Lampiran 1. Data berat ekstrak dan rendemen (%)

Sampel	Berat Cawan Kosong (gr)	Berat Cawan + Ekstrak (gr)	Ekstrak (gr)	Rendemen (%)	Rata-Rata Rendemen
D_0B_0	28,1036	31,1778	3,0741	6,1482	6,1482 ± 0.00000
D_0B_1	98,4213	100,7374	2,3161	4,6322	6,6138 ± 2.80240
	132,2726	136,5703	4,2977	8,5954	
D_0B_2	132,1096	136,2186	4,1091	8,2182	7,2553 ± 1.36174
	137,6089	140,7551	3,1462	6,2924	
D_0B_3	28,1493	31,5041	3,3548	6,7096	8,5431 ± 2.59296
	177,4841	182,6723	5,1883	10,3766	
D_1B_0	30,0718	32,7194	2,6476	5,2952	5,2952 ± 0.00000
D_1B_1	132,1404	134,7680	2,6277	5,2554	5,3298 ± 0.10521
	132,1053	134,8074	2,7021	5,4042	
D_1B_2	125,8041	129,3799	3,5758	7,1516	5,8511 ± 1.83918
	98,3389	100,6142	2,2753	4,5506	
D_1B_3	31,0709	34,6590	3,5881	7,1762	5,8572 ± 1.86539
	137,5784	139,8475	2,2691	4,5382	
D_2B_0	28,1036	30,0877	1,9841	3,9682	3,9682 ± 0.00000
D_2B_1	132,1404	134,0995	1,9591	3,9182	4,5396 ± 0.87879
	132,1225	134,7030	2,5805	5,1610	
D_2B_2	98,3262	100,6141	2,2879	4,5758	4,8959 ± 0.45268
	125,8794	128,4874	2,6080	5,2160	
D_2B_3	31,0709	33,9132	2,8423	5,6846	5,2284 ± 0.64516
	137,5739	139,9600	2,3861	4,7722	
D_3B_0	31,0570	32,3627	1,3057	2,6114	2,6114 ± 0.00000
D_3B_1	132,1400	133,4612	1,3212	2,6424	3,1990 ± 0.78715
	132,1763	134,0541	1,8778	3,7556	
D_3B_2	98,4055	100,1888	1,7833	3,5666	3,5828 ± 0.02291
	125,8041	127,6016	1,7959	3,5990	
D_3B_3	28,1219	29,9583	1,8364	3,6728	4,3990 ± 1.02728
	137,5972	140,1600	2,5628	5,1256	

Lampiran 2. Data Absorbansi dan Inhibisi (%) aktivitas antioksidan

Sampel	Konsentrasi (ppm)	Absorbansi		% inhibisi	
		I	II	I	II
D_0B_0	Kontrol	0,680		-	
	20	0,353		48,08823	
	40	0,308		54,70588	
	80	0,296		56,47058	
	160	0,239		64,85294	
	320	0,135		80,14705	
D_0B_1	Kontrol	0,666	0,593	-	-
	20	0,349	0,335	47,59700	43,50759
	40	0,328	0,293	50,75000	50,59022
	80	0,264	0,26	60,36000	61,21417
	160	0,228	0,218	65,76500	63,23770
	320	0,219	0,150	77,57848	65,43002
D_0B_2	Kontrol	0,689	0,670	-	-
	20	0,377	0,375	45,28301	44,02985
	40	0,340	0,327	50,65312	51,19403
	80	0,274	0,259	60,23222	61,34328
	160	0,245	0,242	64,44122	63,88060
	320	0,216	0,217	68,65022	67,61194
D_0B_3	Kontrol	0,628	0,675	-	-
	20	0,361	0,344	42,51592	49,03770
	40	0,345	0,316	45,06369	53,18550
	80	0,297	0,284	52,70701	57,92500
	160	0,247	0,220	60,66879	67,11110
	320	0,112	0,148	82,16561	78,07440
D_1B_0	Kontrol	0,704		-	
	20	0,361		48,72159	
	40	0,345		50,99431	

	80	0,297		57,81250	
	160	0,247		64,91477	
	320	0,112		84,09999	
D_1B_1	Kontrol	0,819	0,609	-	-
	20	0,443	0,333	45,90965	45,3202
	40	0,432	0,302	47,25274	50,4105
	80	0,330	0,261	59,70695	57,1428
	160	0,301	0,224	63,24786	63,2183
	320	0,278	0,207	66,05616	66,0098
D_1B_2	Kontrol	0,738	0,598	-	-
	20	0,387	0,314	47,56097	47,49164
	40	0,361	0,285	51,08401	52,34114
	80	0,293	0,268	60,29810	55,18395
	160	0,257	0,223	65,17615	62,70900
	320	0,127	0,170	82,79132	70,90301
D_1B_3	Kontrol	0,686	0,695	-	-
	20	0,385	0,388	42,36527	41,12291
	40	0,345	0,312	48,35329	52,65554
	80	0,241	0,262	63,92216	60,24279
	160	0,223	0,231	66,61677	64,94689
	320	0,213	0,222	68,11377	66,31259
D_2B_0	Kontrol	0,789		-	
	20	0,389		43,54136	
	40	0,378		45,13788	
	80	0,288		58,20029	
	160	0,258		62,55443	
	320	0,236		65,74746	
D_2B_1	Kontrol	0,759	0,651	-	-
	20	0,414	0,346	45,45454	46,85100
	40	0,376	0,316	50,46113	51,45929
	80	0,338	0,284	55,46772	56,37481

