

8. Anexos

Anexo I: Tablas de datos de solubilidades expresados en mg/ml

Disolvente	Muestra	Área de pico	Cantidad (mg)	mg/mL	Media	Desvest	DSR (%)
100	1.a.	5477020	0.0010408	104.0756811	110.080313	4.091846463	3.72
	1.b.	5851407	0.0011105	111.0476359			
	1.c.	5906525	0.0011207	112.074061			
	1.d.	5962899	0.0011312	113.1238757			
	2.a.	5368450	0.0010205	102.0538558	108.039181	4.584418172	4.24
	2.b.	5656200	0.0010741	107.4124285			
	2.c.	5782703	0.0010977	109.768208			
	2.d.	5952071	0.0011292	112.9222332			
	3.a.	5538268	0.0010522	105.216261	111.802524	4.776562987	4.27
	3.b.	5868347	0.0011136	111.363098			
	3.c.	6097328	0.0011563	115.6272556			
	3.d.	6063832	0.0011500	115.0034824			
200	1.a.	4380585	0.0008366	83.6575169	89.2292501	4.600085045	5.16
	1.b.	4573702	0.0008725	87.25380361			
	1.c.	4873451	0.0009284	92.83582562			
	1.d.	4891388	0.0009317	93.16985419			
	2.a.	5078318	0.0009665	96.6509246	99.7571556	2.514496285	2.52
	2.b.	5193158	0.0009879	98.78951191			
	2.c.	5365561	0.0010200	102.0000559			
	2.d.	5343441	0.0010159	101.5881301			
	3.a.	3351362	0.0006449	64.49099611	68.1675869	3.273283008	4.80
	3.b.	3544911	0.0006810	68.09532766			
	3.c.	3520157	0.0006763	67.63435073			
	3.d.	3778735	0.0007245	72.44967318			
3F00	1.a.	3898346	0.0007468	74.67710758	78.4240675	2.514820681	3.21
	1.b.	4144704	0.0007926	79.26486527			
	1.c.	4175359	0.0007984	79.83573251			
	1.d.	4179807	0.0007992	79.91856459			
	2.a.	4016643	0.0007688	76.88007225	77.3578512	0.417843957	0.54
	2.b.	4060989	0.0007771	77.70589769			
	2.c.	4030314	0.0007713	77.134658			
	2.d.	4061251	0.0007771	77.71077674			
	3.a.	4359505	0.0008326	83.26495838	82.6665999	1.729447896	2.09
	3.b.	4373022	0.0008352	83.51667629			
	3.c.	4387815	0.0008379	83.79215628			
	3.d.	4189153	0.0008009	80.0926088			
400	1.a.	2655443	0.0005153	51.5313693	57.3035205	5.797003312	10.12
	1.b.	2762939	0.0005353	53.53319429			
	1.c.	3115884	0.0006011	60.10584927			
	1.d.	3327341	0.0006404	64.04366934			

	2.a.	2934265	0.0005672	56.72368201	62.6319112	4.098856443	6.54
	2.b.	3276668	0.0006310	63.10002048			
	2.c.	3371340	0.0006486	64.86303283			
	2.d.	3423851	0.0006584	65.84090951			
	3.a.	3238178	0.0006238	62.38324736	64.2688753	1.848384921	2.88
	3.b.	3343563	0.0006435	64.34576063			
	3.c.	3436562	0.0006608	66.07761783			
	3.d.	1045136	0.0002154	21.5437159			
Glicerol	1.a.	535686	0.0001206	12.05657461	12.0068623	0.092176425	0.77
	1.b.	537168	0.0001208	12.08417289			
	1.c.	533203	0.0001201	12.01033539			
	1.d.	526009	0.0001188	11.87636641			
	2.a.	759544	0.0001623	16.22533008	16.1165012	0.151137007	0.94
	2.b.	757697	0.0001619	16.19093465			
	2.c.	741742	0.0001589	15.89381553			
	2.d.	755817	0.0001616	16.15592469			
	3.a.	545748	0.0001224	12.2439524	11.6918751	0.5528447	4.73
	3.b.	475748	0.0001094	10.94038995			
	3.c.	527754	0.0001191	11.90886236			
	3.d.	515158	0.0001167	11.67429561			
Diglicerol	1.a.	2916181	0.0005639	56.38691596	59.2729474	2.004049667	3.38
	1.b.	3165384	0.0006103	61.02765415			
	1.c.	3100664	0.0005982	59.82241755			
	1.d.	3102403	0.0005985	59.85480177			
	2.a.	2819709	0.0005459	54.59038343	57.7175925	2.118960684	3.67
	2.b.	3015329	0.0005823	58.23328181			
	2.c.	3053168	0.0005894	58.93793181			
	2.d.	3062342	0.0005911	59.10877298			
	3.a.	2929013	0.0005663	56.62587758	59.8614406	2.282935472	3.81
	3.b.	3109618	0.0005999	59.98916181			
	3.c.	3164695	0.0006101	61.01482337			
	3.d.	3207712	0.0006182	61.81589974			
Triglicerol	1.a.	4218658	0.0008064	80.64206037	88.8545876	5.603182293	6.31
	1.b.	4723675	0.0009005	90.04664891			
	1.c.	4879398	0.0009295	92.94657256			
	1.d.	4816919	0.0009178	91.78306859			
	2.a.	3956042	0.0007575	75.751541	80.8991881	3.641857175	4.50
	2.b.	4250193	0.0008123	81.22931526			
	2.c.	4314117	0.0008242	82.41972849			
	2.d.	4409510	0.0008420	84.19616753			
	3.a.	3753728	0.0007198	71.9839848	83.0431991	7.475920845	9.00
	3.b.	4572088	0.0008722	87.22374718			
	3.c.	4454219	0.0008503	85.02875286			
	3.d.	4610352	0.0008794	87.93631166			

Tabla A1: Solubilidades ácido ferúlico en monoéteres.

Disolvente	Muestra	Área de pico	Cantidad (mg)	mg/mL	Media	Desvest	DSR (%)
100	1.a.	10032733	0.0013965	139.650	143.959	2.91648529	2.03
	1.b.	10418543	0.0014479	144.795			
	1.c.	10461287	0.0014536	145.365			
	1.d.	10510969	0.0014603	146.027			
	2.a.	9459794	0.0013201	132.010	142.340	9.36525954	6.58
	2.b.	9858958	0.0013733	137.333			
	2.c.	11006138	0.0015263	152.630			
	2.d.	10612932	0.0014739	147.387			
	3.a.	9878634	0.0013760	137.595	142.028	2.99569398	2.11
	3.b.	10304376	0.0014327	143.272			
	3.c.	10288106	0.0014306	143.056			
	3.d.	10373122	0.0014419	144.189			
200	1.a.	9250968	0.0012923	129.226	135.921	4.53197604	3.33
	1.b.	9862756	0.0013738	137.384			
	1.c.	9897530	0.0013785	137.847			
	1.d.	10001124	0.0013923	139.229			
	2.a.	9530911	0.0013296	132.959	136.689	2.54795673	1.86
	2.b.	9845002	0.0013715	137.147			
	2.c.	9929804	0.0013828	138.278			
	2.d.	9936764	0.0013837	138.371			
	3.a.	9642435	0.0013445	134.446	142.111	5.4087133	3.81
	3.b.	10237867	0.0014239	142.386			
	3.c.	10426731	0.0014490	144.904			
	3.d.	10562019	0.0014671	146.708			
3F00	1.a.	1152491	0.0002124	21.238	22.515	1.07713005	4.78
	1.b.	1222034	0.0002216	22.165			
	1.c.	1275789	0.0002288	22.882			
	1.d.	1342907	0.0002378	23.777			
	2.a.	1155395	0.0002128	21.276	22.544	0.8736127	3.88
	2.b.	1262248	0.0002270	22.701			
	2.c.	1281211	0.0002295	22.954			
	2.d.	1302948	0.0002324	23.244			
400	1.a.	6239515	0.0008907	89.070	97.398	6.62488067	6.80
	1.b.	6705701	0.0009529	95.286			
	1.c.	7158520	0.0010132	101.324			
	1.d.	7352597	0.0010391	103.912			
	2.a.	7170191	0.0010148	101.480	103.659	1.59443792	1.54
	2.b.	7349554	0.0010387	103.872			
	2.c.	7457617	0.0010531	105.313			
	2.d.	7357181	0.0010397	103.973			
	3.a.	5983801	0.0008566	85.660	91.388	6.25373143	6.84
	3.b.	6342596	0.0009044	90.445			
	3.c.	6913739	0.0009806	98.060			
	3.d.	5193743	0.0007513	75.125			

Glicerol	1.a.	1410859	0.0002468	24.683	24.566	0.09120966	0.37
	1.b.	1394149	0.0002446	24.460			
	1.c.	1401479	0.0002456	24.558			
	1.d.	1401900	0.0002456	24.563			
	2.a.	1316251	0.0002342	23.421	23.304	0.08089292	0.35
	2.b.	1302421	0.0002324	23.237			
	2.c.	1305887	0.0002328	23.283			
	2.d.	1305166	0.0002327	23.273			
	3.a.	1609578	0.0002733	27.333	27.417	0.05672241	0.21
	3.b.	1617805	0.0002744	27.442			
	3.c.	1618741	0.0002745	27.455			
	3.d.	1617518	0.0002744	27.438			
Diglicerol	1.a.	6880639	0.0009762	97.619	99.320	1.9388166	1.95
	1.b.	7216209	0.0010209	102.094			
	1.c.	6986237	0.0009903	99.027			
	1.d.	6949880	0.0009854	98.542			
	2.a.	5489973	0.0007908	79.075	89.757	8.83345775	9.84
	2.b.	6015861	0.0008609	86.088			
	2.c.	6729610	0.0009561	95.605			
	2.d.	6928825	0.0009826	98.262			
	3.a.	6095947	0.0008716	87.156	94.032	4.6310809	4.93
	3.b.	6853200	0.0009725	97.253			
	3.c.	6748287	0.0009585	95.854			
	3.d.	6749102	0.0009587	95.865			
Triglicerol	1.a.	6374818	0.0009087	90.874	96.623	4.55198737	4.71
	1.b.	6710174	0.0009535	95.346			
	1.c.	6980411	0.0009895	98.949			
	1.d.	7158256	0.0010132	101.321			
	2.a.	6998539	0.0009919	99.191	106.848	7.19555726	6.73
	2.b.	7335377	0.0010368	103.683			
	2.c.	7697391	0.0010851	108.510			
	2.d.	8259759	0.0011601	116.009			
	3.a.	5337265	0.0007704	77.039	92.393	5.63896625	6.10
	3.b.	6025912	0.0008622	86.222			
	3.c.	6585360	0.0009368	93.682			
	3.d.	6854970	0.0009728	97.277			

Tabla A2: Solubilidades ácido cumárico en monoéteres.

Disolvente	Muestra	Área de pico	Cantidad (mg)	mg/mL	Media	Desvest	DSR (%)
100	1.a.	4207017	0.00072018	72.018	78.795	4.6641617	5.92
	1.b.	4684708	0.00080691	80.691			
	1.c.	4638267	0.00079848	79.848			
	1.d.	4790949	0.00082620	82.620			
	2.a.	4118485	0.00070411	70.411	75.334	3.77411575	5.01
	2.b.	4345397	0.00074531	74.531			
	2.c.	4500573	0.00077348	77.348			
	2.d.	4594182	0.00079048	79.048			
	3.a.	4072732	0.00069580	69.580	72.757	3.08111542	4.23
	3.b.	4168885	0.00071326	71.326			
	3.c.	4281326	0.00073367	73.367			
	3.d.	4467783	0.00076753	76.753			
200	1.a.	3532631	0.00059774	59.774	62.547	2.04562265	3.27
	1.b.	3736800	0.00063481	63.481			
	1.c.	3676978	0.00062395	62.395			
	1.d.	3795082	0.00064539	64.539			
	2.a.	3312910	0.00055784	55.784	59.549	2.65214816	4.45
	2.b.	3533044	0.00059781	59.781			
	2.c.	3586251	0.00060747	60.747			
	2.d.	3648709	0.00061881	61.881			
	3.a.	3429347	0.00057899	57.899	60.912	2.03673802	3.34
	3.b.	3626849	0.00061484	61.484			
	3.c.	3653347	0.00061966	61.966			
	3.d.	3671760	0.00062300	62.300			
3F00	1.a.	235775	-0.00000085	-0.085	0.226	0.21338799	94.60
	1.b.	260414	0.00000362	0.362			
	1.c.	254633	0.00000257	0.257			
	1.d.	260752	0.00000368	0.368			
	2.a.	255971	0.00000281	0.281	0.550	0.32349993	58.85
	2.b.	295666	0.00001002	1.002			
	2.c.	260123	0.00000357	0.357			
	2.d.	271220	0.00000558	0.558			
	3.a.	399021	0.00002879	2.879	3.603	0.56131943	15.58
	3.b.	474307	0.00004246	4.246			
	3.c.	438588	0.00003597	3.597			
	3.d.	443724	0.00003690	3.690			
400	1.a.	1732057	0.00027082	27.082	30.913	2.84909251	9.22
	1.b.	1942053	0.00030895	30.895			
	1.c.	2107700	0.00033902	33.902			
	1.d.	1990405	0.00031773	31.773			
	2.a.	1898501	0.00030104	30.104	31.970	1.88437881	5.89
	2.b.	1927462	0.00030630	30.630			
	2.c.	2108397	0.00033915	33.915			
	2.d.	2070763	0.00033232	33.232			

	3.a.	1717909	0.00026825	26.825			
	3.b.	1803420	0.00028378	28.378			
	3.c.	1875129	0.00029680	29.680	28.294	1.42910663	5.05
	3.d.	2208879	0.00035739	35.739			
Glicerol	1.a.	713461	0.00008588	8.588			
	1.b.	742065	0.00009107	9.107			
	1.c.	721764	0.00008739	8.739	8.754	0.24660896	2.82
	1.d.	713095	0.00008581	8.581			
	2.a.	666283	0.00007731	7.731			
	2.b.	722708	0.00008756	8.756			
	2.c.	664715	0.00007703	7.703	8.172	0.53594369	6.56
	2.d.	708536	0.00008498	8.498			
	3.a.	789783	0.00009974	9.974			
	3.b.	823881	0.00010593	10.593			
	3.c.	812580	0.00010387	10.387	10.286	0.26515167	2.58
	3.d.	801777	0.00010191	10.191			
Diglicerol	1.a.	3010918	0.00050301	50.301			
	1.b.	3265805	0.00054929	54.929			
	1.c.	3321780	0.00055945	55.945	54.432	2.8337722	5.21
	1.d.	3355137	0.00056551	56.551			
	2.a.	2852378	0.00047423	47.423			
	2.b.	3047259	0.00050961	50.961			
	2.c.	3185245	0.00053467	53.467	50.984	2.58559784	5.07
	2.d.	3109119	0.00052084	52.084			
	3.a.	3153871	0.00052897	52.897			
	3.b.	3313466	0.00055795	55.795			
	3.c.	3421940	0.00057764	57.764	55.820	2.10833607	3.78
	3.d.	3370237	0.00056825	56.825			
Triglicerol	1.a.	3252398	0.00054686	54.686			
	1.b.	3464939	0.00058545	58.545			
	1.c.	3585937	0.00060742	60.742	59.120	3.37093627	5.70
	1.d.	3683126	0.00062506	62.506			
	2.a.	3258901	0.00054804	54.804			
	2.b.	3385111	0.00057095	57.095			
	2.c.	3910701	0.00066638	66.638	62.011	7.15811153	11.54
	2.d.	4068737	0.00069508	69.508			
	3.a.	3148270	0.00052795	52.795			
	3.b.	3339483	0.00056267	56.267			
	3.c.	3817319	0.00064943	64.943	60.475	7.11171438	11.76
	3.d.	3980016	0.00067897	67.897			

Tabla A3: Solubilidades ácido cafeico en monoéteres.

