

Table S2

Genome size of selected *Phytophthora* isolates as estimated by flow cytometry. Numbers in *italics* refer to the size of nuclei that correspond to secondary fluorescence peaks. Results from isolates in **bold** were adopted from Jung et al. (2017). A dash in the column of standard deviation (SD) and coefficient of variation (CV) indicates the corresponding fluorescence peak was only encountered in one of the measurements.

clade	species	abbreviation	isolate code	average (Mbp/2C)	SD (Mbp/2C)	average (pg/2C)	SD (pg/2C)	CV (%)
1a	<i>Phytophthora cactorum</i>	CAC	05/005	188	9	0.192	0.009	4.6%
			05/008	182	5	0.186	0.005	2.6%
			06/002	178	3	0.182	0.003	1.8%
	<i>P. hedraiaandra</i>	HED	06/018	189	5	0.193	0.005	2.4%
			06/019	186	7	0.190	0.007	3.6%
	<i>P. ×serendipita</i>	×SER	05/009	185	2	0.189	0.002	1.2%
			05/012	184	9	0.188	0.009	4.9%
			08/005	178	5	0.182	0.005	2.9%
			10/013	180	3	0.184	0.003	1.6%
			HC21	175	4	0.179	0.005	2.6%
			HC25	192	2	0.196	0.002	1.0%
			HC27	180	6	0.184	0.006	3.2%
			HC32	186	2	0.190	0.003	1.3%
			HC39	178	10	0.181	0.010	5.7%
			HC42	179	6	0.183	0.006	3.1%
			HC50	184	3	0.188	0.003	1.5%
			W54	185	4	0.189	0.004	2.3%
1	<i>P. nicotianae</i>	NIC	13/006	189	17	0.193	0.018	9.1%
			13/036	185	7	0.189	0.007	3.7%
			13/048	178	3	0.182	0.003	1.8%
1-1a	<i>P. ×pelgrandis</i>	×PEL	15/006	186	2	0.190	0.002	1.0%
			15/007	119	12	0.122	0.012	9.7%
			15/008	187	7	0.191	0.007	3.7%
			15/009	180	2	0.184	0.002	1.1%
1b	<i>P. tentaculata</i>	TEN	SW22	260	7	0.265	0.007	2.6%
			SW23	258	13	0.263	0.013	5.0%
1c	<i>P. infestans</i>	INF	16/053	545	14	0.558	0.015	2.6%
			17/033	<i>147</i>	-	<i>0.150</i>	-	-
				317	5	0.324	0.005	1.4%
				515	10	<i>0.527</i>	<i>0.010</i>	1.9%
				841	5	<i>0.860</i>	<i>0.005</i>	0.5%
			17/034	546	4	0.558	0.004	0.7%
2a	<i>P. botryosa</i> <i>P. meadii</i> <i>P. citrophthora</i> -related <i>P. ×citrophthora</i> -related1	BOT	TJ092	181	5	0.185	0.005	2.6%
			TJ095	175	9	0.179	0.009	4.9%
		CIPr	TJ097	155	3	0.158	0.003	1.6%
			TJ100	124	2	0.127	0.002	1.9%
		×CIPr1	TJ101	152	1	0.155	0.001	0.5%
			TJ102	176	5	0.180	0.005	2.7%
			TJ103	194	6	0.199	0.006	2.9%