	160	0,306	0,244	59,68379	62,51920
	320	0,215	0,148	71,67325	77,26575
D_2B_2	Kontrol	0,654	0,574	-	-
	20	0,340	0,321	48,01223	44,07666
	40	0,326	0,28	50,15291	48,95470
	80	0,304	0,256	53,51682	61,49826
	160	0,247	0,212	62,23240	63,06620
	320	0,210	0,169	67,88990	70,55749
D_2B_3	Kontrol	0,822	0,818	-	-
	20	0,420	0,452	48,9051	44,74328
	40	0,400	0,422	51,33819	48,41076
	80	0,368	0,315	55,23114	61,49144
	160	0,291	0,270	64,59854	66,99267
	320	0,153	0,204	81,38686	75,06112
D_3B_0	Kontrol	0,664		-	
	20	0,371		44,12651	
	40	0,350		47,28916	
	80	0,328		50,60241	
	160	0,275		58,58434	
	320	0,204		69,27711	
D_3B_1	Kontrol	0,583	0,788	-	-
	20	0,359	0,495	38,42196	37,18274
	40	0,315	0,397	45,96913	49,61929
	80	0,258	0,358	55,74614	54,56853
	160	0,206	0,275	64,66552	65,10152
	320	0,176	0,204	69,81132	74,11168
D_3B_2	Kontrol	0,620	0,670	-	-
	20	0,350	0,371	43,54838	44,62687
	40	0,323	0,353	47,90322	47,31343
	80	0,285	0,319	54,03225	52,38806
	160	0,253	0,260	59,19354	61,19403

	320	0,230	0,206	62,90322	69,25373
D_3B_3	Kontrol	0,640	0,608	-	-
	20	0,375	0,341	41,40625	43,91447
	40	0,314	0,333	50,93750	45,23026
	80	0,298	0,255	53,43750	58,05921
	160	0,255	0,219	60,15625	63,98026
	320	0,204	0,122	68,12500	79,93421

Lampiran 3. Data IC_{50}

Sampel	Replikasi	Persamaan	Nilai IC_{50}	Rata-Rata	Kategori
D_0B_0	-	y = 0,1002x + 48,431	15,65868	15,65868 ± 0,00000^{abc}	Sangat Kuat
D_0B_1	1	y = 0,0958x + 48,527	15,37557	14,02395 ± 1,91176^{bc}	Sangat Kuat
	2	y = 0,061x + 49,227	12,67213		Sangat Kuat
D_0B_2	1	y = 0,0699x + 49,184	11,67382	10,81445 ± 1,21532^{ab}	Sangat Kuat
	2	y = 0,0668x + 49,335	9,95509		Sangat Kuat
D_0B_3	1	y = 0,1304x + 40,452	8,44657	7,43779 ± 1,42640^{a}	Sangat Kuat
	2	y = 0,0941x + 49,395	6,42933		Sangat Kuat
D_1B_0	-	y = 0,1164x + 46,879	26,81271	26,81271 ± 0,00000^{fg}	Sangat Kuat
D_1B_1	1	y = 0,0647x + 48,408	24,60587	23,38230 ± 1,73038^{efg}	Sangat Kuat
	2	y = 0,063x + 48,604	22,15873		Sangat Kuat
D_1B_2	1	y = 0,1123x + 47,459	22,62689	20,94081 ± 2,38447^{def}	Sangat Kuat
	2	y = 0,0738x + 48,579	19,25474		Sangat Kuat
D_1B_3	1	y = 0,0751x + 48,565	19,10786	18,86633 ± 0,34156^{cde}	Sangat Kuat
	2	y = 0,0669x + 48,754	18,62481		Sangat Kuat

D_2B_0	-	y = 0,0715x +46,166	53,62237	53,62237 ± 0,00000[i]	Kuat
D_2B_1	1	y = 0,0805x + 46,569	42,62112	37,02856 ± 7,90907[h]	Sangat Kuat
	2	y = 0,0961x + 46,979	31,43600		Sangat Kuat
D_2B_2	1	y = 0,067x + 48,057	29,07463	28,20018 ± 1,23665[g]	Sangat Kuat
	2	y = 0,0789x + 47,844	27,32573		Sangat Kuat
D_2B_3	1	y = 0,1083x + 46,857	29,02124	27,73946 ± 1,81271[g]	Sangat Kuat
	2	y = 0,0957x + 47,468	26,45768		Sangat Kuat
D_3B_0	-	y = 0,0823x + 43,769	75,71084	75,71084 ± 0,00000k	Kuat
D_3B_1	1	y = 0,0958x + 43,046	72,58872	69,99463 ± 3,66859[k]	Kuat
	2	y = 0,1081x + 42,714	67,40055		Kuat
D_3B_2	1	y = 0,0593x + 46,163	64,70489	63,98234 ± 1,02183[j]	Kuat
	2	y = 0,0816x + 44,838	63,25980		Kuat
D_3B_3	1	y = 0,077x + 45,267	61,46753	58,02261 ± 4,87184[i]	Kuat
	2	y = 0,1184x + 43,538	54,57770		Kuat

Keterangan: notasi huruf a, b, c,…k didapatkan dari tabel uji lanjut (Duncan)