Disolvente	Muestra	Área de pico	Cantidad (mg)	mg/mL	Media	Desvest	DSR (%)
D100	1.a.	6713215	0.0012710	127.097	121.913	5.42536562	4.45
	1.b.	6046629	0.0011468	114.683			
	1.c.	6388877	0.0012106	121.057			
	1.d.	6590783	0.0012482	124.817			
	2.a.	5226415	0.0009941	99.409	119.455	5.31277637	4.45
	2.b.	5980858	0.0011346	113.458			
	2.c.	6403599	0.0012133	121.331			
	2.d.	6524102	0.0012357	123.575			
	3.a.	5469766	0.0010394	103.941	112.291	6.00175556	5.34
	3.b.	5939632	0.0011269	112.691			
	3.c.	6034218	0.0011445	114.452			
	3.d.	6229000	0.0011808	118.079			
D200	1.a.	4927980	0.0009385	93.851	107.329	9.04741507	8.43
	1.b.	5838669	0.0011081	110.810			
	1.c.	5971762	0.0011329	113.289			
	1.d.	5868369	0.0011136	111.364			
	2.a.	5174203	0.0009844	98.437	104.245	5.03802775	4.83
	2.b.	5397883	0.0010260	102.602			
	2.c.	5555005	0.0010553	105.528			
	2.d.	5817402	0.0011041	110.414			
	3.a.	4896332	0.0009326	93.262	104.715	7.8658955	7.51
	3.b.	5821362	0.0011049	110.488			
	3.c.	5579223	0.0010598	105.979			
	3.d.	5748585	0.0010913	109.133			
D3F00	1.a.	2653839	0.0005150	51.501	56.635	3.82874482	6.76
	1.b.	2891122	0.0005592	55.920			
	1.c.	3092452	0.0005967	59.669			
	1.d.	3080492	0.0005945	59.447			
	2.a.	2845392	0.0005507	55.069	58.609	2.73653125	4.67
	2.b.	2995805	0.0005787	57.870			
	2.c.	3132060	0.0006041	60.407			
	2.d.	3168697	0.0006109	61.089			
	3.a.	2518516	0.0004898	48.981	52.822	2.63785058	4.99
	3.b.	2754650	0.0005338	53.379			
	3.c.	2788277	0.0005401	54.005			
	3.d.	2837586	0.0005492	54.923			
D400	1.a.	4779148	0.0009108	91.080	96.898	3.90419614	4.03
	1.b.	5228985	0.0009946	99.457			
	1.c.	5173909	0.0009843	98.431			
	1.d.	5184258	0.0009862	98.624			
	2.a.	4674175	0.0008912	89.125	98.604	6.34658216	6.44
	2.b.	5324734	0.0010124	101.240			
	2.c.	5336881	0.0010147	101.466			
	2.d.	5396948	0.0010258	102.585			

	3.a.	4308234	0.0008231	82.310	96.050	4.07034907	4.24
	3.b.	4794492	0.0009137	91.365			
	3.c.	5189501	0.0009872	98.721			
	3.d.	5154167	0.0009806	98.063			

Tabla A4: Solubilidades ácido ferúlico en dímeros.

Disolvente	Muestra	Área de pico	Cantidad (mg)	mg/mL	Media	Desvest	DSR (%)
D100	1.a.	9061504	0.0017083	170.827	187.287	11.2543722	6.01
	1.b.	10182579	0.0019170	191.704			
	1.c.	10111911	0.0019039	190.388			
	1.d.	10425462	0.0019623	196.227			
	2.a.	8480145	0.0016000	160.001	198.404	9.95926166	5.02
	2.b.	10170570	0.0019148	191.480			
	2.c.	10301259	0.0019391	193.914			
	2.d.	11155279	0.0020982	209.818			
	3.a.	8985278	0.0016941	169.408	195.314	18.0319767	9.23
	3.b.	10455656	0.0019679	196.789			
	3.c.	11105463	0.0020889	208.890			
	3.d.	10959302	0.0020617	206.168			
D200	1.a.	8108939	0.0015309	153.088	172.996	14.9836026	8.66
	1.b.	9357397	0.0017634	176.337			
	1.c.	9191878	0.0017325	173.255			
	1.d.	10053727	0.0018930	189.305			
	2.a.	8248104	0.0015568	155.680	165.514	7.53225848	4.55
	2.b.	8677225	0.0016367	163.671			
	2.c.	9037165	0.0017037	170.374			
	2.d.	9142281	0.0017233	172.331			
	3.a.	8626210	0.0016272	162.721	179.237	18.0189381	10.05
	3.b.	8726553	0.0016459	164.590			
	3.c.	10309296	0.0019406	194.064			
	3.d.	10390360	0.0019557	195.573			
D3F00	1.a.	4873218	0.0009283	92.831	97.237	3.10508199	3.19
	1.b.	5264767	0.0010012	100.123			
	1.c.	5143529	0.0009787	97.865			
	1.d.	5157581	0.0009813	98.127			
	2.a.	4671966	0.0008908	89.084	97.028	5.89806081	6.08
	2.b.	5061866	0.0009634	96.345			
	2.c.	5258540	0.0010001	100.007			
	2.d.	5401895	0.0010268	102.677			
	3.a.	4608068	0.0008789	87.894	93.924	4.04568695	4.31
	3.b.	5054356	0.0009620	96.205			
	3.c.	5059579	0.0009630	96.302			
	3.d.	5005570	0.0009530	95.296			

D400	1.a.	8604955	0.0016233	162.325	168.402	4.08286255	2.42
	1.b.	9006223	0.0016980	169.798			
	1.c.	9041174	0.0017045	170.448			
	1.d.	9072789	0.0017104	171.037			
	2.a.	7470982	0.0014121	141.208	159.585	12.3558091	7.74
	2.b.	8718887	0.0016445	164.447			
	2.c.	8908097	0.0016797	167.970			
	2.d.	8733357	0.0016472	164.716			
	3.a.	7700732	0.0014549	145.486	177.012	13.2078332	7.46
	3.b.	8579133	0.0016184	161.844			
	3.c.	9727100	0.0018322	183.222			
	3.d.	9874729	0.0018597	185.971			

Tabla A5: Solubilidades ácido cumárico.

Disolvente	Muestra	Área de pico	Cantidad (mg)	mg/mL	Media	Desvest	DSR (%)
D100	1.a.	4293678	0.0008204	82.039	93.929	8.71544668	9.28
	1.b.	4903502	0.0009340	93.395			
	1.c.	5379886	0.0010227	102.267			
	1.d.	5151621	0.0009802	98.016			
	2.a.	4417567	0.0008435	84.346	90.910	0.88254061	0.97
	2.b.	4718608	0.0008995	89.952			
	2.c.	4779556	0.0009109	91.087			
	2.d.	4811946	0.0009169	91.690			
	3.a.	4626909	0.0008824	88.245	97.516	7.90479141	8.11
	3.b.	5083368	0.0009674	96.745			
	3.c.	5124615	0.0009751	97.513			
	3.d.	5664185	0.0010756	107.561			
D200	1.a.	3885789	0.0007444	74.443	84.017	8.82640223	10.51
	1.b.	4147284	0.0007931	79.313			
	1.c.	4622080	0.0008815	88.155			
	1.d.	4944373	0.0009416	94.157			
	2.a.	4103366	0.0007850	78.495	86.137	6.05382567	7.03
	2.b.	4402342	0.0008406	84.063			
	2.c.	4767528	0.0009086	90.863			
	2.d.	4781723	0.0009113	91.128			
	3.a.	3797510	0.0007280	72.799	80.815	7.52824445	9.32
	3.b.	3989399	0.0007637	76.373			
	3.c.	4452267	0.0008499	84.992			
	3.d.	4672667	0.0008910	89.097			

D3F00	1.a.	1500578	0.0003003	30.025	31.120	0.74967187	2.41
	1.b.	1591878	0.0003173	31.725			
	1.c.	1572210	0.0003136	31.359			
	1.d.	1572922	0.0003137	31.372			
	2.a.	1456664	0.0002921	29.207	30.212	0.71140652	2.35
	2.b.	1514250	0.0003028	30.280			
	2.c.	1545428	0.0003086	30.860			
	2.d.	1526180	0.0003050	30.502			
	3.a.	1625378	0.0003235	32.349	33.512	0.79739997	2.38
	3.b.	1694726	0.0003364	33.641			
	3.c.	1713628	0.0003399	33.993			
	3.d.	1717616	0.0003407	34.067			
D400	1.a.	3552777	0.0006824	68.242	73.819	4.98933789	6.76
	1.b.	3716458	0.0007129	71.290			
	1.c.	3990981	0.0007640	76.402			
	1.d.	4148860	0.0007934	79.342			
	2.a.	3736521	0.0007166	71.664	73.434	1.3079164	1.78
	2.b.	3832160	0.0007344	73.445			
	2.c.	3853446	0.0007384	73.841			
	2.d.	3904269	0.0007479	74.787			
	3.a.	3680123	0.0007061	70.613	75.517	0.39211296	0.52
	3.b.	3935371	0.0007537	75.367			
	3.c.	3927610	0.0007522	75.222			
	3.d.	3967336	0.0007596	75.962			

Tabla A6: Solubilidades ácido cafeico.

Anexo II: Rectas de calibrado

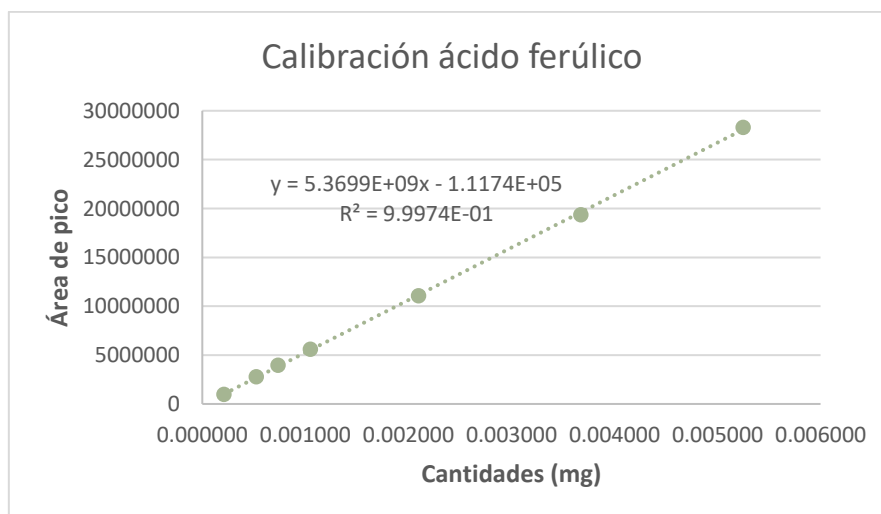


Figura A1: Calibración de ácido ferúlico.

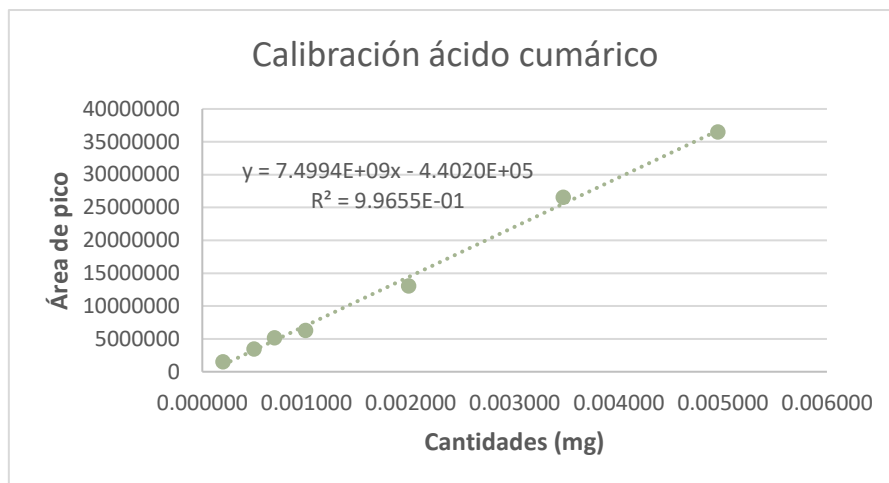


Figura A2: Calibración de ácido cumárico.

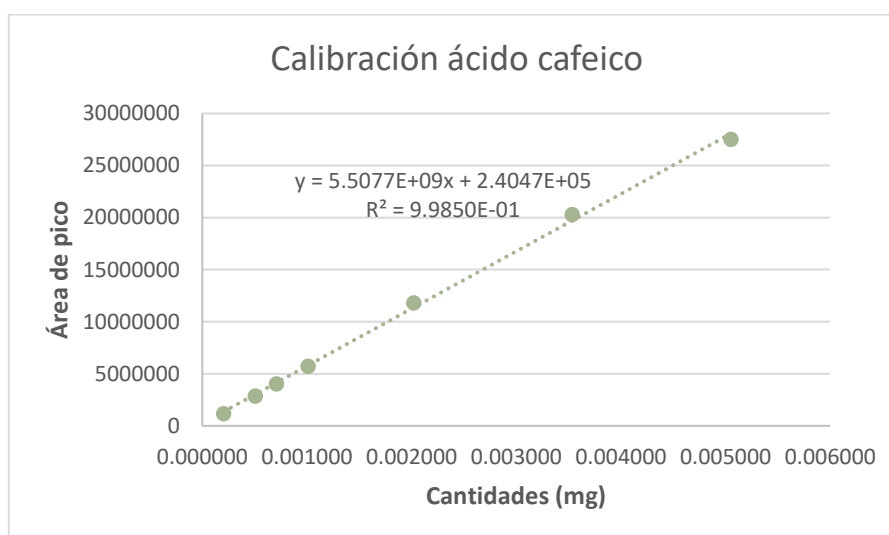


Figura A3: Calibración de ácido cafeico.

Anexo III: Tablas de datos de los estudios de log P y factor hidrofílico

Disolvente	mg/mL	Desvest	DSR (%)	Fracción molar (por peso)	Fracción molar (por RMN)	Log P*	Hy*
100	109.97	4.37	3.97	0.0618	0.0559	-1	1.118
200	85.72	14.09	16.44	0.0732	0.0587	-0.651	0.964
3F00	79.48	2.89	3.63	0.0168	0.0173	0.008	0.924
400	57.84	5.05	8.73	0.0605	0.0442	0.329	0.743
D100	117.74	6.71	5.70	0.1267	0.0977	-1.6412	1.6358
D200	105.43	6.94	6.58	0.1423	0.0901	-1.2924	1.5381
D3F00	56.02	3.77	6.73	0.0172	0.0144	-0.6338	1.377
D400	95.85	6.43	6.70	0.1234	0.0763	-0.3125	1.4944
Glicerol	12.01	0.09	0.77	0.0074	0.0151	-1.88	2.4921
Diglicerol	58.95	2.15	3.65	0.0907	0.0784	-2.0497	2.7628
Triglicerol	84.26	6.30	7.48	0.1406	0.1340	-2.6913	3.2782

Tabla A7: Factor hidrofílico y log P del ácido ferúlico.

Disolvente	mg/mL	Desvest	DSR (%)	Fracción molar (por peso)	Fracción molar (por RMN)	Log P*	Hy*
100	142.28	5.43	3.82	0.1267	0.0977	-1	1.118
200	138.24	4.86	3.52	0.1423	0.0901	-0.651	0.964
3F00	22.53	0.91	4.03	0.0172	0.0144	0.008	0.924
400	98.04	6.92	7.05	0.1234	0.0763	0.329	0.743
D100	193.24	13.39	6.93	0.2437	0.1590	-1.6412	1.6358
D200	172.58	14.13	8.19	0.1987	0.2551	-1.2924	1.5381
D3F00	96.06	4.37	4.55	0.1495	0.1098	-0.6338	1.377
D400	163.86	11.75	7.17	0.3131	0.2506	-0.3125	1.4944
Glicerol	25.1	1.80	7.16	0.0105	0.0076	-1.88	2.4921
Diglicerol	95.76	4.88	5.10	0.1246	0.1284	-2.0497	2.7628
Triglicerol	99.19	8.25	8.32	0.2519	0.2146	-2.6913	3.2782

Tabla A8: Factor hidrofílico y log P del ácido ferúlico.

Disolvente	mg/mL	Desvest	DSR (%)	Fracción molar (por peso)	Fracción molar (por RMN)	Log P*	Hy*
100	75.63	4.37	5.78	0.0597	0.0519	-1	1.118
200	61.00	2.41	3.96	0.0530	0.0459	-0.651	0.964
3F00	-	-	-	-	-	0.008	0.924
400	31.01	2.82	9.09	0.0380	0.0297	0.329	0.743
D100	94.41	7.02	7.44	0.1203	0.0919	-1.6412	1.6358
D200	83.65	7.21	8.61	0.1323	0.1675	-1.2924	1.5381
D3F00	31.62	1.61	5.08	0.0473	0.0524	-0.6338	1.377
D400	73.66	3.08	4.18	0.1392	0.1456	-0.3125	1.4944
Glicerol	-	-	-	-	-	-1.88	2.4921
Diglicerol	53.75	3.12	5.81	0.0770	0.0611	-2.0497	2.7628
Triglicerol	60.54	5.69	9.40	0.1405	0.1401	-2.6913	3.2782

Tabla A9: Factor hidrofílico y log P del ácido ferúlico.

Anexo IV: Porcentaje de etanol en dímeros.

	FERÚLICO		CUMÁRICO		CAFEICO	
	Dímero R00	EtOH	Dímero R00	EtOH	Dímero R00	EtOH
Dímero 100	45.9%	54.1%	41.2%	58.8%	50.7%	49.3%
Dímero 200	37.5%	62.5%	45.7%	54.3%	43.5%	56.5%
Dímero 3F00	32.0%	68.0%	36.7%	63.3%	33.0%	67.0%
Dímero 400	29.5%	70.5%	32.4%	67.6%	34.0%	66.0%
Diglicerol	38.0%	62.0%	-	-	48.5%	51.5%
Triglicerol	44.0%	56.0%	-	-	44.0%	56.0%

Tabla A10: Porcentaje en fracción molar de etanol en los diferentes dímeros estudiados.

	FERÚLICO		CUMÁRICO		CAFEICO	
	Dímero R00	EtOH	Dímero R00	EtOH	Dímero R00	EtOH
Dímero 100	76.8%	23.2%	73.3%	26.7%	80.1%	19.9%
Dímero 200	70.1%	29.9%	76.7%	23.3%	75.1%	24.9%
Dímero 3F00	64.8%	35.2%	69.4%	30.6%	65.8%	34.2%
Dímero 400	62.1%	37.9%	65.2%	34.8%	66.8%	33.2%
Diglicerol	70.6%	29.4%	-	-	78.6%	21.4%
Triglicerol	75.4%	24.6%	-	-	75.4%	24.6%

Tabla A11: Porcentaje en peso de etanol en los diferentes dímeros estudiados.

