Table S1. Chemical analyses of olive oil samples obtained from different extractive processes (a, b, c, d, f) carried out at the beginning (HD1), in the middle (HD2) and the end (HD3) of harvesting in the same crop season (U = measurement uncertainty)

	Acidity (Percentage of Oleic Acid)	U	Peroxide Value (meq O_2/Kg)	U	Total Phenolic Concentration (mg/Kg of Gallic Acid)	U
HD1a	0.23	± 0.01	2.3	± 0.80	521	± 55
HD1b	0.26	± 0.01	1.4	± 0.80	654	± 72
HD1c	0.31	± 0.01	1.6	± 0.80	771	± 92
HD1d	0.26	± 0.01	1.6	± 0.80	656	± 73
HD1e	0.25	± 0.01	2.1	± 0.80	598	±65
HD1f	0.31	± 0.01	2.1	± 0.80	712	± 81
HD2a	0.28	± 0.01	3.1	± 0.80	746	± 87
HD2b	0.24	± 0.01	2.6	± 0.80	657	± 73
HD2c	0.28	± 0.01	2.7	± 0.80	663	± 74
HD2d	0.28	± 0.01	2.3	± 0.80	591	± 64
HD2e	0.23	± 0.01	2.5	± 0.80	699	± 79
HD3a	0.27	± 0.01	4.5	± 0.80	569	± 61
HD3b	0.26	± 0.01	4.4	± 0.80	573	± 62
HD3c	0.25	± 0.01	3.2	± 0.80	636	± 70

Table 2. Volatile compounds (mg/kg) in olive oil samples obtained from different extractive processes (a, b, c, d, f) carried out at the beginning (HD1), in the middle (HD2) and the end (HD3) of harvesting in the same crop season.

(1) Heptane; (2) Octane; (3) Methyl acetate; (4) Ethyl acetate; (5) 2-Butanone; (6) 2-Methyl-butanal; (7) Isovaleraldehydes; (8) Valeraldehydes; (9) Ethyl-vinyl-ketone; (10) Propanol; (11) Hexanal; (12) Isobutanol; (13) 2-Pentanol; (14) trans-2-Pentenal; (15) cis-3-Hexenal; (16) 1-Penten-3-ol; (17) 2-Heptanone; (18) 2 and 3-Methylbutan-1-ol; (19) trans-2-Hexenal; (20) Ocimene; (21) Pentanol; (22) Hexyl acetate; (23) 2-Octanone; (24) Octanal; (25) trans-2-Pentenol; (26) cis-3-Hexenyl acetate; (27) cis-2-Pentenol; (28) trans-2- Hexenyl acetate; (29) 6-Methyl-5-epten-2-one; (30) Hexanol; (31) trans-3-Hexen-1-ol; (32) cis-3-Hexenol; (33) Nonanal; (34) 2,4-Exadienal; (35) trans-2-Hexenol; (36) cis-2-Exenol; (37) trans-2-Octanal; (38) 1-Octen-3-ol; (39) 2,4-Heptadienal; (40) Benzaldehydes; (41) Octanol; (42) Butyric acid; (43) trans-2-Decenal; (44) Nonanol; (45) Ethylbenzene (46) Phenol; (47) 4-Ethylphenol; (48) l-Penten-3-one.

	1	2	2	4	5	6	7	8	9	10	11	12	13	14	15	16
HD1a	0.009	0.029	0.004	0.001	0.017	0.033	0.007	0.060	0.394	0.003	1.036	0.000	0.000	0.078	5.958	0.359
HD1b	0.004	0.014	0.001	0.000	0.001	0.023	0.004	0.034	0.459	0.002	0.816	0.000	0.000	0.072	6.621	0.432
HD1c	0.002	0.013	0.002	0.000	0.001	0.027	0.005	0.041	0.603	0.002	0.790	0.000	0.000	0.082	6.305	0.549
HD1d	0.003	0.014	0.002	0.000	0.001	0.029	0.004	0.044	0.547	0.002	0.719	0.000	0.000	0.077	5.978	0.528
HD1e	0.002	0.011	0.001	0.000	0.001	0.018	0.003	0.035	0.481	0.002	0.578	0.000	0.000	0.071	7.004	0.515
HD1f	0.002	0.012	0.001	0.000	0.001	0.019	0.003	0.040	0.463	0.001	0.572	0.000	0.000	0.063	5.652	0.497
HD2a	0.004	0.023	0.005	0.011	0.009	0.036	0.012	0.074	0.679	0.002	0.272	0.004	0.000	0.069	1.793	0.443
HD2b	0.004	0.019	0.006	0.016	0.002	0.046	0.017	0.067	0.791	0.002	0.276	0.006	0.000	0.077	1.820	0.533
HD2c	0.003	0.015	0.008	0.017	0.001	0.027	0.007	0.028	0.725	0.003	0.350	0.004	0.000	0.081	5.692	0.520
HD2d	0.003	0.011	0.006	0.012	0.001	0.019	0.006	0.022	0.760	0.002	0.312	0.005	0.000	0.082	5.693	0.517
HD2e	0.003	0.011	0.006	0.017	0.001	0.018	0.005	0.031	0.642	0.002	0.317	0.006	0.000	0.076	6.405	0.489
HD3a	0.003	0.057	0.011	0.006	0.001	0.034	0.009	0.044	0.513	0.002	0.440	0.011	0.004	0.060	1.591	0.340
HD3b	0.003	0.032	0.007	0.007	0.001	0.030	0.009	0.048	0.477	0.002	0.401	0.009	0.002	0.055	1.439	0.329
HD3c	0.002	0.014	0.003	0.004	0.001	0.029	0.008	0.037	0.479	0.002	0.303	0.008	0.000	0.049	1.326	0.341