Lampiran 4. Data pengukuran pH

Sampel	Replikasi		Rata-Rata
	I	II	
D_0B_0	3,70		3,70 $\pm$0.00000^{j}
D_0B_1	3,00	3,03	3.01 $\pm$0.02121^{h}
D_0B_2	3,03	3,06	3.04 $\pm$0.02121^{hi}
D_0B_3	3,06	3,07	3.06 $\pm$0.00707^{i}
D_1B_0	2,83		2.83 $\pm$0.00000^{f}
D_1B_1	2,83	2,86	2.84 $\pm$0.02121^{fg}
D_1B_2	2,84	2,86	2.85 $\pm$0.01414^{fg}
D_1B_3	2,86	2,88	2.87 $\pm$0.01414^{g}
D_2B_0	2,58		2.58 $\pm$0.00000^{c}
D_2B_1	2,61	2,67	2.64 $\pm$0.04243^{d}
D_2B_2	2,67	2,67	2.67 $\pm$0.00000^{de}
D_2B_3	2,69	2,70	2.69 $\pm$0.00707^{e}
D_3B_0	2,51		2.51 $\pm$0.00000^{a}
D_3B_1	2,52	2,54	2.53 $\pm$0.02828^{ab}
D_3B_2	2,54	2,58	2.56 $\pm$0.00707^{bc}
D_3B_3	2,58	2,59	2.58 $\pm$0.00707^{c}

Keterangan: notasi huruf a, b, c,…j didapatkan dari tabel uji lanjut (Duncan)

Lampiran 5. Data uji hedonik

1. Data penilaian uji hedonik hari 0

Panelis	Warna				Aroma				Rasa			
	D_0B_0	D_0B_1	D_0B_2	D_0B_3	D_0B_0	D_0B_1	D_0B_2	D_0B_3	D_0B_0	D_0B_1	D_0B_2	D_0B_3
1	3	3	4	5	3	4	4	3	5	4	5	5
2	5	5	3	5	4	2	5	4	3	5	5	2
3	5	3	5	4	3	4	5	5	1	1	4	3
4	2	2	4	3	5	2	3	3	2	2	2	2
5	5	5	4	2	1	5	4	4	1	3	1	3
6	2	5	2	1	4	5	3	2	1	3	5	1
7	3	2	3	1	3	4	5	1	3	2	2	3
8	4	4	5	2	4	1	5	1	4	2	5	4
9	2	5	3	2	2	2	1	5	1	1	3	4
10	3	4	4	4	2	3	3	3	4	3	4	5
11	1	1	4	4	3	1	3	3	1	4	4	1
12	3	4	1	4	2	5	1	1	1	1	2	1
13	1	3	4	3	1	2	3	2	4	3	4	2
14	5	2	4	2	5	2	4	1	5	1	5	1
15	2	1	5	1	2	4	1	1	2	3	2	3
16	4	3	5	5	3	5	1	5	5	5	1	2
17	3	4	2	3	3	1	5	4	5	2	1	2
18	2	5	2	3	5	2	2	1	2	5	4	2
19	5	5	3	2	2	4	2	3	5	5	2	2
20	1	3	3	4	4	4	5	4	4	5	1	4
21	4	4	5	4	4	4	1	3	3	1	5	4
22	2	1	5	2	1	5	3	5	5	4	1	1
23	5	5	3	4	3	1	1	2	5	5	2	4
24	4	5	2	5	5	4	3	4	3	2	5	2
25	2	2	3	2	2	3	4	1	5	3	3	5
26	3	5	4	2	1	5	2	2	4	4	2	2
27	5	5	3	5	2	4	5	4	3	5	1	2
28	2	3	3	1	2	3	4	5	5	1	4	2
29	1	3	2	1	1	4	3	4	2	1	1	4
30	1	2	1	4	1	4	5	2	2	4	1	1

2. Data penilaian uji hedonik hari 7

Panelis	Warna				Aroma				Rasa			
	D_1B_0	D_1B_1	D_1B_2	D_1B_3	D_1B_0	D_1B_1	D_1B_2	D_1B_3	D_1B_0	D_1B_1	D_1B_2	D_1B_3
1	4	4	4	4	3	2	3	5	4	1	1	4
2	3	5	4	3	3	3	3	4	2	2	3	1
3	5	4	2	4	3	3	4	4	2	3	1	3
4	1	4	1	3	5	2	2	5	2	4	2	5
5	1	4	1	1	5	1	4	5	1	4	3	1
6	5	1	2	1	1	4	5	3	1	4	3	5
7	5	3	3	4	3	5	2	3	5	4	1	1
8	4	5	3	5	3	5	2	4	4	1	3	1
9	5	3	5	5	1	5	4	3	2	2	2	5
10	1	1	1	2	5	3	3	5	5	2	5	2
11	1	3	4	1	3	4	4	1	1	5	5	1
12	1	1	1	1	2	1	5	1	1	4	1	3
13	5	2	2	3	2	5	5	4	4	4	1	4
14	1	1	5	2	5	2	3	2	1	5	3	3
15	2	2	1	2	5	2	4	4	1	3	5	1
16	5	5	3	3	2	1	2	4	3	1	3	5
17	5	5	4	3	2	5	2	5	2	2	3	5
18	3	3	1	5	5	3	2	4	5	5	5	2
19	3	5	3	2	4	5	5	3	4	5	2	4
20	4	5	3	3	4	4	5	4	4	3	2	5
21	4	5	5	2	1	1	1	4	5	1	1	3
22	1	2	4	1	4	1	1	1	4	4	3	3
23	4	4	1	1	5	4	2	5	1	5	1	2
24	1	5	2	2	4	3	1	4	3	2	2	1
25	1	5	2	4	3	4	1	3	5	3	3	4
26	1	3	5	2	3	4	5	2	1	5	4	1
27	2	3	1	2	5	3	2	4	2	4	5	3
28	2	1	2	5	4	5	2	4	3	1	3	1
29	4	3	3	1	5	2	1	1	2	2	4	5
30	3	3	2	4	3	2	2	5	2	3	5	4