Anexo V: RMN de monoésteres de glicerol y mezclas de dímeros (Caracterización)

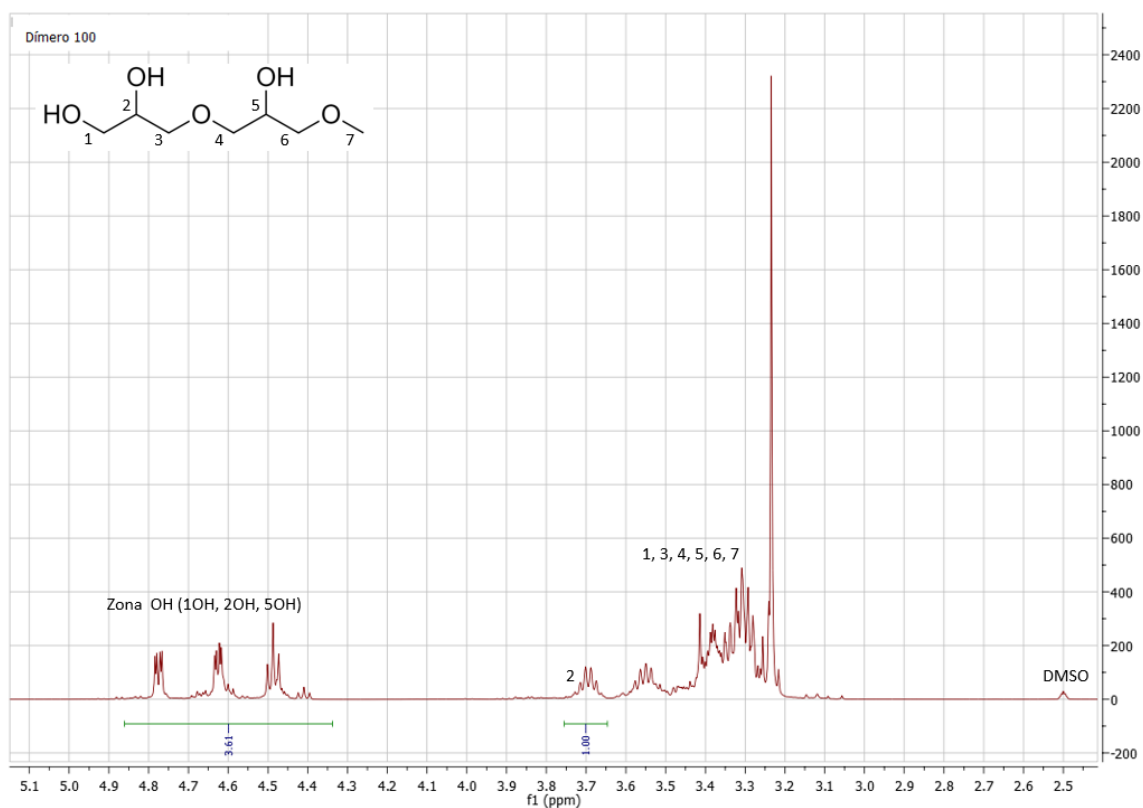


Figura A4: RMN del dímero del monoéter de glicerol 100 (D100).

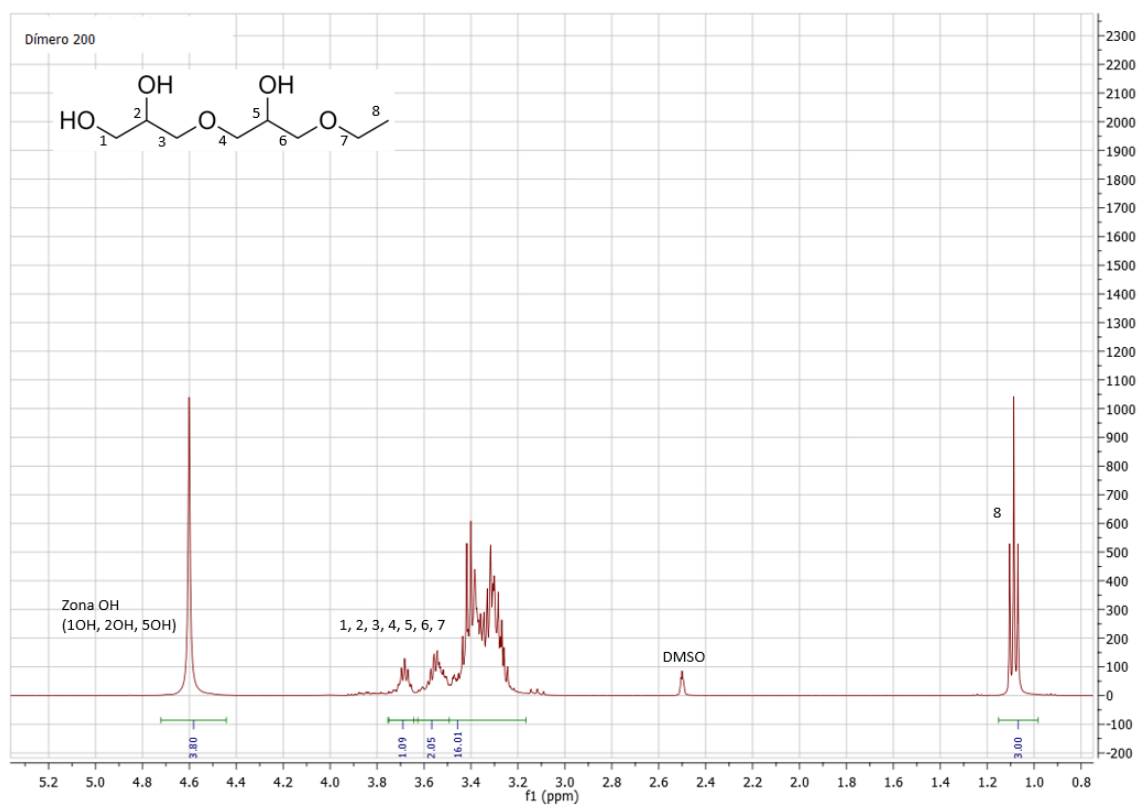


Figura A5: RMN del dímero del monoéter de glicerol 200 (D200).

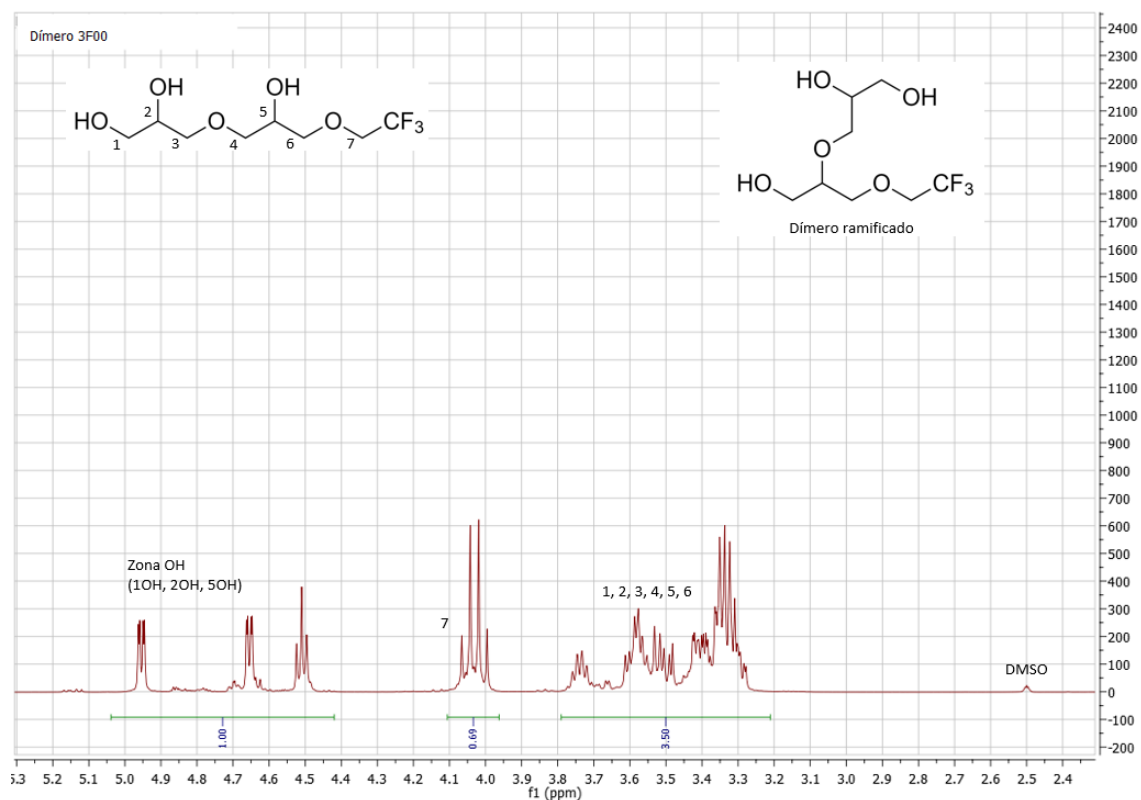


Figura A6: RMN del dímero del monoéter de glicerol 3F00 (D3F00).

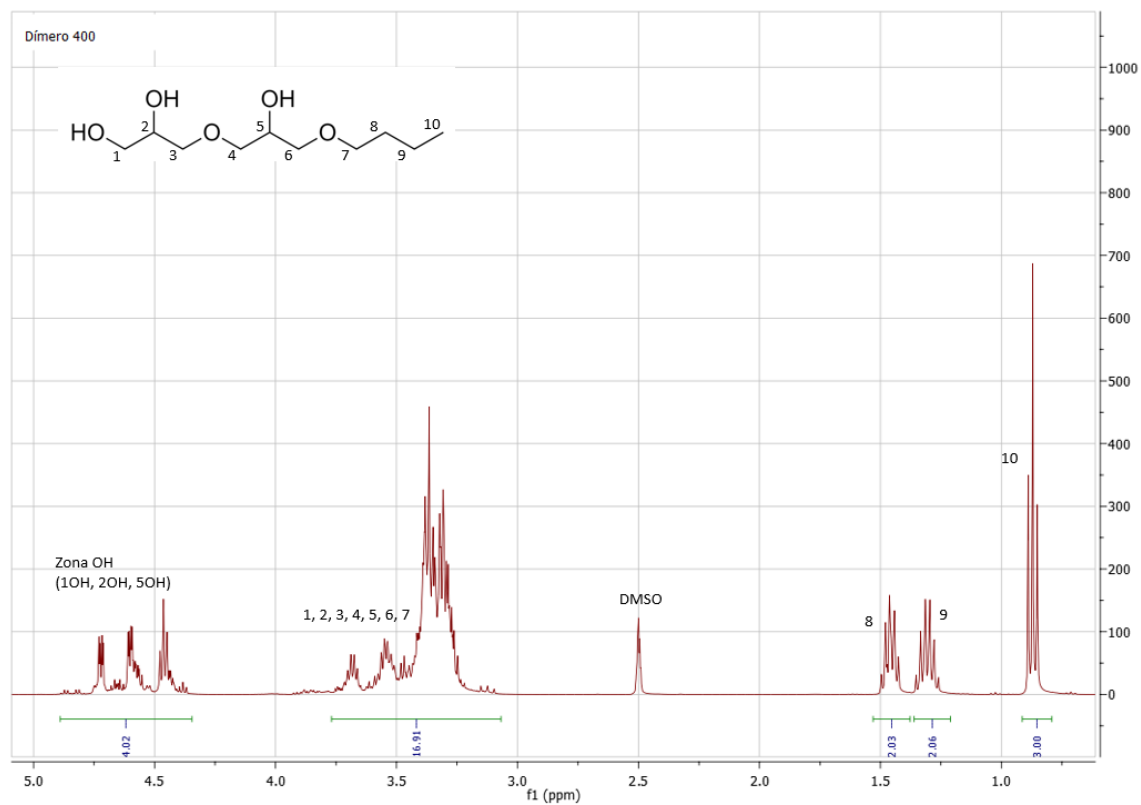


Figura A7: RMN del dímero del monoéter de glicerol 400 (D400).

Anexo VI: RMN's de ácido ferúlico en 100, 200, 3F00, 400

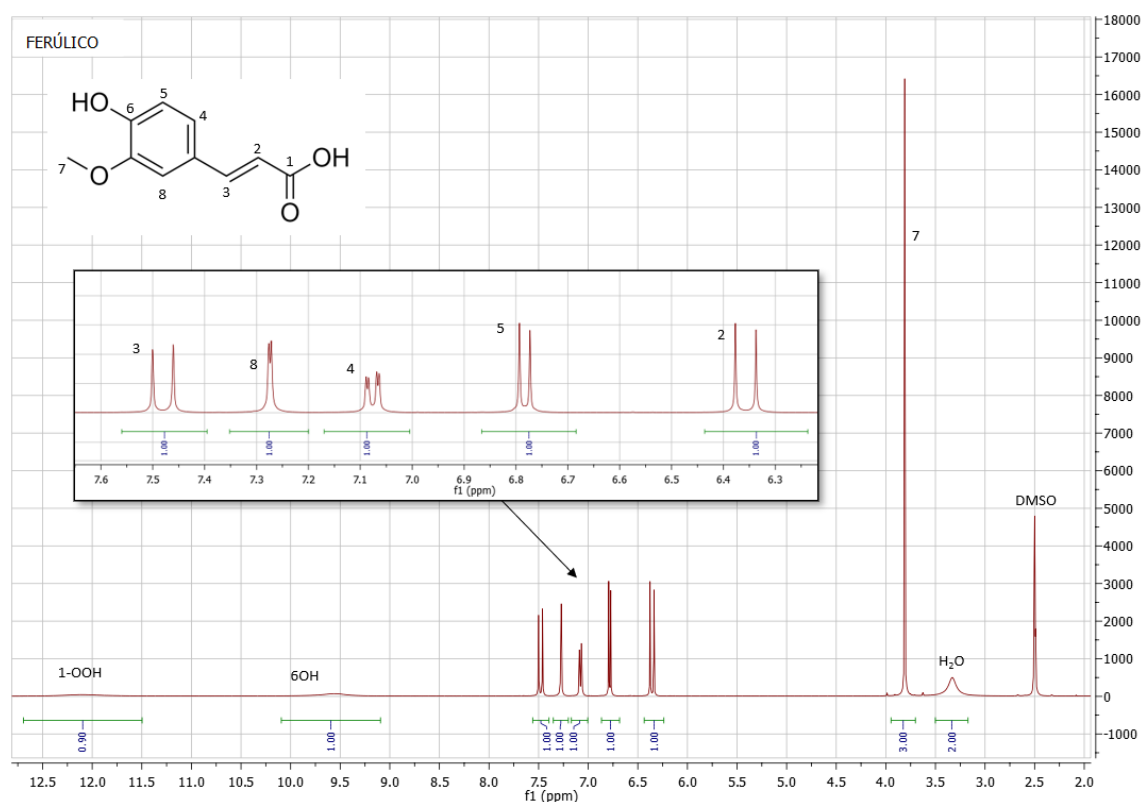


Figura A8: RMN del ácido ferúlico.

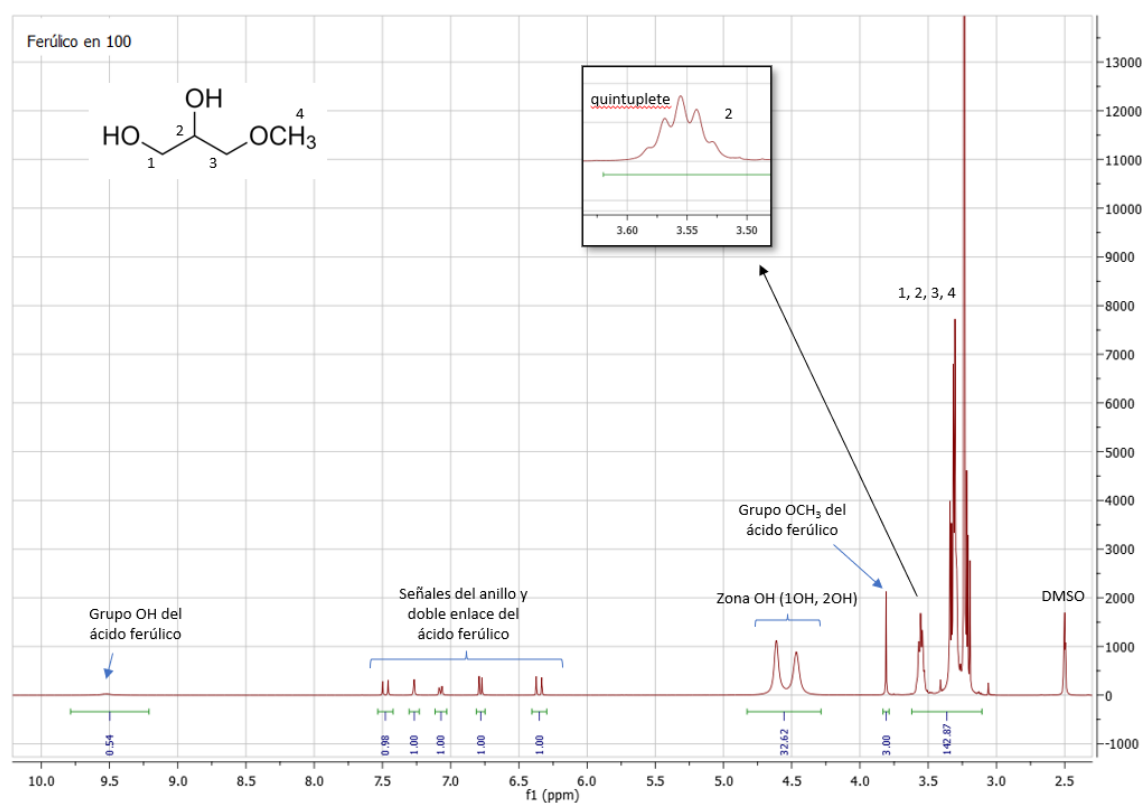


Figura A9: RMN del ácido ferúlico en 100.

