

Table S1. Numbers of raw reads, cleaned reads, assembled contigs, PeSV-related contigs and number of variants identified for each of the two analyzed pomegranate samples.

Sample	Paired Reads	Trimmed and Cleaned Reads	Contigs ≥ 200	PeSV-Related Contigs	Recovered Variants
PS1	13,611,066	2,562,437	6,078	50	5
PS4	20,918,456	1,586,985	3,690	125	1

Table S2. Characteristics of the isolates and variants used in this study.

Isolate/Variant	Place of Origin	Symptoms	Amplified Region	Accession Number
PS1-1	Hatay-Turkey	Oak-leaf patterns	complete genome	MT680930
PS1-2	Hatay-Turkey	Oak-leaf patterns	complete genome	MT680931
PS1-3	Hatay-Turkey	Oak-leaf patterns	complete genome	MT680932
PS1-4	Hatay-Turkey	Oak-leaf patterns	complete genome	MT680933
PS1-5	Hatay-Turkey	Oak-leaf patterns	complete genome	MT680934
PS4-1	Hatay-Turkey	Chlorotic rings	complete genome	MT680935
SRX2583192	China	Unknown	near complete genome	SRX2583192
SRX2735578	China	Unknown	6K1-3 end	SRX2735578
SRX2503675	India	Unknown	P3-3 end	SRX2503675
SRX2735578 3	China	Unknown	NIb-3 end	SRX2735578 3
SRX2735578 2	China	Unknown	6K1-3 end	SRX2735578 2
SRX2503675 2	India	Unknown	6K2-3 end	SRX2503675 2
SRX275580	China	Unknown	CP	SRX275580
SRX2503675 3	India	Unknown	CP	SRX2503675 3
225	Adana-Turkey	Oak-leaf patterns	CP	MT271616
228	Adana-Turkey	Mosaics, oak-leaf patterns	CP	MT271617

229	Adana-Turkey	Vein clearing	CP	MT271618
231	Adana-Turkey	Light mosaics	CP	MT271619
232	Adana-Turkey	Mosaics, oak-leaf patterns	CP	MT271620
239	Adana-Turkey	Oak-leaf patterns	CP	MT271621
241	Adana-Turkey	Yellowing and mottling	CP	MT271622
242	Adana-Turkey	Vein clearing	CP	MT271623
243	Adana-Turkey	Oak-leaf patterns	CP	MT271624
245	Adana-Turkey	Oak-leaf patterns	CP	MT271625
247	Adana-Turkey	Yellowing and oak-leaf patterns	CP	MT271626
226	Adana-Turkey	Yellowing and mottlings	CP	MT271627
187	Hatay-Turkey	Oak-leaf patterns and heavy chlorotic spots	CP	MT271628
195	Hatay-Turkey	Yellowing and leaf deformation	CP	MT271629
201	Hatay-Turkey	Yellowing and mosaics	CP	MT271630
221	Adana-Turkey	Yellowing and mottlings	CP	MT271631
222	Adana-Turkey	Vein clearing	CP	MT271632
223	Adana-Turkey	Yellowing and vein clearing	CP	MT271633
253	Hatay-Turkey	Yellowing and mottlings	CP	MT271634
254	Hatay-Turkey	Yellowing and leaf deformation	CP	MT271635
268	Hatay-Turkey	Oak-leaf patterns	CP	MT271636

274	Hatay-Turkey	Yellowing and mosaics	CP	MT271637
278	Hatay-Turkey	Oak-leaf patterns	CP	MT271638
360	Aydin-Turkey	Yellowing	CP	MT271639
3	Hatay-Turkey	Yellowing and mosaics	NIa-Pro	MT271640
5	Hatay-Turkey	Yellowing and mosaics	NIa-Pro	MT271641
48	Hatay-Turkey	Yellowing and mosaics	NIa-Pro	MT271642
64	Hatay-Turkey	Oak-leaf patterns	NIa-Pro	MT271643
187	Hatay-Turkey	Oak-leaf patterns and heavy chlorotic spots	NIa-Pro	MT271644
201	Hatay-Turkey	Yellowing and mosaics	NIa-Pro	MT271645
216	Adana-Turkey	Yellowing and mottlings	NIa-Pro	MT271646
221	Adana-Turkey	Yellowing and mottlings	NIa-Pro	MT271647
222	Adana-Turkey	Vein clearing	NIa-Pro	MT271648
223	Adana-Turkey	Yellowing and vein clearing	NIa-Pro	MT271649
225	Adana-Turkey	Oak-leaf patterns	NIa-Pro	MT271650
226	Adana-Turkey	Yellowing and mottlings	NIa-Pro	MT271651
228	Adana-Turkey	Mosaics, oak-leaf patterns	NIa-Pro	MT271652
229	Adana-Turkey	Vein clearing	NIa-Pro	MT271653
231	Adana-Turkey	Light mosaics	NIa-Pro	MT271654

232	Adana-Turkey	Mosaics, oak-leaf patterns	NIa-Pro	MT271655
239	Adana-Turkey	Oak-leaf patterns	NIa-Pro	MT271656
241	Adana-Turkey	Yellowing and mottlings	NIa-Pro	MT271657
242	Adana-Turkey	Vein clearing	NIa-Pro	MT271658
243	Adana-Turkey	Oak-leaf patterns	NIa-Pro	MT271659
244	Adana-Turkey	Yellowing and mottlings	NIa-Pro	MT271660
245	Adana-Turkey	Oak-leaf patterns	NIa-Pro	MT271661
247	Adana-Turkey	Yellowing and oak-leaf patterns	NIa-Pro	MT271662
252	Hatay-Turkey (Ornamental Pomegranate)	No symptoms	NIa-Pro	MT271663
257	Hatay-Turkey	Yellowing and mosaics	NIa-Pro	MT271664
258	Hatay-Turkey	Yellowing and mosaics	NIa-Pro	MT271665
260	Hatay-Turkey	Yellowing and mosaics	NIa-Pro	MT271666
261	Hatay-Turkey	Yellowing and oak-leaf patterns	NIa-Pro	MT271667
265	Hatay-Turkey	Yellowing and oak-leaf patterns	NIa-Pro	MT271668
266	Hatay-Turkey	Yellowing and oak-leaf patterns	NIa-Pro	MT271669
267	Hatay-Turkey	Yellowing and oak-leaf patterns	NIa-Pro	MT271670
270	Hatay-Turkey	Yellowing and oak-leaf patterns	NIa-Pro	MT271671

Table S4. Pairwise nucleotide sequence identity in the N1a-Pro gene between PeSV isolates.

Accession	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
1	100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				