3. Data penilaian uji hedonik hari 14

Panelis	Warna				Aroma				Rasa			
	D_2B_0	D_2B_1	D_2B_2	D_2B_3	D_2B_0	D_2B_1	D_2B_2	D_2B_3	D_2B_0	D_2B_1	D_2B_2	D_2B_3
1	5	5	5	4	3	3	5	4	4	1	4	2
2	2	4	3	3	5	5	1	3	2	1	5	5
3	4	3	1	5	5	4	3	2	3	5	4	5
4	4	1	4	1	4	1	3	3	1	4	5	2
5	3	1	4	1	1	2	1	3	3	2	1	5
6	1	2	1	5	4	1	1	3	4	2	3	2
7	2	4	1	4	4	3	3	4	5	4	1	1
8	5	4	4	5	1	2	5	5	3	2	4	5
9	2	2	4	3	3	2	2	5	4	2	4	2
10	2	4	4	1	3	5	4	1	5	1	2	2
11	4	2	2	5	1	3	1	4	4	3	3	4
12	2	4	2	5	4	4	4	5	1	5	3	5
13	2	5	1	4	2	4	2	2	4	2	4	4
14	2	3	5	2	5	3	2	3	2	4	1	3
15	1	3	3	3	2	5	5	4	3	3	5	5
16	3	2	3	1	2	4	2	2	2	3	4	2
17	4	3	3	3	2	1	4	4	1	1	2	2
18	1	3	1	2	1	5	1	5	1	1	5	5
19	5	2	4	5	2	1	3	2	2	5	4	4
20	5	4	3	4	5	5	1	4	2	4	4	2
21	2	2	1	5	3	3	4	5	5	4	2	2
22	5	2	1	4	2	3	4	3	3	5	5	4
23	1	4	4	4	2	4	1	2	2	5	5	2
24	3	5	5	1	3	4	1	4	5	4	2	3
25	1	5	4	5	2	2	5	2	2	1	4	2
26	4	2	1	2	4	2	3	3	3	4	1	4
27	3	2	2	2	5	1	5	2	4	3	1	1
28	4	2	1	5	3	5	4	5	1	4	1	3
29	5	5	2	4	1	5	4	5	1	5	5	1
30	5	2	1	5	1	5	2	5	3	5	2	2

4. Data penilaian uji hedonik Hari 21

Panelis	Warna				Aroma				Rasa			
	D_3B_0	D_3B_1	D_3B_2	D_3B_3	D_3B_0	D_3B_1	D_3B_2	D_3B_3	D_3B_0	D_3B_1	D_3B_2	D_3B_3
1	4	4	4	3	2	2	3	3	3	1	1	3
2	3	5	4	2	3	5	3	5	2	5	3	5
3	3	3	2	5	5	4	1	1	3	5	3	1
4	2	2	2	3	3	5	5	4	2	4	5	4
5	5	3	4	5	4	3	1	5	1	4	3	1
6	2	3	2	2	3	3	1	5	5	2	4	2
7	1	1	4	5	5	3	4	5	4	5	2	2
8	4	3	4	4	1	3	1	2	3	1	5	4
9	2	3	2	2	4	2	5	5	3	2	2	3
10	2	3	2	4	2	3	5	1	5	1	5	3
11	2	4	4	3	3	4	1	3	5	3	5	5
12	4	4	3	5	4	2	2	1	2	3	3	5
13	5	2	1	5	3	5	1	4	1	1	2	3
14	3	4	3	4	3	2	2	5	5	3	3	5
15	1	4	3	1	5	4	1	4	4	3	5	1
16	1	4	3	3	4	3	1	1	5	4	1	4
17	3	4	1	1	3	1	5	1	1	4	1	5
18	5	5	3	4	1	5	1	3	4	4	4	4
19	2	2	5	3	2	5	4	4	5	2	5	5
20	1	3	2	2	1	1	4	5	5	5	5	3
21	3	4	3	1	4	2	1	1	5	2	5	1
22	2	2	1	2	3	1	3	5	1	5	4	4
23	3	2	3	3	5	3	3	3	5	1	3	2
24	1	3	1	2	1	2	1	2	4	2	4	1
25	1	2	5	2	5	5	4	4	2	2	1	5
26	5	3	1	4	2	3	2	1	1	4	1	3
27	5	1	4	3	5	5	4	1	2	5	1	4
28	5	4	1	5	1	2	1	1	1	5	4	5
29	3	5	4	3	2	1	4	3	2	2	2	3
30	3	1	4	3	4	5	1	3	5	5	2	1

Lampiran 6. Rata-rata skor uji hedonik

1. Warna

Hari Fermentasi (D)	Skor Warna			
	B_0	**B_1**	**B_2**	**B_3**
0	3.00 ± 1.438	3.47 ± 1.383	3.37 ± 1.189	3.00 ± 1.390
7	2.90 ± 1.626	3.33 ± 1.446	2.67 ± 1.398	2.70 ± 1.368
14	3.07 ± 1.461	3.07 ± 1.258	2.67 ± 1.446	3.43 ± 1.501
21	2.87 ± 1.408	3.10 ± 1.155	2.83 ± 1.262	3.13 ± 1.279

2. Aroma

Hari Fermentasi (D)	Skor Warna			
	B_0	**B_1**	**B_2**	**B_3**
0	2.77 ± 1.331	3.30 ± 1.368	3.20 ± 1.472	2.93 ± 1.437
7	3.43 ± 1.331	3.13 ± 1.432	2.90 ± 1.423	3.53 ± 1.306
14	2.83 ± 1.392	3.23 ± 1.455	2.87 ± 1.479	3.47 ± 1.224
21	3.10 ± 1.373	3.13 ± 1.408	2.50 ± 1.548	3.03 ± 1.608