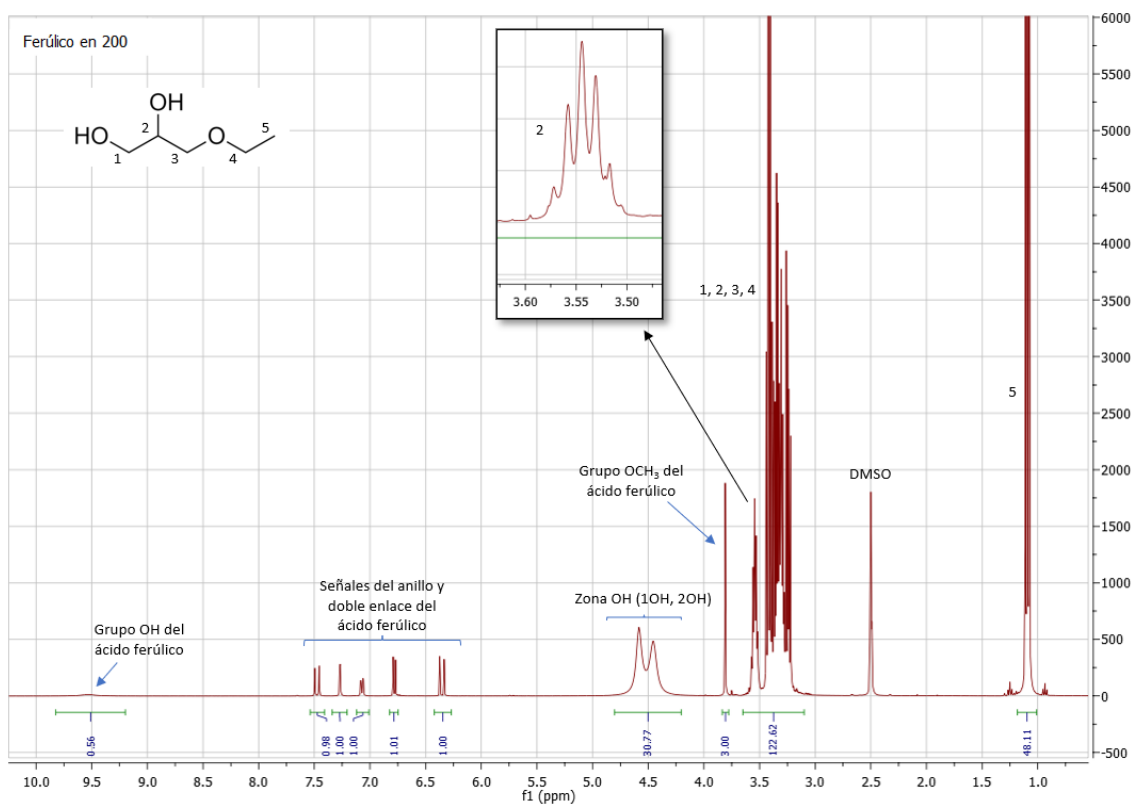


Figura A10: RMN del ácido ferúlico en 200.

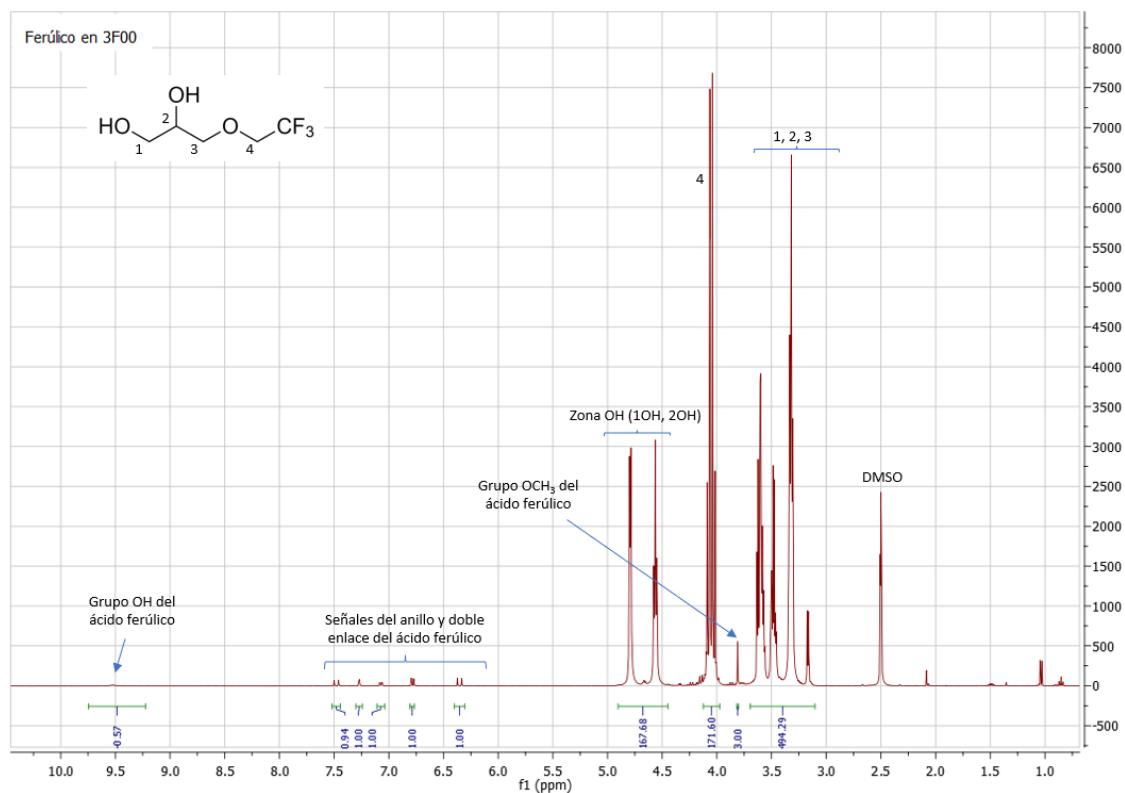


Figura A11: RMN del ácido ferúlico en 3F00.

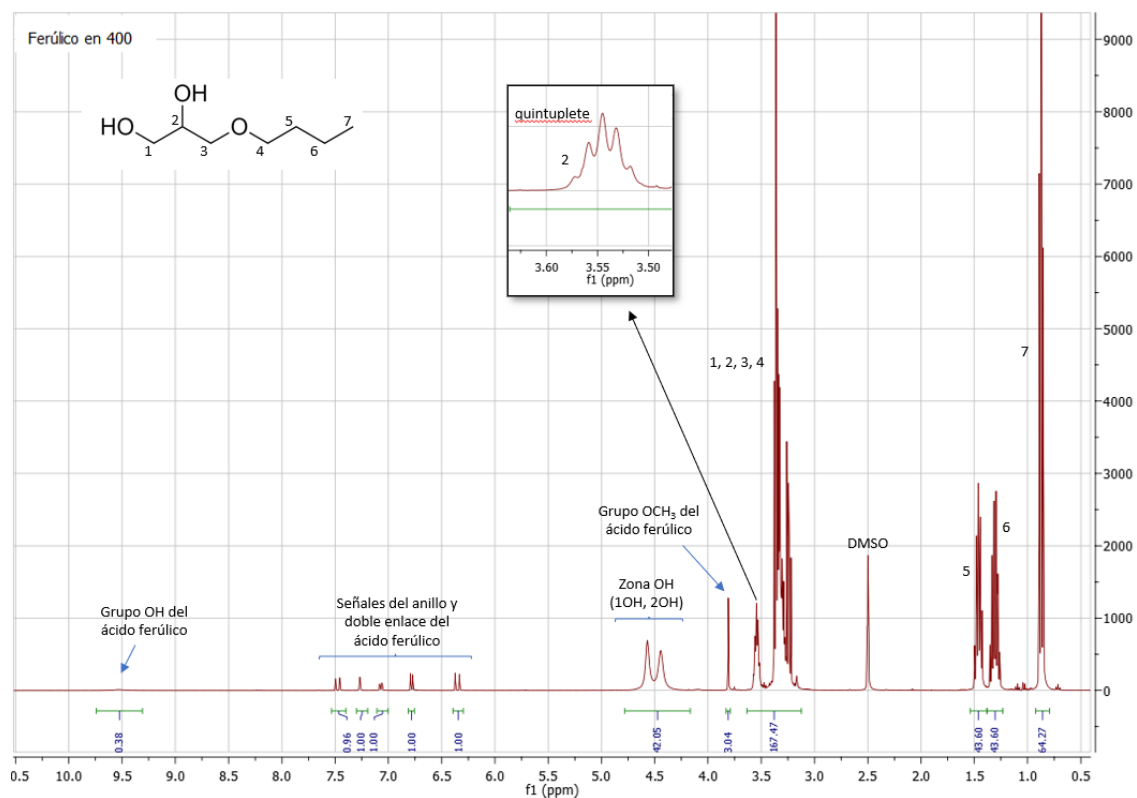


Figura A12: RMN del ácido ferúlico en 400.

Anexo VII: RMN's de ácido cumárico en 100, 200, 3F00, 400

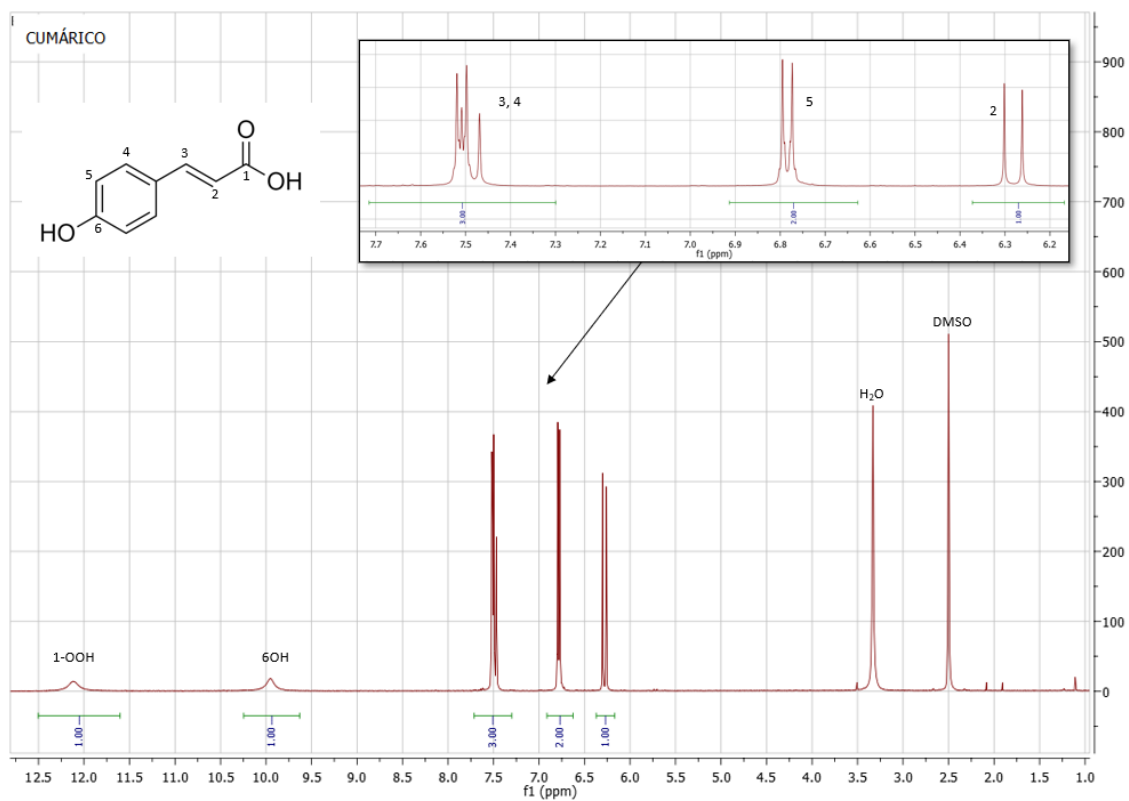


Figura A13: RMN del ácido cumárico.

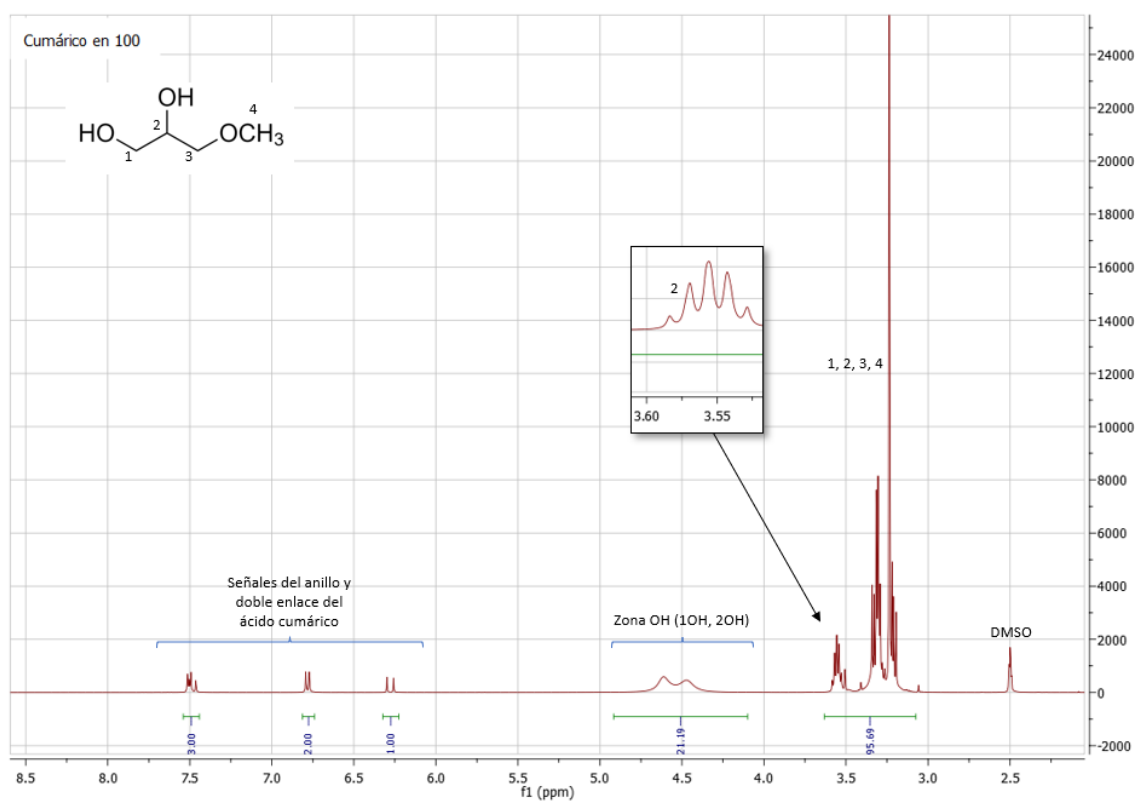


Figura A14: RMN del ácido cumárico en 100.

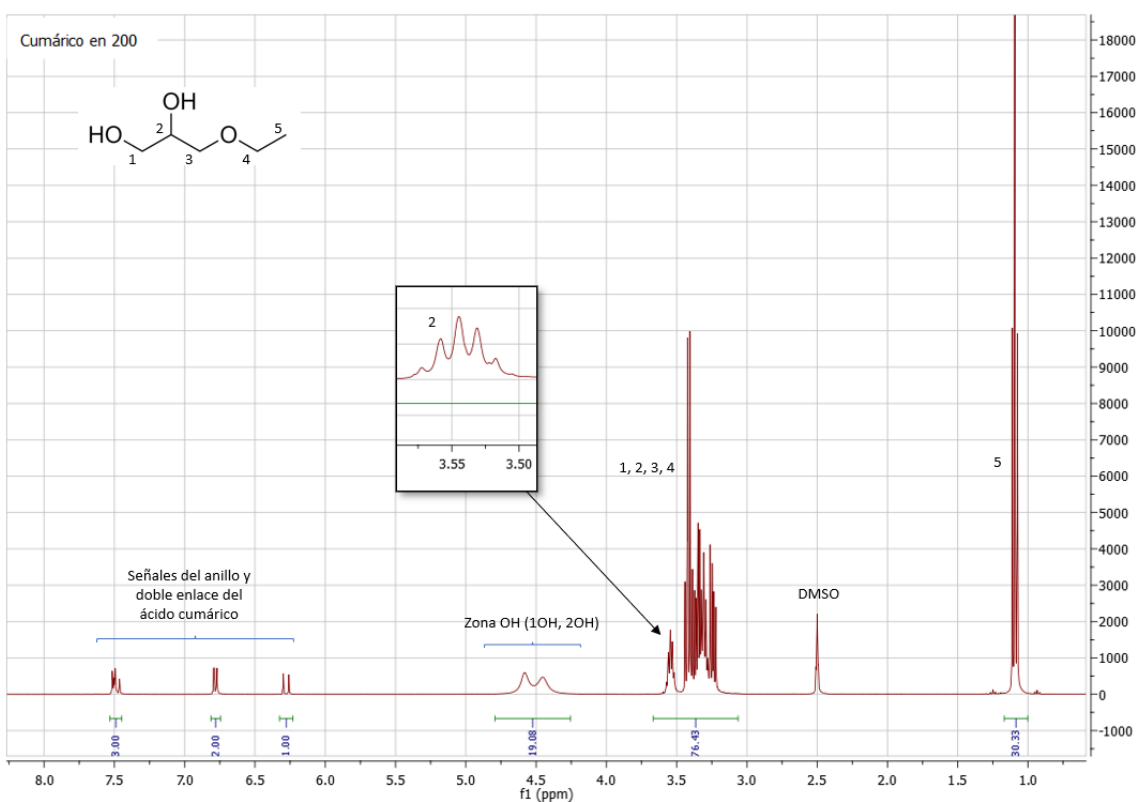


Figura A15: RMN del ácido cumárico en 200.