	<i>P. ×citrophthora</i> -related2	×CIPr2	TJ093	147	6	0.150	0.006	3.8%
	<i>P. ×citrophthora</i> 1	×CIP1	TJ104	125	1	0.128	0.001	0.9%
	<i>P. ×citrophthora</i> 2	×CIP2	TJ184	156	4	0.160	0.004	2.6%
	<i>P. citrophthora</i>	CIP	10/083	131	6	0.134	0.006	4.4%
			10/087	125	3	0.128	0.003	2.6%
	<i>P. occultans</i>	OCC	05/034	129	4	0.132	0.004	2.8%
			12/021	132	6	0.135	0.006	4.4%
			13/037	123	4	0.126	0.005	3.7%
	<i>P. terminalis</i>	TER	10/099	131	3	0.134	0.003	2.2%
2b	<i>P. tropicalis</i>	TRO	SW11	112	6	0.115	0.006	4.9%
			TJ099	128	1	0.131	0.001	0.8%
2c	<i>P. acerina</i>	ACE	14/013	120	0	0.123	0.000	0.3%
	<i>P. multivora</i>	MUV	10/014	124	1	0.127	0.001	0.5%
			10/055	119	3	0.121	0.004	2.9%
	<i>P. pini</i>	PIN	10/030	122	2	0.125	0.003	2.0%
			14/002	119	8	0.122	0.008	6.4%
	<i>P. plurivora</i>	PLV	10/033	124	1	0.127	0.001	0.6%
			10/034	123	4	0.125	0.004	3.4%
			11/010	122	3	0.125	0.003	2.6%
			11/014	125	3	0.128	0.003	2.5%
			12/023	119	3	0.122	0.003	2.2%
			14/057	112	11	0.115	0.011	10.0%
			14/065	179	6	0.183	0.006	3.2%
3	<i>P. pseudosyringae</i>	PSR	SW17	157	5	0.160	0.005	3.1%
			SW18	157	14	0.160	0.015	9.1%
			AC10	150	4	0.154	0.005	2.9%
			AC11	154	10	0.158	0.010	6.5%
4	<i>P. quercetorum</i>	QCT	TJ024	138	6	0.141	0.006	4.3%
			TJ025	145	2	0.149	0.002	1.1%
5	<i>P. heveae</i>	HEVr	TJ013	137	3	0.140	0.003	2.0%
			TJ014	129	3	0.132	0.003	1.9%
			TJ016	142	4	0.145	0.004	2.7%
	<i>P. castaneae</i>	CAS	TJ033	136	3	0.139	0.003	2.2%
			TJ034	149	4	0.153	0.004	2.4%
6a	<i>P. taxon</i> Walnut	WAL	SW33	129	3	0.132	0.003	2.1%
	<i>P. inundata</i>	INU	09/001	303	3	0.310	0.004	1.1%
			09/003	295	9	0.302	0.009	2.9%
6b	<i>P. thermophila</i> × <i>amnicola</i>	THE×A MN	TJ114	159	2	0.163	0.002	1.3%
			TJ115	146	1	0.149	0.001	0.7%
	<i>P. amnicola</i> × <i>chlamydospora</i>	AMN× CHL	TJ118	157	3	0.161	0.004	2.2%
			TJ119	165	2	0.169	0.002	1.0%
	<i>P. chlamydospora</i>	CHL	04/001	150	8	0.153	0.008	5.4%
			04/004	152	10	0.155	0.010	6.5%
			07/003	152	13	0.155	0.013	8.3%
			10/003	154	8	0.157	0.008	5.4%
			12/040	142	17	0.145	0.018	12.1%
	<i>P. chlamydospora</i> × <i>lacustris</i>	CHL×L AC	13/005	159	9	0.163	0.009	5.8%

			SS01	225	26	0.230	0.026	11.4%
	<i>P. lacustris</i>	LAC	05/013	173	1	0.177	0.001	0.6%
			07/002	153	17	0.157	0.017	10.8%
			CH01	166	3	0.169	0.003	1.5%
			CH04	158	5	0.161	0.005	3.4%
	<i>P. gonapodyides</i>	GON	05/004	171	11	0.175	0.011	6.3%
			05/015	178	10	0.182	0.010	5.4%
			05/017	164	6	0.167	0.006	3.8%
			05/025	274	7	0.281	0.008	2.7%
			06/001	266	6	0.272	0.006	2.3%
			07/004	272	10	0.278	0.011	3.9%
			07/007	274	8	0.280	0.009	3.1%
			14/049	176	7	0.180	0.007	3.9%
	<i>P. megasperma</i>	MEG	14/085	283	7	0.290	0.007	2.6%
	<i>P. crassamura</i>	CRA	TJ179	218	15	0.223	0.015	6.9%
			TJ180	217	4	0.222	0.004	1.9%
7a	<i>P. ×alni</i>	×ALN	AC01	532	6	0.544	0.006	1.2%
			AC02	513	30	0.525	0.030	5.8%
			TJ145	505	12	0.517	0.012	2.3%
			TJ143	565	10	0.578	0.010	1.8%
			AC03	844	32	0.863	0.033	3.8%
	<i>P. ×multiformis</i>	×MUF	AC04	653	13	0.668	0.013	1.9%
	<i>P. uniformis</i>	UNI	AC05	348	9	0.356	0.009	2.7%
			AC06	317	5	0.324	0.005	1.5%
			AC07	327	3	0.335	0.003	0.8%
	<i>P. ×cambivora</i>	×CAM	05/006	458	9	0.469	0.009	1.9%
			05/027	472	6	0.483	0.006	1.3%
			10/010	429	16	0.439	0.017	3.8%
			AC08	426		0.436		
			AC09	510		0.521		
			AC12	423		0.433		
			AC13	428		0.438		
			TJ067	462		0.472		
			TJ068	445		0.455		
			TJ069	458		0.468		
			TJ070	445		0.455		
			TJ071	435		0.445		
			TJ072	460		0.470		
			TJ073	285		0.291		
			TJ074	297		0.304		
				457		0.467		
			TJ076	457		0.467		
			TJ077	462		0.472		
			TJ078	468		0.479		
			TJ081	489		0.500		
			TJ083	480		0.491		
			TJ085	478		0.489		
			TJ086	458		0.468		
			TJ087	451		0.461		