3. Rasa

Hari Fermentasi (D)	Skor Warna			
	B_0	**B_1**	**B_2**	**B_3**
0	3.20 ± 1.540	3.00 ± 1.509	2.90 ± 1.583	2.63 ± 1.299
7	2.73 ± 1.484	3.13 ± 1.408	2.83 ± 1.416	2.93 ± 1.574
14	2.83 ± 1.341	3.17 ± 1.487	3.20 ± 1.495	3.03 ± 1.402
21	3.20 ± 1.584	3.17 ± 1.487	3.13 ± 1.502	3.23 ± 1.478

Lampiran 7. Perhitungan penambahan natrium benzoat

$$\boxed{\text{Batas maksimum BTP x volume teh kombucha (mL)}}$$

Diketahui :

Volume teh kombucha = 600 mL = 600 gram

Batas maksimum natrium benzoat = 600 mg/kg

Penyelesaian :

$$\text{Batas maksimum BTP} = \frac{600\text{ mg}}{1000\text{ gram}} \text{x } 600\text{ gram}$$

$$= 360\text{ mg}$$

Jadi variasi penambahan natrium benzoat pada teh kombucha yaitu 120 mg, 240 mg, dan 360 mg

Lampiran 8. Perhitungan rendemen

$$\boxed{\text{Rendemen (\%)} = \frac{\text{Bobot ekstrak (gram)}}{\text{Volume sampel (mL)}} \text{x}100\%}$$

Sampel D_0B_0

Diketahui :

Bobot ekstrak : 3,0741 gram

Volume sampel : 50 mL

Penyelesaian :

$$\text{Rendemen (\%)} = \frac{3{,}0741\text{ gram}}{50\text{ mL}} \text{x}100\%$$

$$= 6{,}1482\ \%$$

Dengan cara yang sama seperti diatas, didapatkan hasil perhitungan rendemen ekstrak teh kombucha lainnya pada tabel.

Lampiran 9. Perhitungan pembuatan larutan DPPH 0,4 mM

$$0{,}4\text{ mM} = \frac{\text{mg}}{\text{Mr}} \text{x } \frac{1000}{\text{v (mL)}}$$

$$0{,}4\text{ mM} = \frac{\text{x}}{394{,}32} \text{x } \frac{1000}{25}$$

$\text{x} = 3{,}9432$ mg (dibulatkan menjadi 3,9 mg)

Lampiran 10. Perhitungan % inhibisi

$$\% \text{ Inhibisi} = \frac{\text{Absorbansi kontrol} - \text{Absorbansi sampel}}{\text{Absorbansi kontrol}} \text{x } 100\%$$

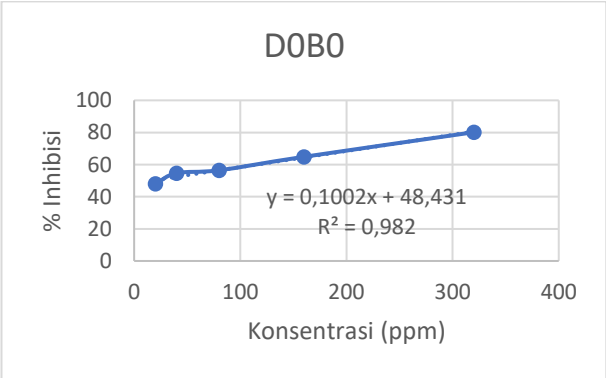
Sampel D_0B_0 Konsentrasi 20 ppm

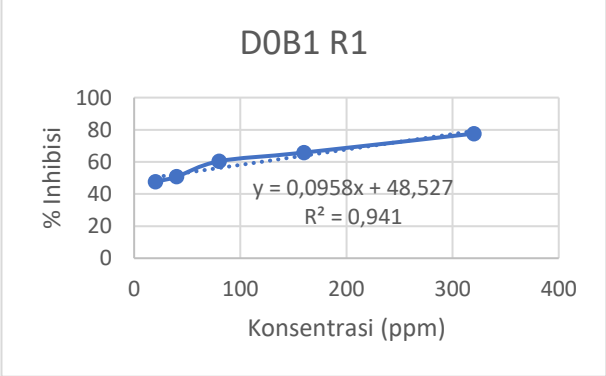
$$\% \text{ Inhibisi} = \frac{0{,}680 - 0{,}353}{0{,}680} \text{x } 100\%$$