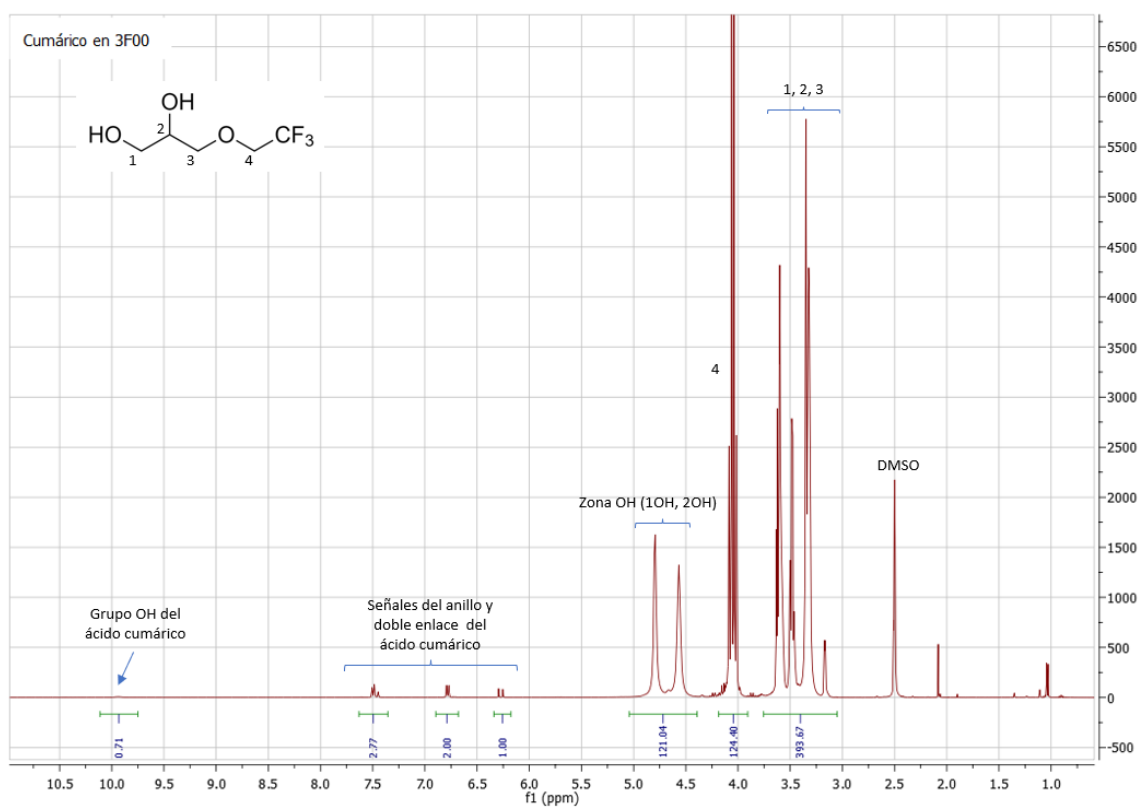


Figura A16: RMN del ácido cumárico en 3F00.

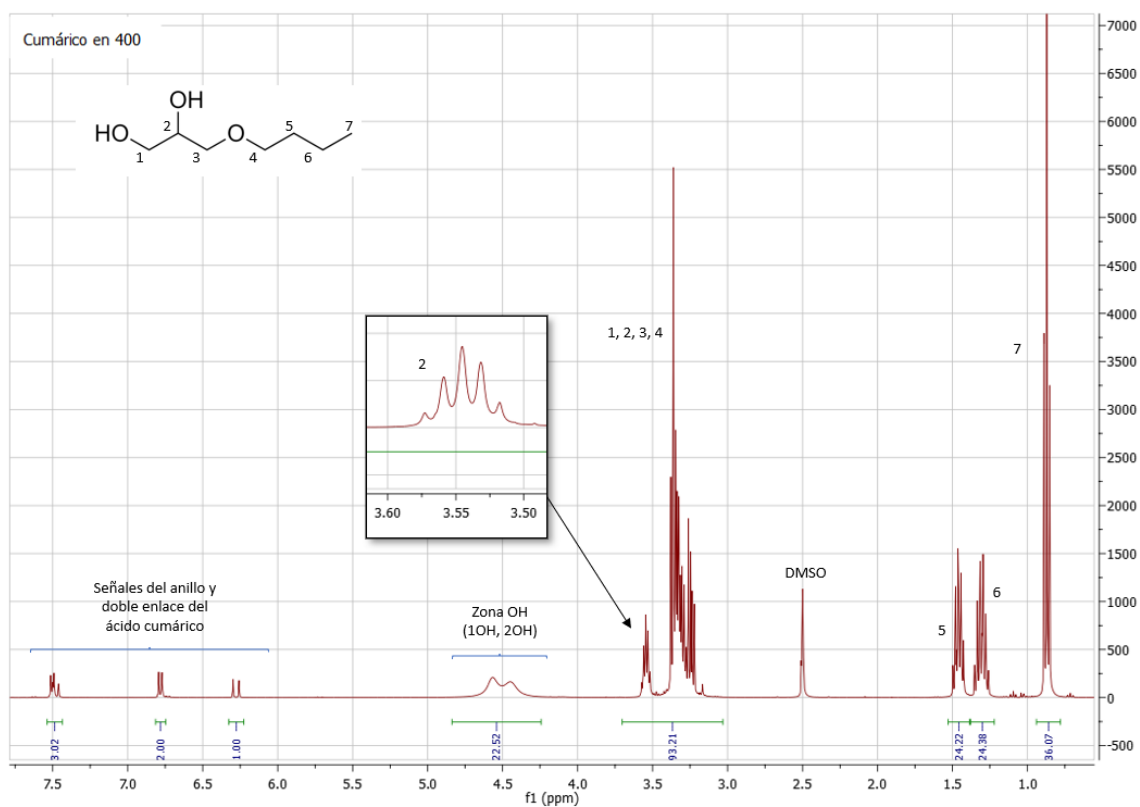


Figura A17: RMN del ácido cumárico en 400.

Anexo VIII: RMN's de ácido cafeico en 100, 200, 3F00, 400

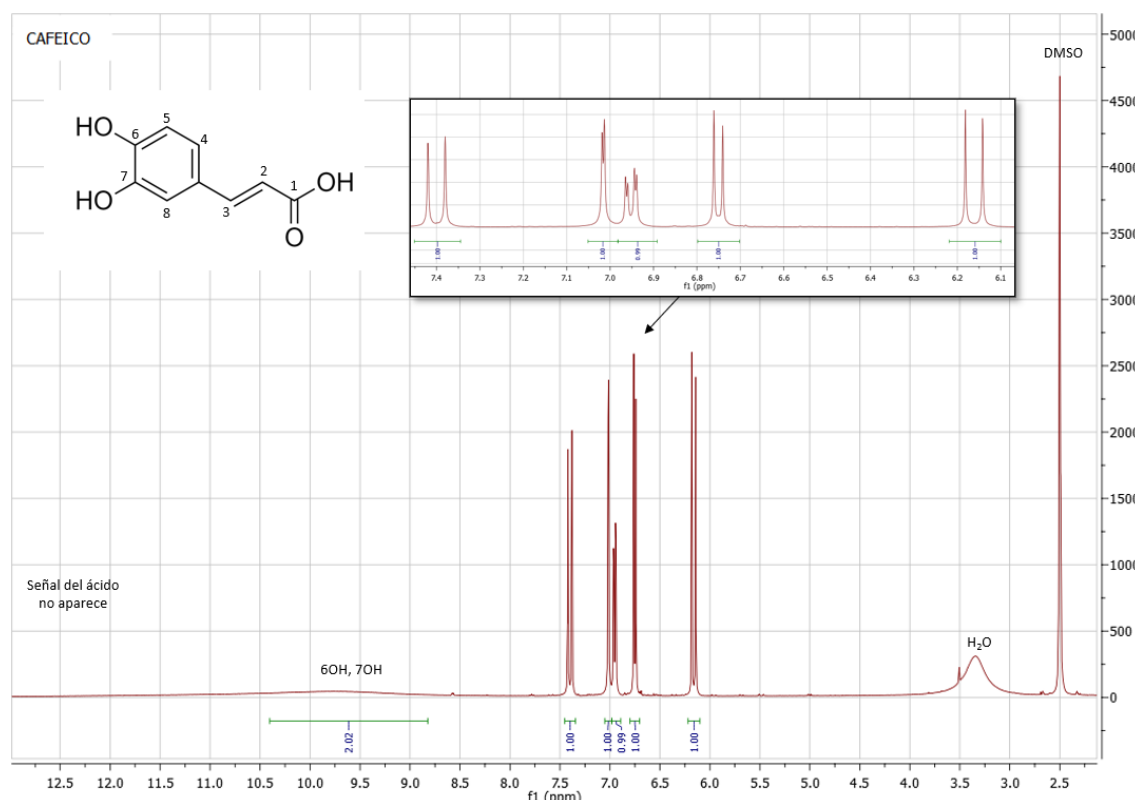


Figura A18: Espectro del ácido cafeico.

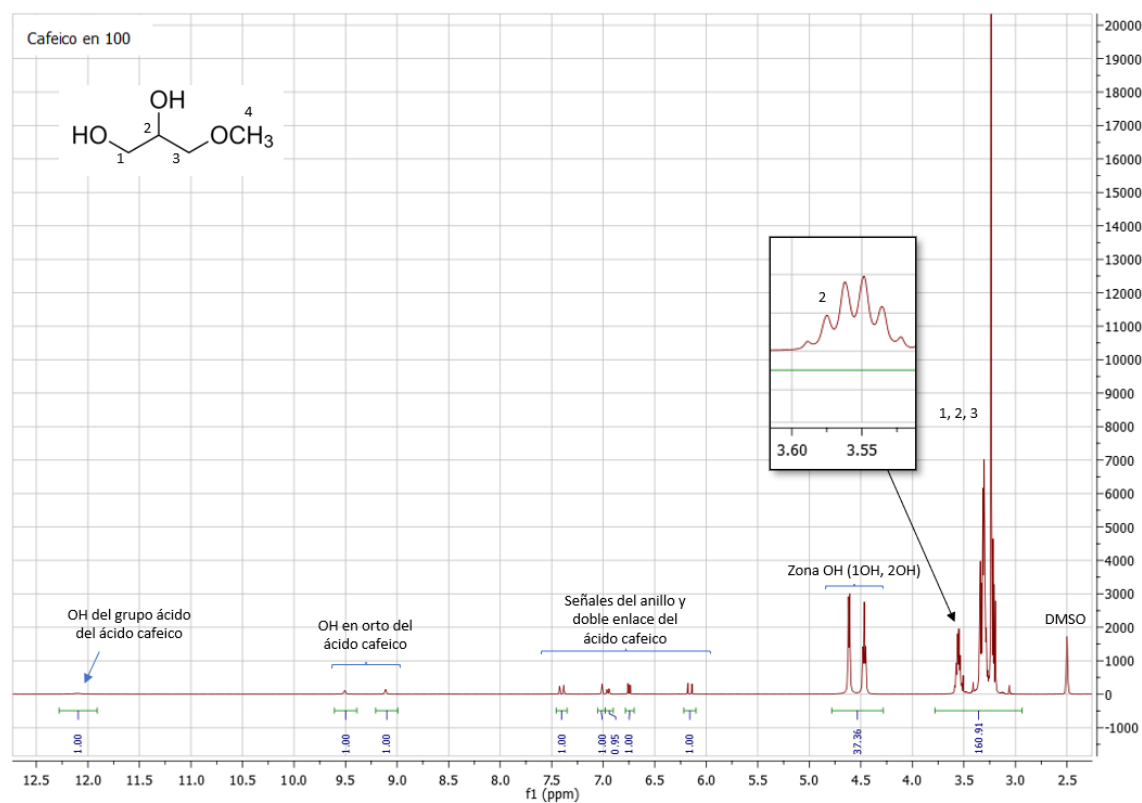


Figura A19: Espectro del ácido cafeico en 100.

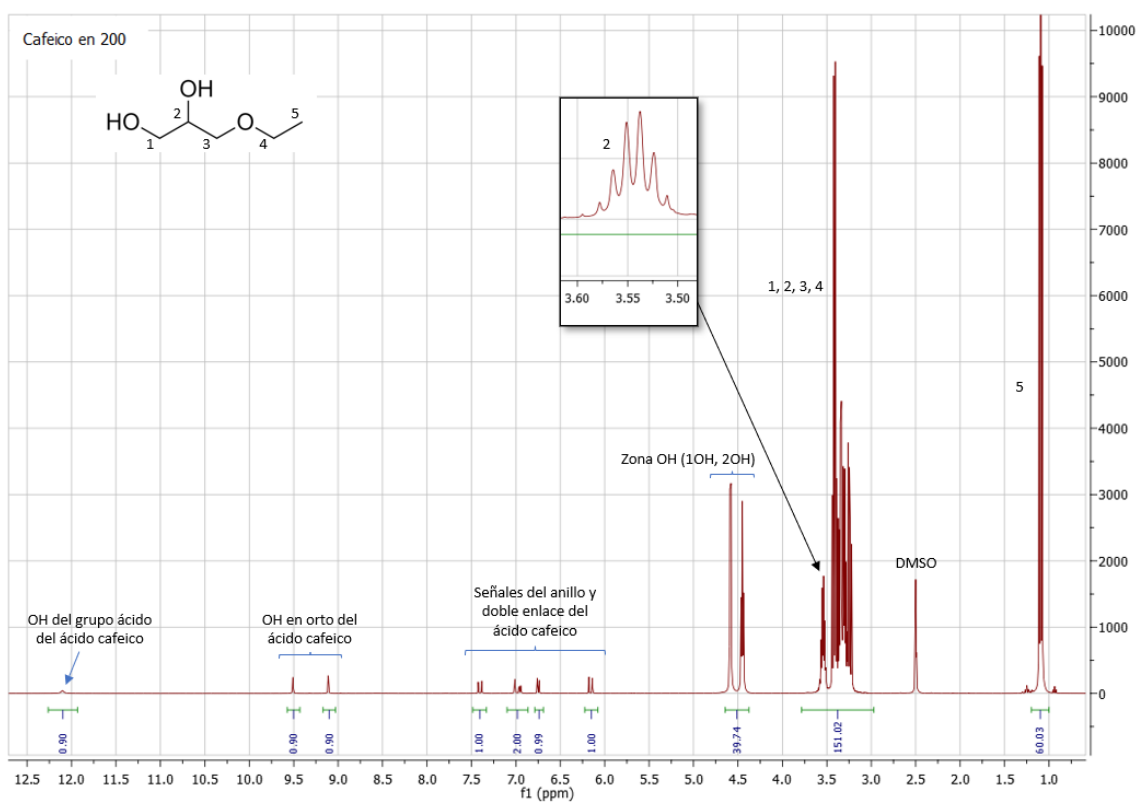


Figura A20: Espectro del ácido cafeico en 200.