			TJ090	447		0.457		
	<i>P. ×cambivora</i> -related	×CAMr	TJ075	479		0.490		
			TJ079	454		0.464		
			TJ080	315		0.322		
				395		0.404		
	<i>P. ×heterohybrida</i>	×HET	TJ036	338		0.346		
			TJ037	324		0.331		
			TJ038	331		0.338		
			TJ039	339		0.347		
			TJ040	343		0.351		
			TJ041	327		0.334		
			TJ042	330		0.337		
			TJ043	329		0.336		
			TJ046	340		0.348		
			TJ047	320		0.327		
			TJ048	318		0.325		
			TJ049	313		0.320		
			TJ050	334		0.342		
			TJ053	339		0.347		
			TJ055	320		0.327		
			TJ057	323		0.330		
	<i>P. ×heterohybrida</i> -related	×HETr	TJ106	543	12	0.556	0.012	2.2%
			TJ107	518	17	0.530	0.018	3.3%
			TJ108	561	11	0.574	0.011	1.9%
			TJ109	541	5	0.553	0.005	0.9%
	<i>P. ×incrassata</i>	×INC	TJ060	619		0.633		
			TJ061	421		0.430		
				639		0.653		
			TJ062	426		0.436		
				648		0.663		
			TJ063	650		0.665		
			TJ064	654		0.669		
			TJ065	651		0.666		
			TJ066	648		0.663		
	<i>P. fragariae</i>	FRA	JA06	281	7	0.288	0.007	2.3%
			SW39	273	8	0.279	0.008	2.8%
	<i>P. europaea</i>	EUR	SW37	206	3	0.211	0.003	1.5%
	<i>P. ×attenuata</i> -related	×ATTTr	TJ105	301	14	0.307	0.014	4.5%
7b	<i>P. niederhauseri</i>	NIE	AB02	325	5	0.332	0.005	1.6%
			AB04	343	4	0.351	0.004	1.1%
			SW15	350	2	0.358	0.002	0.6%
	<i>P. niederhauseri</i> -related	NIEr	AB05	403	17	0.413	0.017	4.1%
7c	<i>P. parvispora</i>	PAS	SW45	220	2	0.225	0.002	0.7%
	<i>P. cinnamomi</i>	CIN	10/009	406	19	0.416	0.020	4.8%
			11/024	410	4	0.419	0.005	1.1%
			14/003	400	16	0.409	0.016	4.0%
8a	<i>P. cryptogea</i>	CRY	SW34	217	4	0.222	0.004	2.0%
			05/022	216	8	0.221	0.008	3.5%
			12/016	219	7	0.224	0.007	3.1%

			12/025	220	3	0.225	0.003	1.5%
			14/011	224	7	0.229	0.008	3.3%
8b	<i>P. primulae</i>	PRI	SW47	255	1	0.261	0.001	0.4%
8c	<i>P. lateralis</i>	LAT	13/001	156	1	0.159	0.001	0.8%
			JA03	154	6	0.157	0.006	3.8%
			JA04	146	4	0.149	0.004	2.5%
	<i>P. hibernalis</i>	HIB	SW43	215	2	0.219	0.002	0.7%
	<i>P. ramorum</i>	RAM	02/001	141	6	0.144	0.006	4.1%
			02/002	134	7	0.137	0.007	5.3%
			11/038	140	9	0.144	0.009	6.1%
			14/004	134	10	0.137	0.010	7.5%
8d	<i>P. syringae</i>	SYR	TJ021	171	3	0.175	0.003	1.7%
			TJ022	173	3	0.177	0.003	1.7%
			04/005	184	16	0.188	0.017	8.9%
9a1	<i>P. hydropathica</i>	HYD	TJ018	136	2	0.139	0.002	1.4%
	<i>P. sp. Peru4-related</i>	PER4r	TJ019	136	4	0.139	0.004	2.9%
9a3	<i>P. polonica</i>	POL	SW16	126	2	0.128	0.002	1.7%
			TS01	120	0	0.123	0.000	0.3%
10	<i>P. gallica</i>	GAL	SW13	144	2	0.147	0.002	1.6%
	<i>P. kernoviae</i>	KER	06/003	147	10	0.150	0.010	6.5%
			10/022	132	6	0.134	0.006	4.8%
			12/006	112	8	0.115	0.008	7.0%
12	<i>P. quercina</i>	QCN	SW19	184	1	0.188	0.001	0.3%
			TJ027	181	3	0.185	0.003	1.5%
			TJ030	93	2	0.095	0.002	2.3%
				185	2	0.189	0.002	1.0%
			TJ196	183	4	0.187	0.004	2.1%