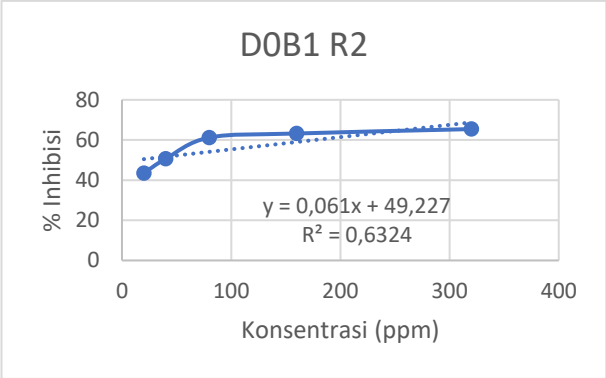
% Inhibisi = 48,08823%

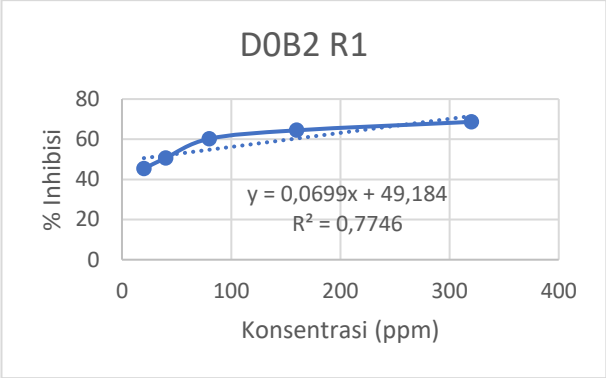
Dengan cara yang sama seperti diatas, didapatkan hasil perhitungan % Inhibisi pada setiap konsentrasi (20; 40; 80; 160; 320 ppm) larutan sampel teh kombucha lainnya pada tabel.

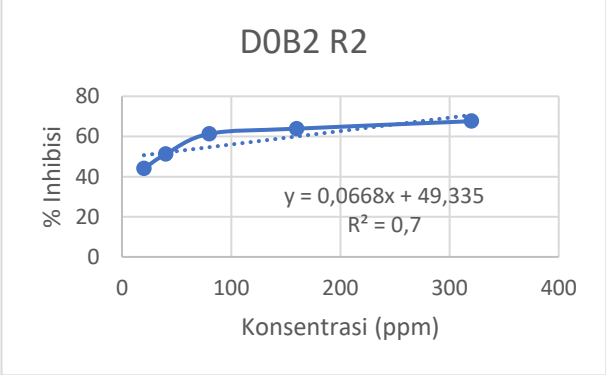
Lampiran 11. Kurva uji aktivitas antioksidan

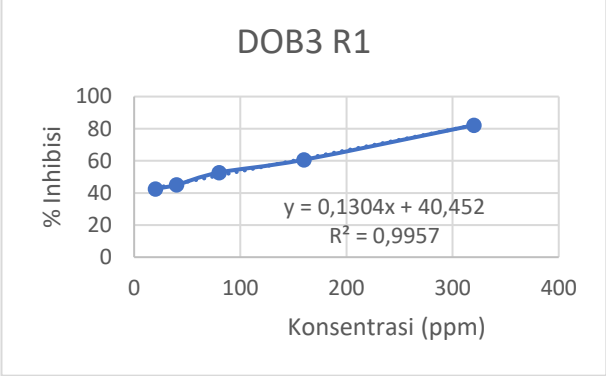


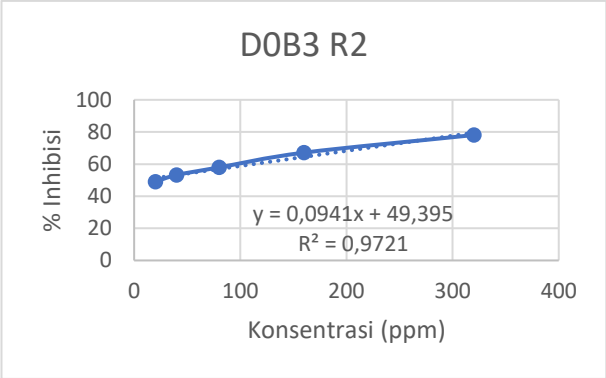


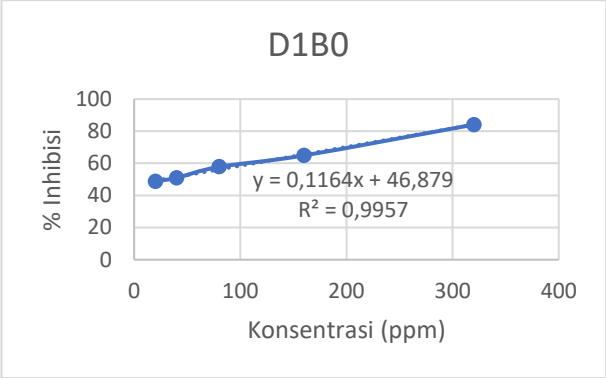

D0B1 R2
% Inhibisi
80
60
40
20
0
y = 0,061x + 49,227
R² = 0,6324
0
100
200
300
400
Konsentrasi (ppm)

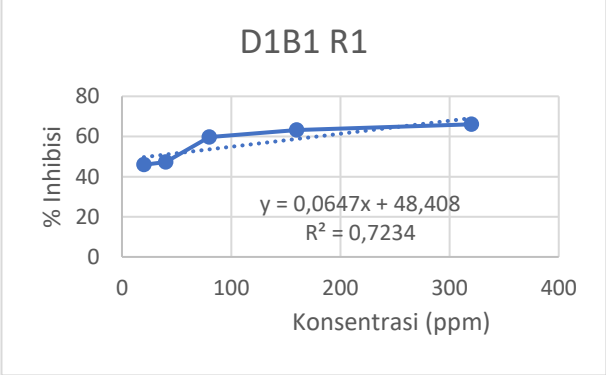

D0B2 R1
% Inhibisi
80
60
40
20
0
y = 0,0699x + 49,184
R² = 0,7746
0
100
200
300
400
Konsentrasi (ppm)