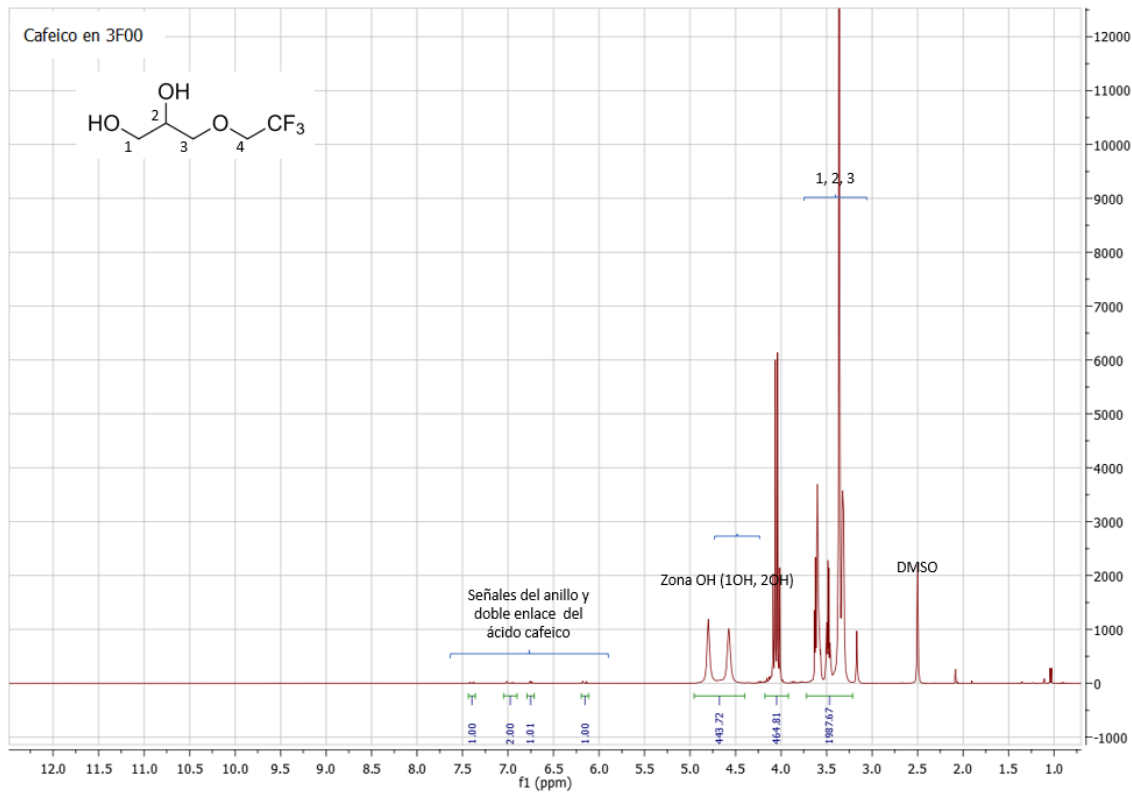


Figura A21: Espectro del ácido cafeico en 3F00.

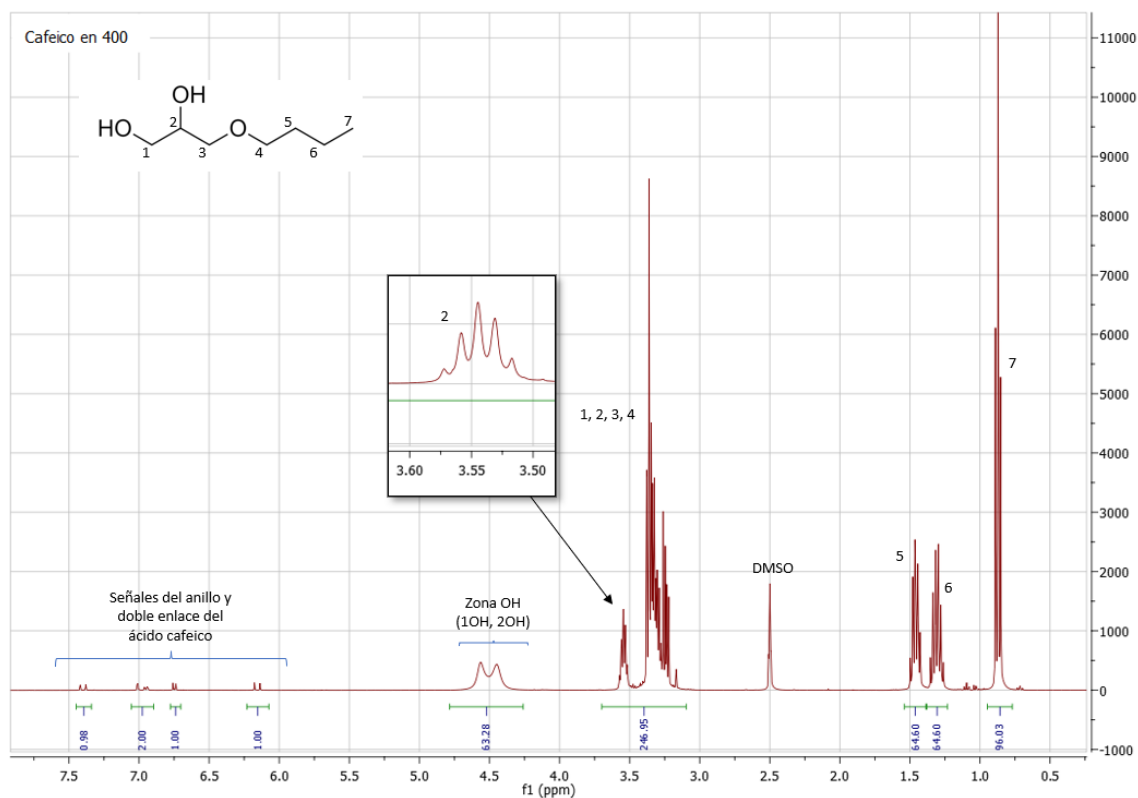


Figura A22: Espectro del ácido cafeico en 400.

Anexo VIII: RMN's de dímeros y etanol (tras tratamiento de muestras)

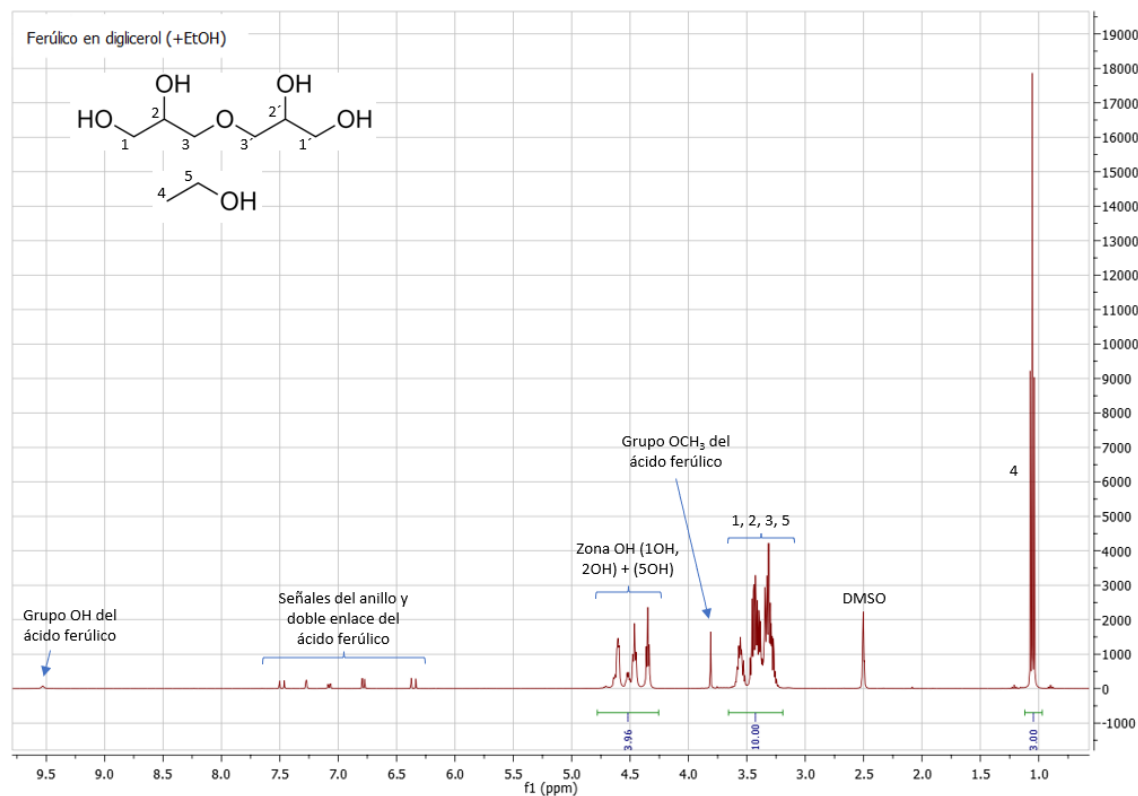


Figura A23: RMN del ácido ferúlico en diglicerol (+etanol).

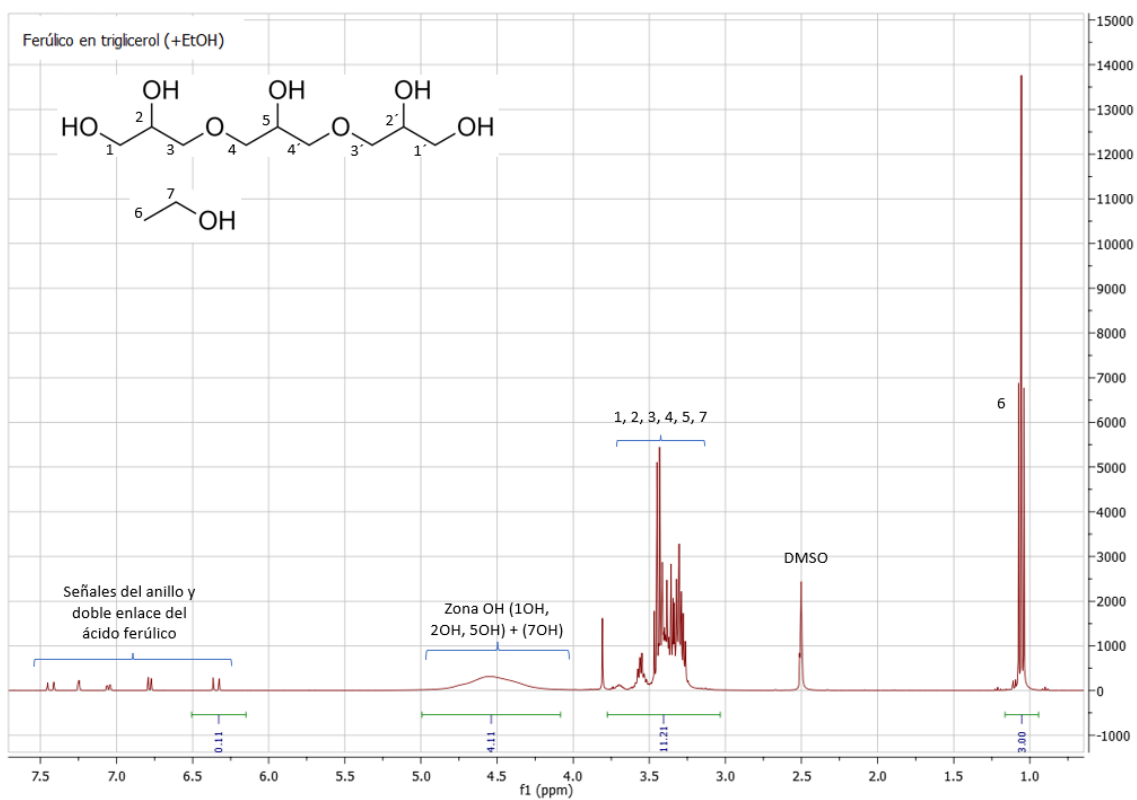


Figura A24: RMN del ácido ferúlico en triglicerol (+etanol).

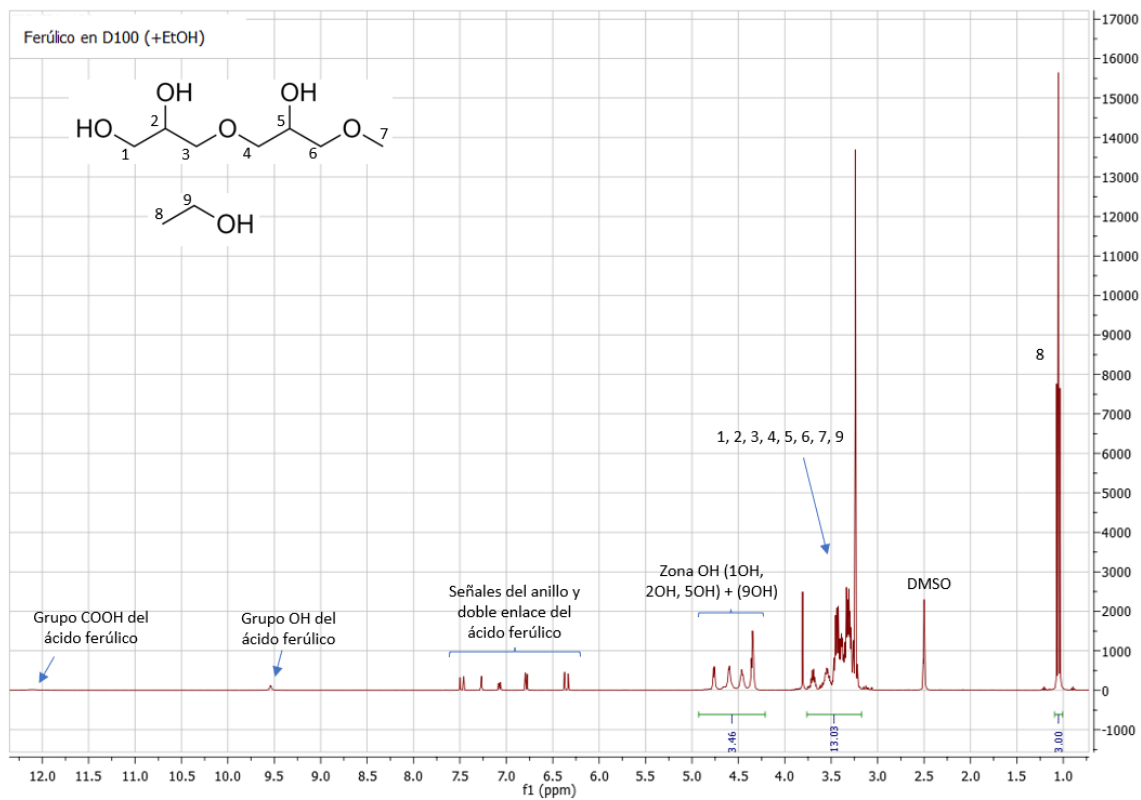


Figura A25: RMN del ácido ferúlico en D100 (+etanol).

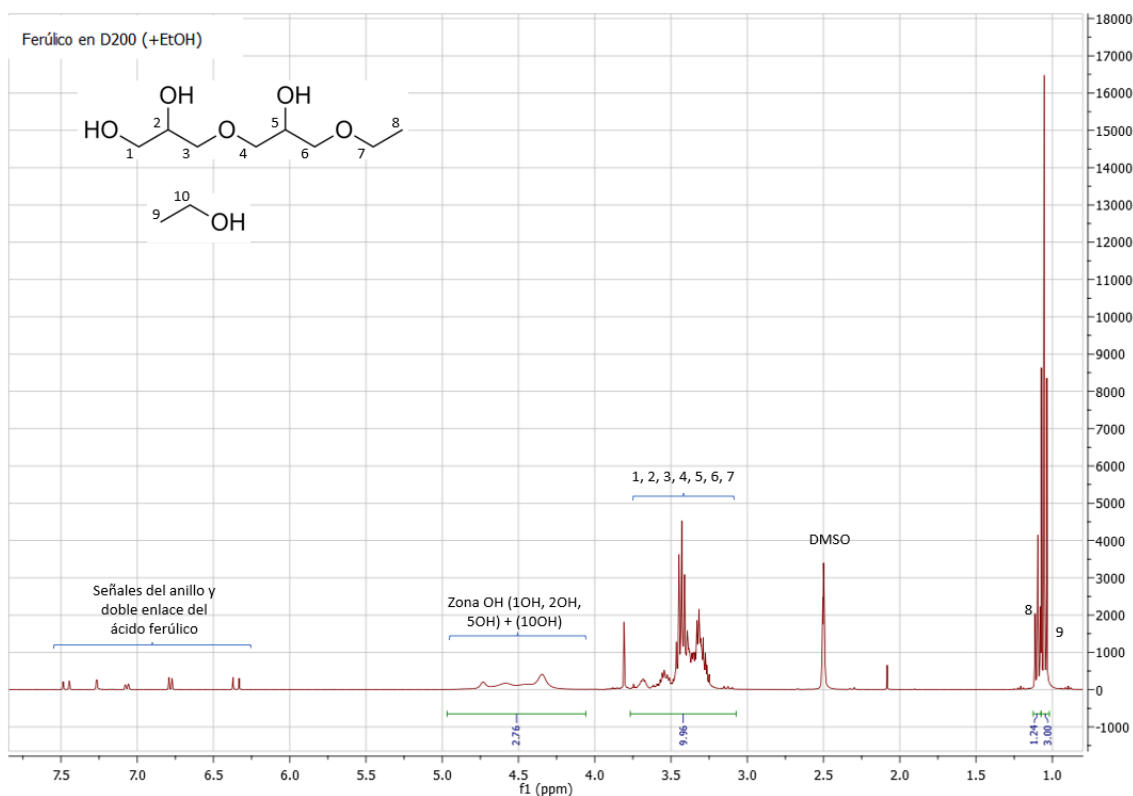


Figura A26: RMN del ácido ferúlico en D200 (+etanol).

