämingsplus	D	1999	-	white
34	Flämingsprofi	D	2003	-	white
35	Flämingsstern	D	1971	Unnanmed_13917 × 1617	yellow
36	Flämingsstrend	D	2005	-	yellow
37	Flipper	D	2000	-	white
38	Freddy	D	2001	-	white
39	Fusch	D	-	-	yellow
40	Gagybatory K Tajfajta	H	-	Landrace × Unknown	white
41	Gambo	NL	1989	Unnanmed_12728 × Marino	white
42	German	P	1994	-	yellow
43	Hannibal	D	1972	-	yellow
44	Hecht	D	1996	-	yellow
45	Hron (PS-81)	SK	-	-	yellow
46	Chantilly	F	2000	Adamo × 4720.18	white
47	Izák	CZ	1998	Unnanmed_7773 × Auron	naked
48	Jumbo	D	1995	Unnanmed_11632 × Fagot	yellow
49	Kanton	D	2001	-	yellow
50	Kubanskij	SU	-	-	yellow
51	Leo	D	2001	-	white
52	Lutz	D	1995	Unnanmed_11632 × Fagot	yellow
53	Maris Oberon	GB	1976	Manod × Unnanmed_9437	white
54	Markant	DK	-	-	white
55	Master	D	1995	-	white
56	Neklan	CZ	1998	Unnanmed_7766 × Auron	yellow
57	Nelson	D	-	Unnanmed_13932 × Unnanmed_13935	yellow
58	Neon	GB	1995	Unnanmed_7243 × 08659CN3-5N	naked

59	Noirine	F	1996	Creole × Major	brown
60	Pan	CS	1979	Diadem × Rigal	yellow
61	Pendek	NL	1954	Flamingsgold × Binder	white
62	Petra	S	1995	-	white
63	Pluco	NL	1986	-	white
64	Poncho	F	1996	-	white
65	PS-106	SK	-	-	naked
66	PS-90	SK	-	-	naked
67	Revisor	D	1996	Alfred × Dula	white
68	Salo	S	2002	-	white
69	Salomon	D	1994	Alfred × Unnanmed_11669	naked
70	Sanova AS 181 325	D	1987	-	white
71	Saul	CZ	2005	Unnanmed_16053 × KR5278	naked
72	Selma	S	1972	Palu × Saxo	white
73	Senator	A	-	-	yellow
74	Sirene	F	1979	-	brown
75	Stormont Sceptre	IRL	1972	-	white
76	Suomi	FIN	2001	-	white
77	SV-5	SK	-	-	naked
78	Šampionka	CZ	-	-	yellow
79	Tarra	A	1973	Flamingskrone × Peragold	yellow
80	Unisignum	D	1972	Regent (Bickelmann, 1989) × Phonix	yellow
81	Vendelin	SK	2007	Expander × Flamingsregent	yellow
82	Vilma	S	-	-	white
83	Vok	CZ	2002	Dalimil × Unnanmed_7786	yellow
84	Zlafák	CZ	1988	Pan	yellow
85	Zvolen	SK	2006	Unnanmed_11688 × Auron	yellow

A – Austria; CS – Czechoslovakia; CZ – Czech Republic; D – Germany; DK – Denmark; F – France; FIN – Finland; GB – Great Britain; H – Hungary; I – Italy; IRL – Ireland; NL – Netherlands; P – Portugal; PL – Poland; RU – Russia; S – Sweden; SK – Slovakia; SU – Soviet Union

Table S2. Primer sequences for oat microsatellite loci.

Code	Sequence	Repetition	Length (bp)	T _m (°C)	Reference
AM1	5'-GGATCCTCCACGCTGTTGA-3' 5'-CTCATCCGTATGGGCTTTA-3'	(AG) ₂₁ (CAGAG) ₆	204	46	[57]
AM4	5'-GGTAAGGTTTCGAAGAGCAAAG-3' 5'-GGGCTATATCCATCCCTCAC-3'	(AG) ₃₄	166	48	[57]
AM6	5'-AATGAAGAAACGGGTGAGGAAGTG-3' 5'-CCAGCCCAGTAGTTAGCCCATCT-3'	(AG) ₂₀	209	52	[57]
AM11	5'-TCGTGGCAGAGAATCAAAGACAC-3' 5'-TGGGTGGAGGCAAAAACAAAAC	(AG) ₁₂ (AAAG) ₃	225	49	[57]
AM14	5'-GTGGTGGGCACGGTATCA-3' 5'-TGGGTGGCGAAGCGAATC-3'	(AC) ₂₁	133	48	[57]
AM21	5'-ACGTTGGTCTCGGGTTGG-3' 5'-AAATCCTTGACTTCGCTCTGA-3'	(AT) ₅ ..(AC) ₅ ..(AC) ₅	210	46	[57]
AM22	5'-ATTGTATTTGTAGCCCCAGTT-3'C 5'-AAGAGCGACCCAGTTGTATG-3'	(AC) ₂₂	138	46	[57]
AM30	5'-TGAAGATAGCCATGAGGAAC-3' 5'-GTGCAAATTGAGTTTCACG-3'	(GAA) ₁₄	203	43	[57]
AM31	5'-GCAAAGGCCATATGGTGAGAA-3' 5'-CATAGTTTGCCATTCTGTTG-3'	(GAA) ₂₃	186	47	[57]
AM83	5'-CACTGCCATACATTCTGTGCG-3' 5'-CCTCTACCGCAAAGGAAGAA-3'	(AC) ₁₁	190	55	[58]

AM84	5'-GATAACAACCTGGATGCAACTGA-3' 5'-CAGGTTGACAAGGGAACGAT-3'	(AC) ₉	163	55	[58]
AM87	5'-CACCAAGACGATTCGCTACA-3' 5'-CTTTTGCAAGACCTTCAAATCA-3'	(AC) ₁₀	186	55	[58]
AM91	5'-GCGATTTACAACGACCTTATGA-3' 5'-CCAGTGCTTCTGATCTGGAAT-3'	(AC) ₂₀	171	55	[58]
AM92	5'-CCGCACTATCGGCTTGTATC-3' 5'-GTGGGAATCGAGGGTAGAGC-3'	(AC) ₁₃	130	60	[58]
AM99	5'-GCAATCATTCCTCAACTTGTATGACACA-3' 5'-GATAGTGGAAGCGGCATCAACATC-3'	(AC) ₁₂	169	58	[58]
AM102	5'-TGGTCAGCAAGCATCACAAAT-3' 5'-TGTGCATGCATCTGTGCTTA-3'	(AC) ₉	213	55	[58]
AM104	5'-AACAATGATGGGGATGGTGT-3' 5'-GTCGTGAGCAAGTTGAACCA-3'	(AG) ₃₆	186	55	[58]
AM112	5'-AGCGGTGTAGGGGAAAGAGT-3' 5'-TTCTTGGTTTAGATGGGAGGA-3'	(AG) ₃ (AC) ₉ (AT) ₈	234	55	[58]
AM115	5'-CGCAACTCTTCCTACTTTTTGTT-3' 5'-TGGCAAACCTCCCTCGATTTA-3'	(AC) ₉	214	55	[58]
Rast1-4	5'-CTTCTGCCCATGAAACCCTA-3' 5'-ACTCAGCACATGCACCCTC-3'	(TAA) ₃	189	55	[59]

bp – base pair; T_m – melting temperature