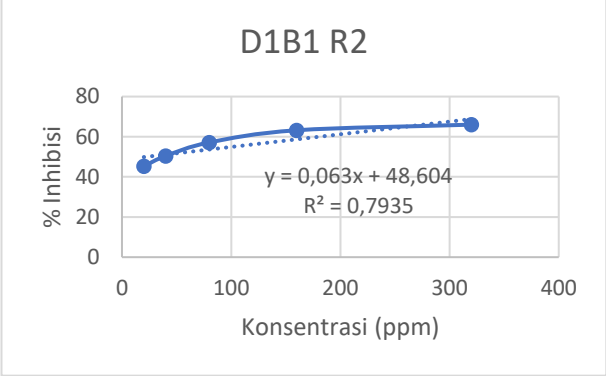

D0B2 R2
% Inhibisi
80
60
40
20
0
y = 0,0668x + 49,335
R² = 0,7
0
100
200
300
400
Konsentrasi (ppm)

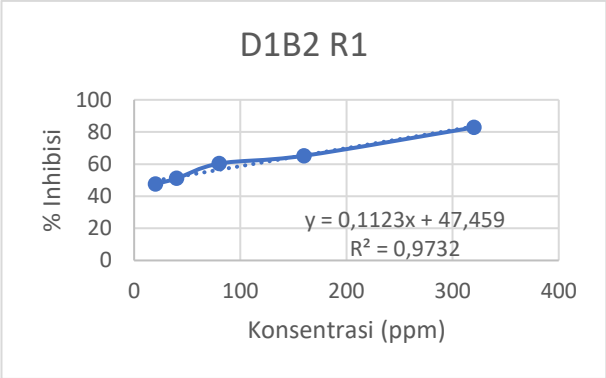

DOB3 R1
% Inhibisi
100
80
60
40
20
0
y = 0,1304x + 40,452
R² = 0,9957
0
100
200
300
400
Konsentrasi (ppm)

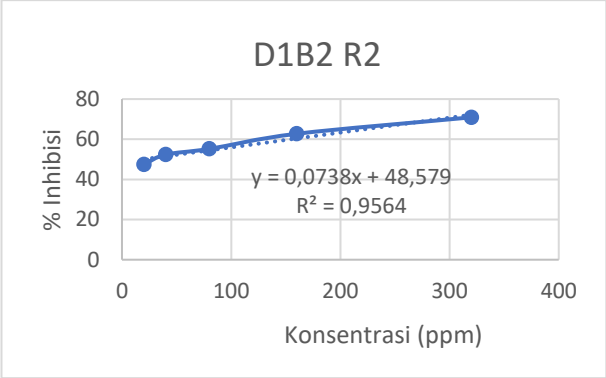

D0B3 R2
% Inhibisi
100
80
60
40
20
0
y = 0,0941x + 49,395
R² = 0,9721
0
100
200
300
400
Konsentrasi (ppm)

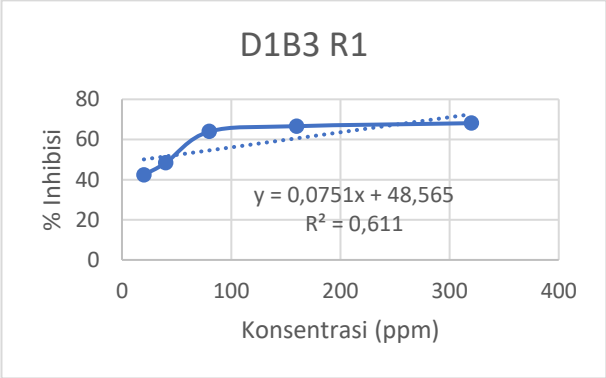

D1B0
% Inhibisi
100
80
60
40
20
0
y = 0,1164x + 46,879
R² = 0,9957
0
100
200
300
400
Konsentrasi (ppm)

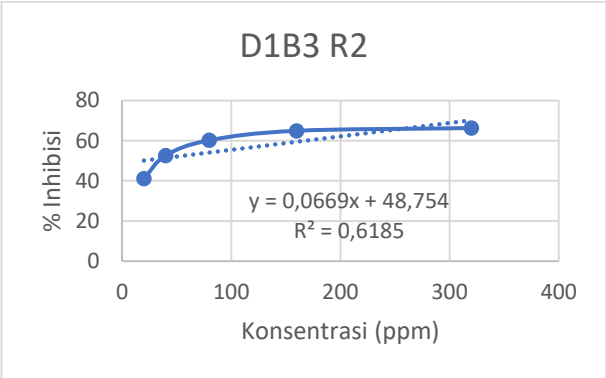

D1B1 R1
% Inhibisi
80
60
40
20
0
y = 0,0647x + 48,408
R² = 0,7234
0
100
200
300
400
Konsentrasi (ppm)

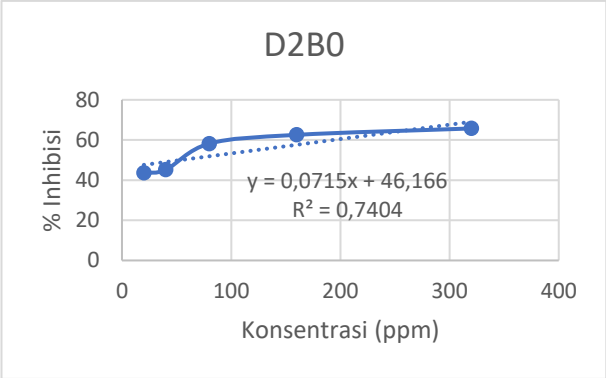

D1B1 R2
% Inhibisi
80
60
40
20
0
y = 0,063x + 48,604
R² = 0,7935
0
100
200
300
400
Konsentrasi (ppm)