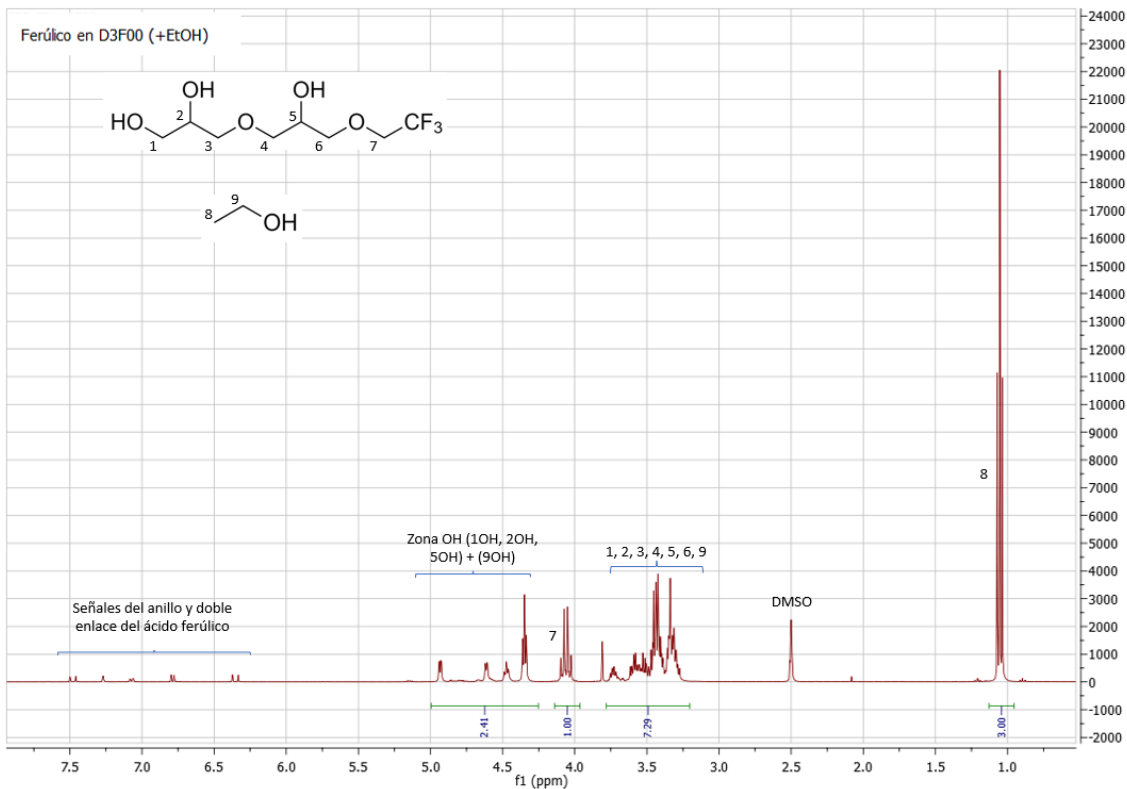


Figura A27: RMN del ácido ferúlico en D3F00 (+etanol).

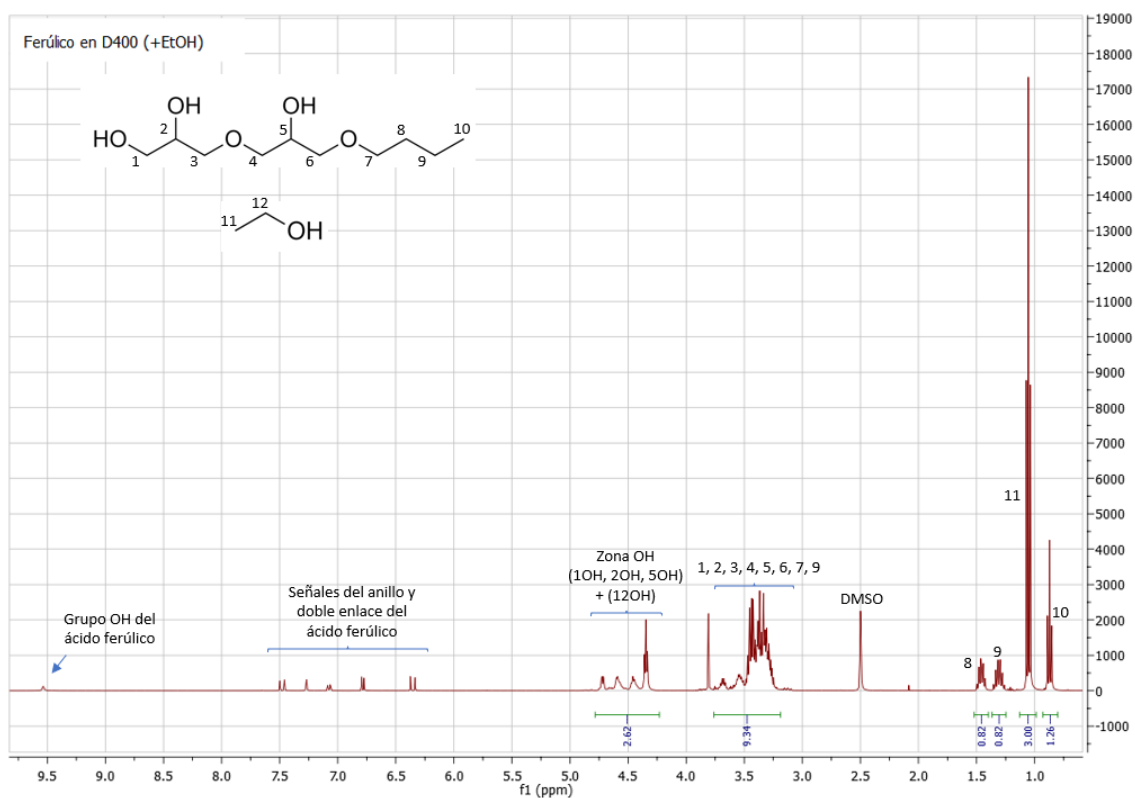


Figura A28: RMN del ácido ferúlico en D400 (+etanol).

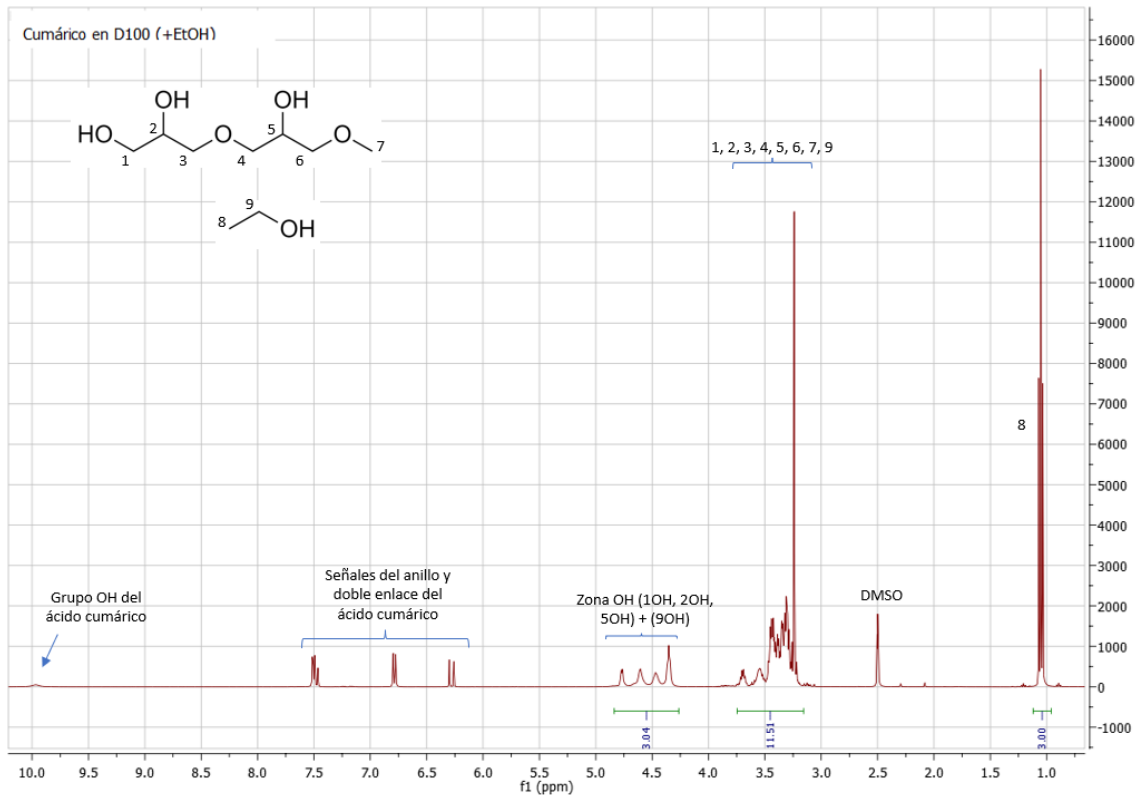


Figura A29: RMN del ácido cumárico en D100 (+etanol).

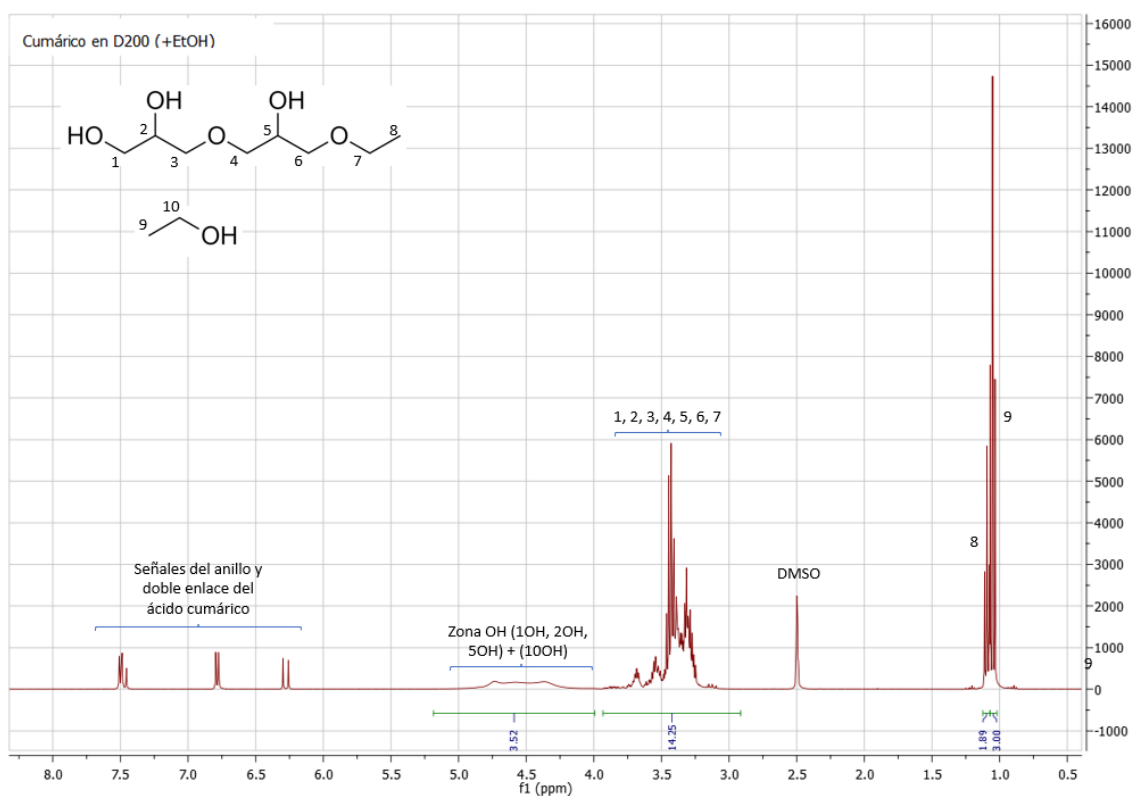


Figura A30: RMN del ácido cumárico en D200 (+etanol).

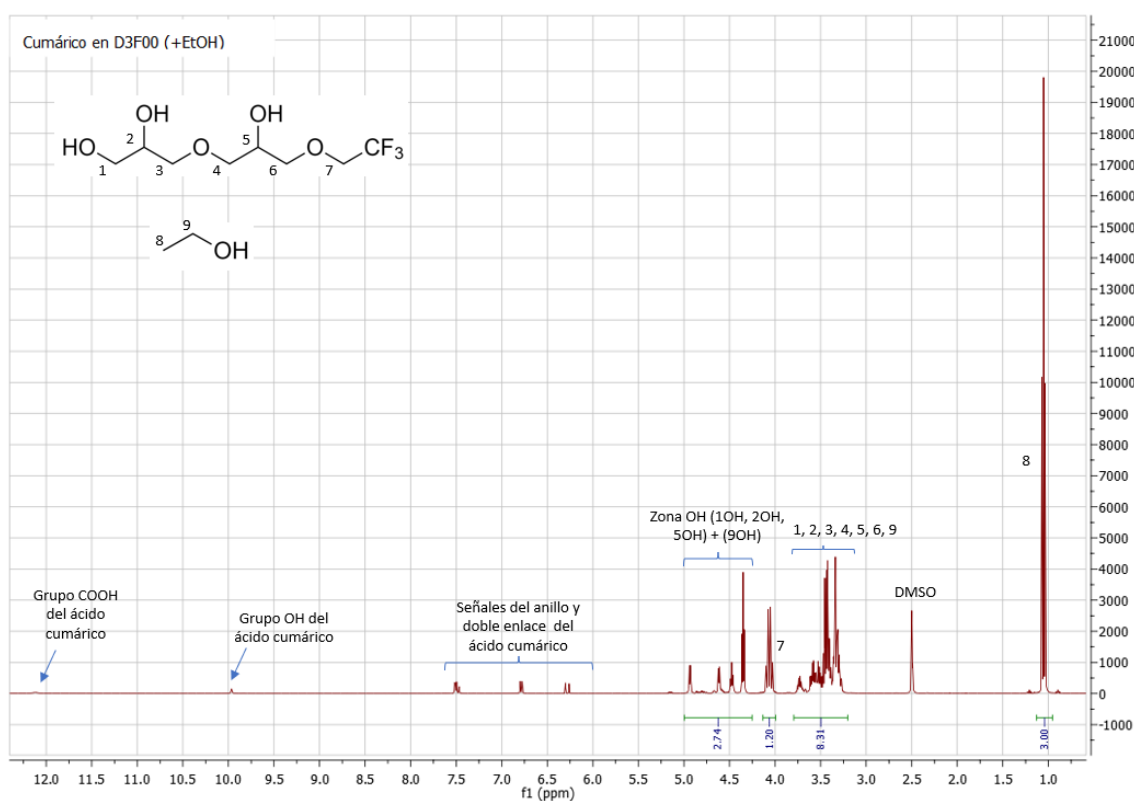


Figura A31: RMN del ácido cumárico en D3F00 (+etanol).

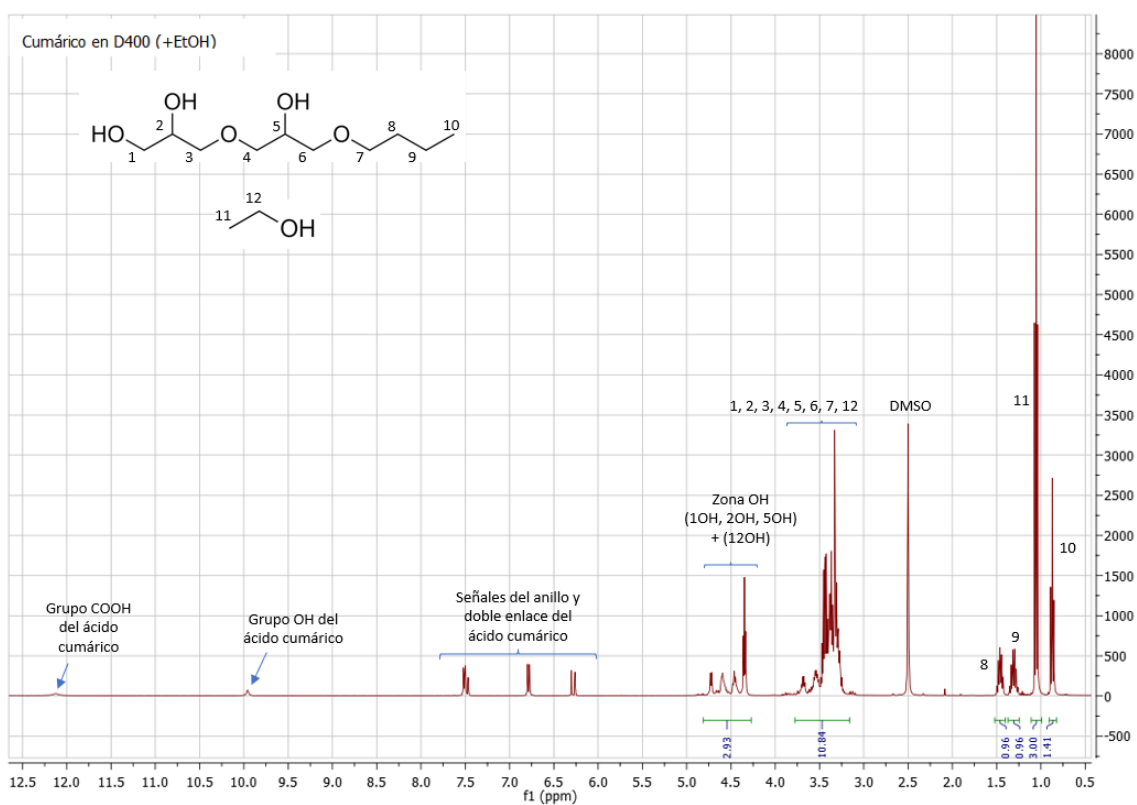


Figura A32: RMN del ácido cumárico en D400 (+etanol).