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
HD1a	0.002	0.009	13.781	0.000	0.011	0.174	0.020	0.066	0.054	0.888	0.529	0.000	0.015	0.634	0.017	1.441
HD1b	0.000	0.006	12.826	0.000	0.005	0.210	0.000	0.025	0.056	0.997	0.526	0.061	0.009	0.587	0.013	1.281
HD1c	0.000	0.008	12.635	0.129	0.006	0.208	0.000	0.027	0.066	1.193	0.614	0.057	0.010	0.599	0.016	1.411
HD1d	0.000	0.006	12.068	0.104	0.006	0.182	0.000	0.028	0.061	1.152	0.604	0.064	0.004	0.583	0.016	1.382
HD1e	0.000	0.007	10.299	0.000	0.004	0.187	0.000	0.021	0.061	1.363	0.522	0.132	0.005	0.604	0.015	1.317
HD1f	0.000	0.006	11.665	0.000	0.003	0.170	0.000	0.023	0.058	1.238	0.505	0.113	0.007	0.647	0.017	1.364
HD2a	0.000	0.011	8.884	0.000	0.004	0.053	0.000	0.024	0.065	0.277	0.435	0.000	0.006	0.257	0.004	0.434
HD2b	0.000	0.017	9.666	0.000	0.004	0.037	0.000	0.022	0.081	0.275	0.528	0.000	0.004	0.280	0.005	0.534
HD2c	0.000	0.014	8.069	0.022	0.004	0.105	0.005	0.000	0.064	1.155	0.537	0.019	0.010	0.367	0.012	1.203
HD2d	0.000	0.012	7.322	0.023	0.004	0.109	0.005	0.000	0.067	1.306	0.523	0.024	0.009	0.353	0.011	1.329

HD2e	0.000	0.015	7.600	0.000	0.003	0.103	0.006	0.000	0.062	1.072	0.528	0.016	0.009	0.273	0.009	1.132
HD3a	0.000	0.035	7.527	0.026	0.004	0.131	0.003	0.000	0.048	0.734	0.372	0.024	0.009	0.547	0.012	0.878
HD3b	0.000	0.038	6.942	0.015	0.004	0.134	0.002	0.000	0.048	0.763	0.368	0.038	0.007	0.546	0.013	0.931
HD3c	0.000	0.026	6.452	0.024	0.003	0.158	0.011	0.000	0.044	0.846	0.351	0.033	0.007	0.449	0.009	0.773

	33	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**
HD1a	0.583	1.623	0.462	0.009	0.065	0.010	0.000	0.094	0.097	0.201	0.000	0.104	0.294	0.984	0.098	0.015
HD1b	0.282	1.507	0.363	0.004	0.035	0.005	0.000	0.058	0.048	0.182	0.000	0.097	0.201	0.361	0.069	0.020
HD1c	0.229	1.448	0.375	0.005	0.022	0.007	0.000	0.072	0.046	0.155	0.000	0.063	0.201	0.353	0.063	0.030
HD1d	0.217	1.419	0.403	0.005	0.034	0.008	0.000	0.066	0.052	0.118	0.000	0.060	0.193	0.350	0.057	0.025
HD1e	0.249	1.484	0.521	0.004	0.022	0.005	0.000	0.058	0.046	0.134	0.000	0.071	0.159	0.333	0.062	0.018
HD1f	0.191	1.285	0.512	0.006	0.020	0.004	0.000	0.051	0.050	0.114	0.000	0.065	0.167	0.321	0.049	0.019
HD2a	0.202	0.730	0.311	0.002	0.024	0.003	0.000	0.042	0.035	0.047	0.000	0.056	0.133	0.266	0.033	0.031
HD2b	0.171	0.757	0.387	0.003	0.017	0.004	0.000	0.039	0.033	0.024	0.000	0.055	0.144	0.274	0.025	0.040
HD2c	0.352	1.216	0.278	0.003	0.022	0.003	0.010	0.045	0.027	0.032	0.091	0.049	0.136	0.260	0.031	0.032
HD2d	0.266	1.182	0.188	0.002	0.036	0.003	0.014	0.043	0.027	0.028	0.122	0.026	0.122	0.252	0.027	0.035
HD2e	0.322	1.289	0.176	0.002	0.024	0.003	0.010	0.046	0.024	0.012	0.099	0.026	0.098	0.265	0.036	0.035
HD3a	0.362	0.594	0.650	0.006	0.030	0.003	0.000	0.032	0.037	0.002	0.234	0.046	0.183	0.203	0.014	0.049
HD3b	0.375	0.532	0.586	0.006	0.028	0.004	0.005	0.030	0.029	0.002	0.145	0.029	0.177	0.197	0.015	0.041
HD3c	0.168	0.535	0.339	0.005	0.025	0.002	0.000	0.029	0.025	0.002	0.103	0.019	0.128	0.192	0.013	0.035