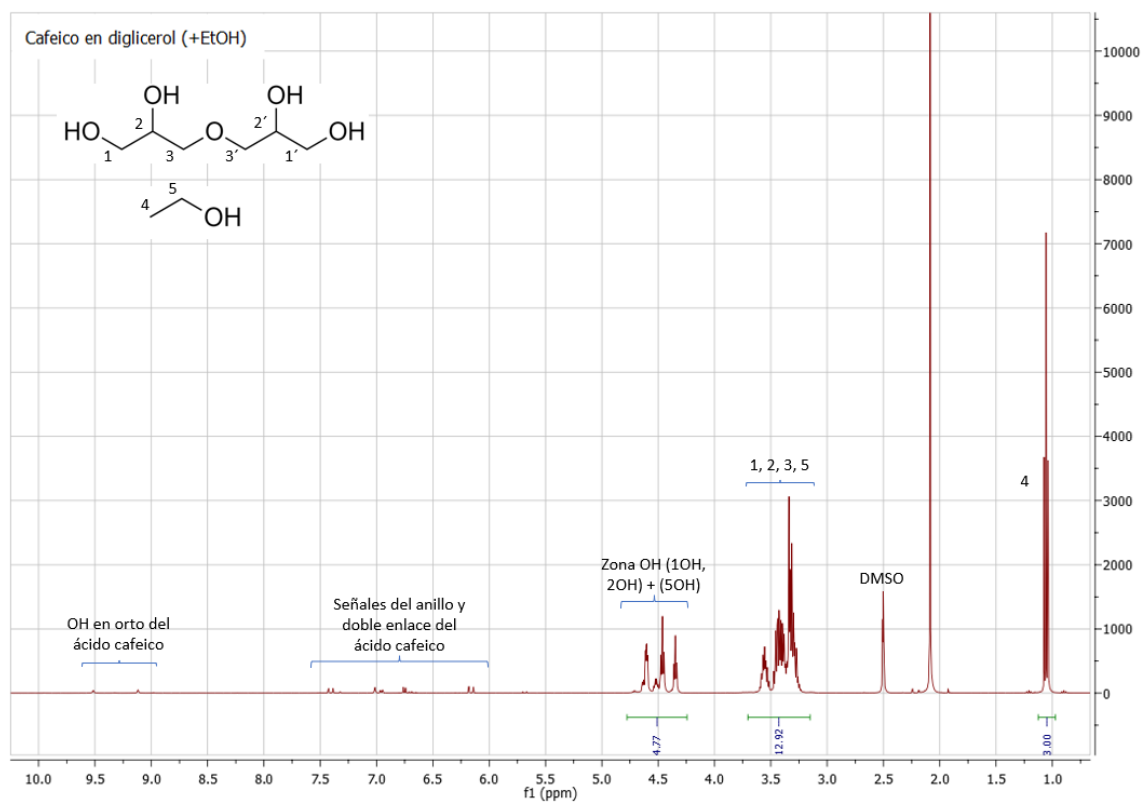


Figura A33: RMN del ácido cafeico en diglicerol (+etanol).

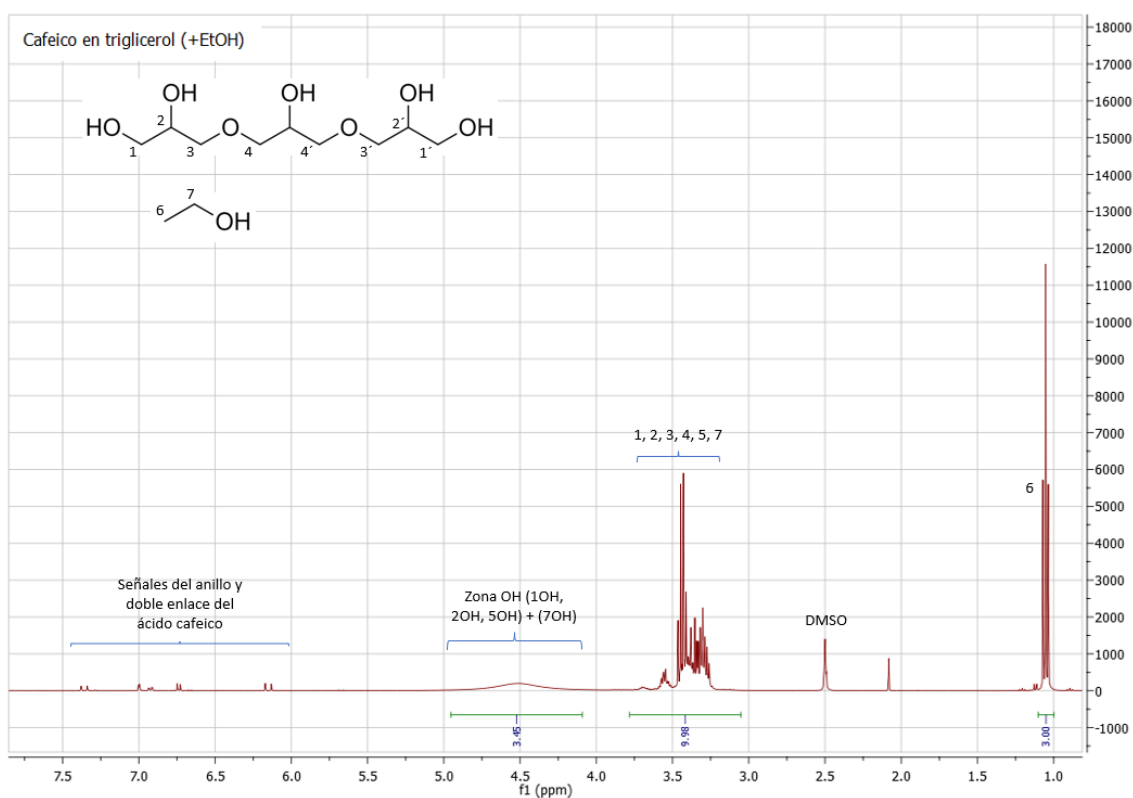


Figura A34: RMN del ácido cafeico en triglicerol (+etanol).

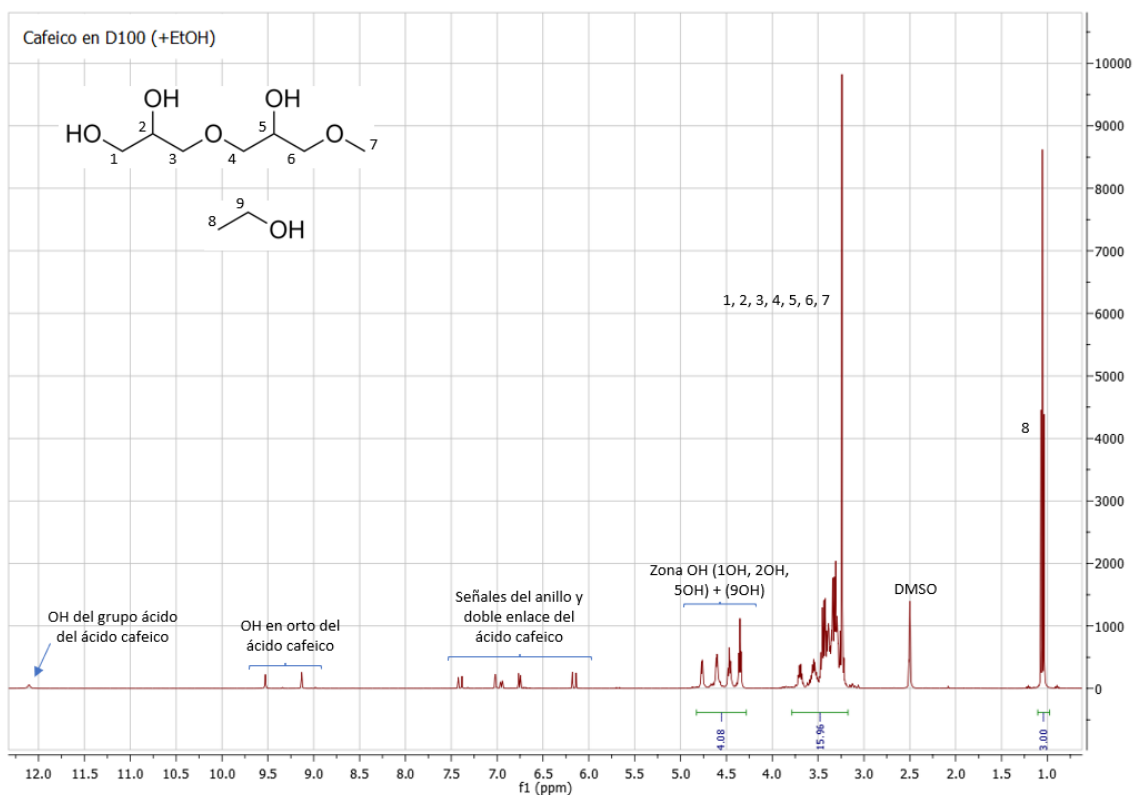


Figura A35: RMN del ácido cafeico en D100 (+etanol).

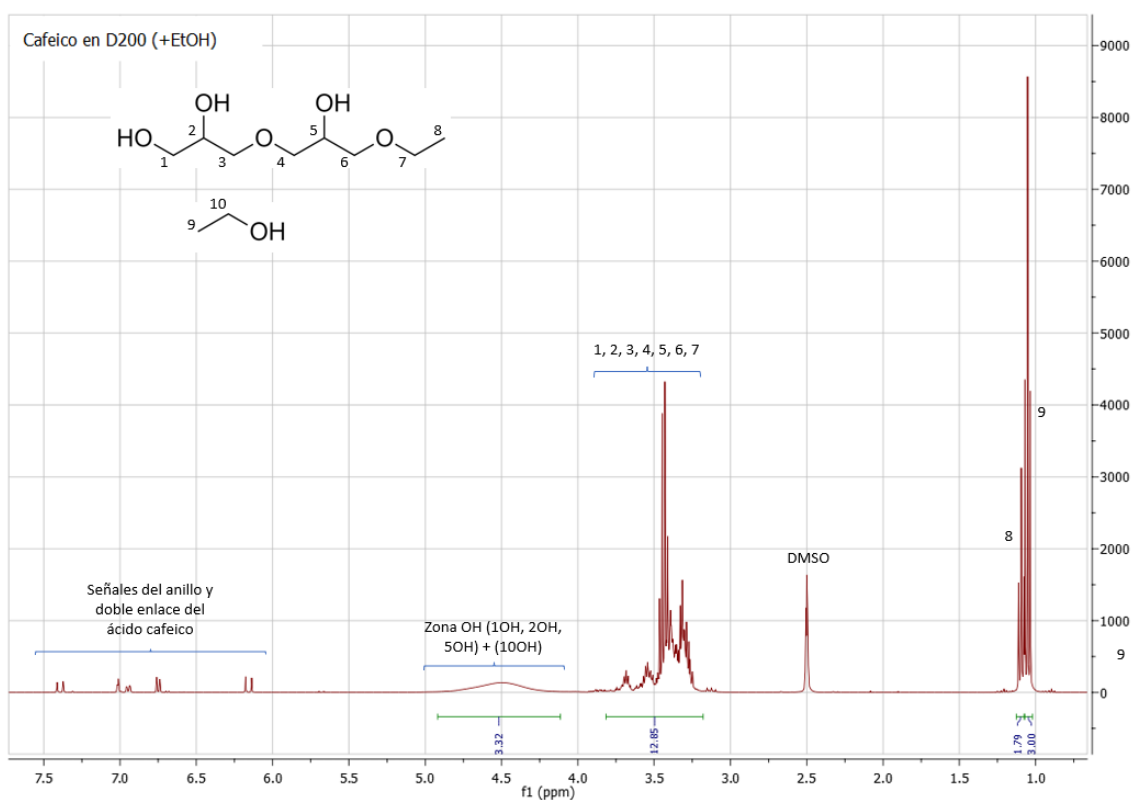


Figura A36: RMN del ácido cafeico en D200 (+etanol).

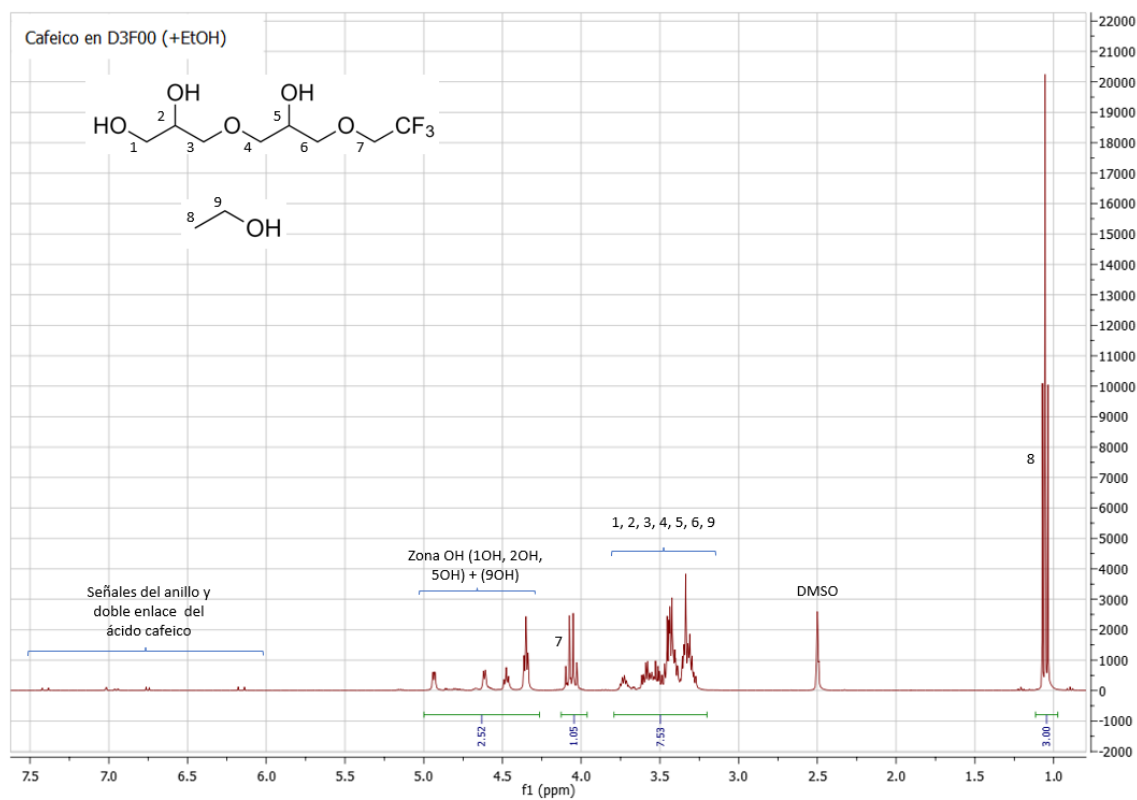


Figura A37: RMN del ácido cafeico en D3F00 (+etanol).

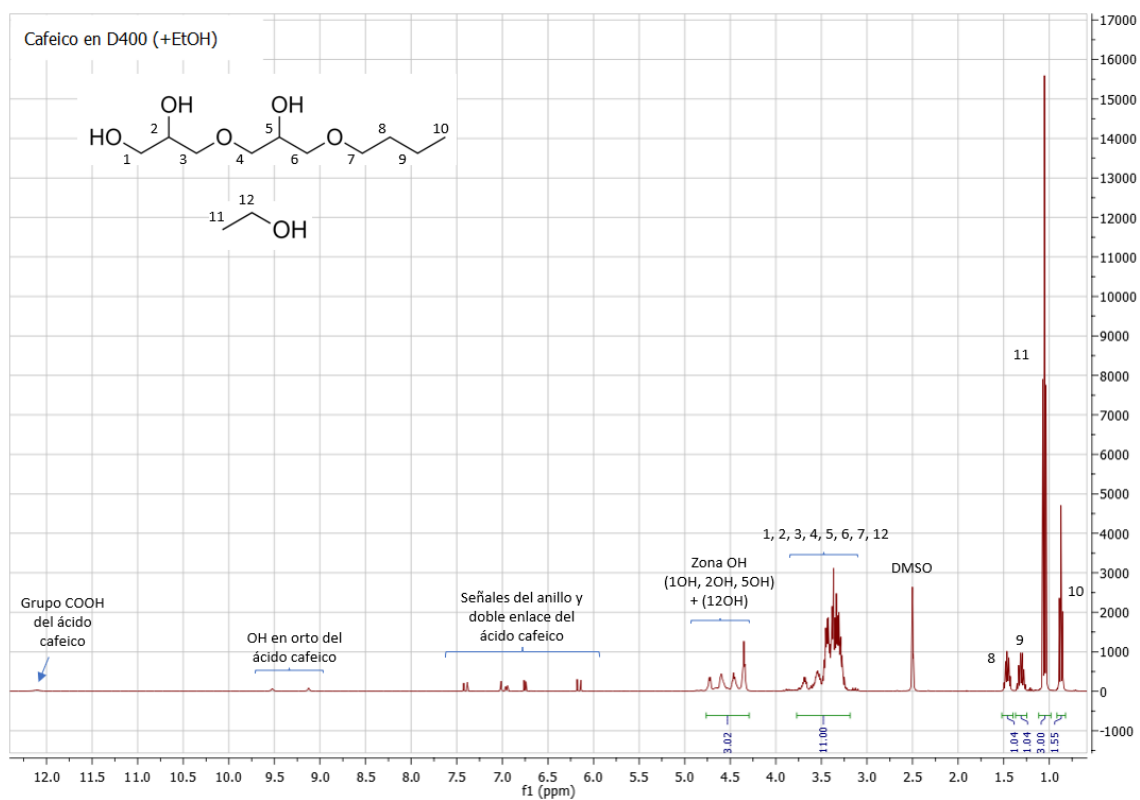


Figura A38: RMN del ácido cafeico en D400 (+etanol).