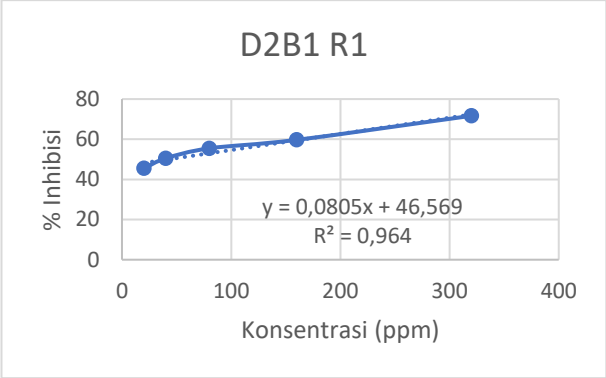

D1B2 R1
% Inhibisi
100
80
60
40
20
0
y = 0,1123x + 47,459
R² = 0,9732
0
100
200
300
400
Konsentrasi (ppm)

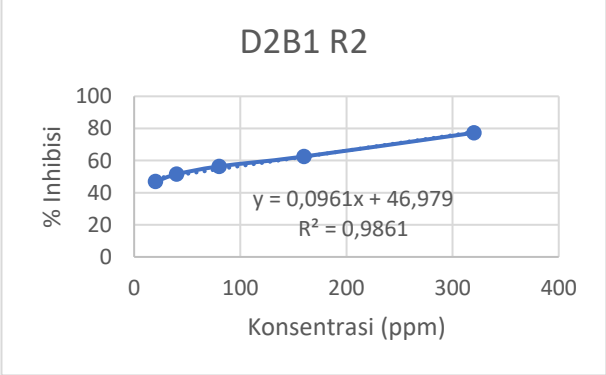

D1B2 R2
% Inhibisi
80
60
40
20
0
y = 0,0738x + 48,579
R² = 0,9564
0
100
200
300
400
Konsentrasi (ppm)

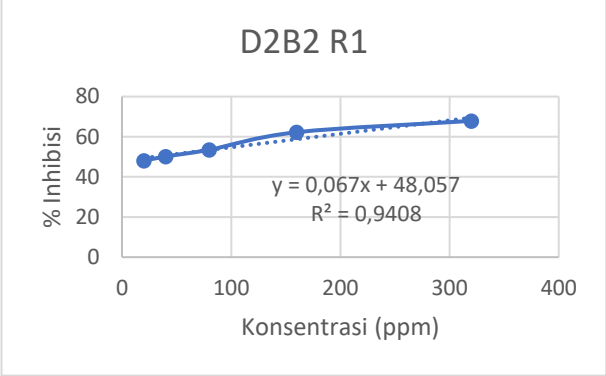

D1B3 R1
% Inhibisi
80
60
40
20
0
y = 0,0751x + 48,565
R² = 0,611
0
100
200
300
400
Konsentrasi (ppm)

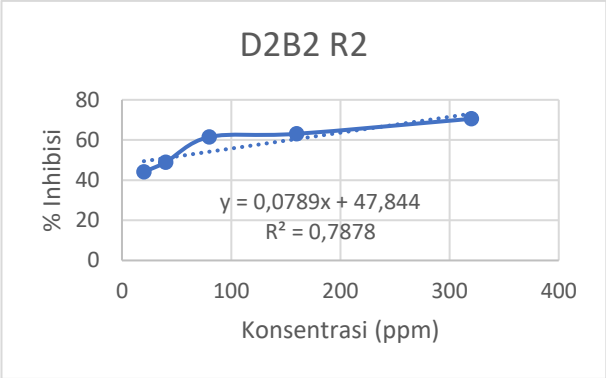

D1B3 R2
% Inhibisi
80
60
40
20
0
y = 0,0669x + 48,754
R² = 0,6185
0
100
200
300
400
Konsentrasi (ppm)

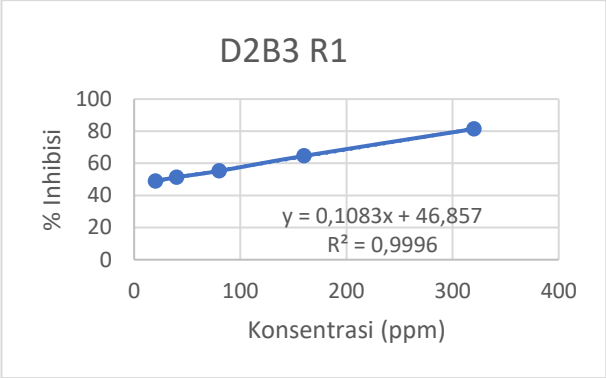

D2B0
% Inhibisi
80
60
40
20
0
0
100
200
300
400
Konsentrasi (ppm)
y = 0,0715x + 46,166
R² = 0,7404

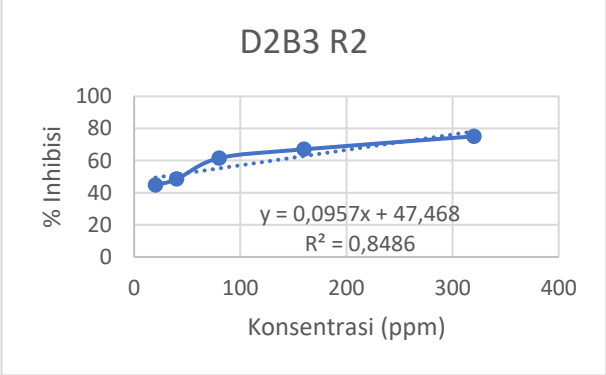

D2B1 R1
% Inhibisi
80
60
40
20
0
0
100
200
300
400
Konsentrasi (ppm)
y = 0,0805x + 46,569
R² = 0,964

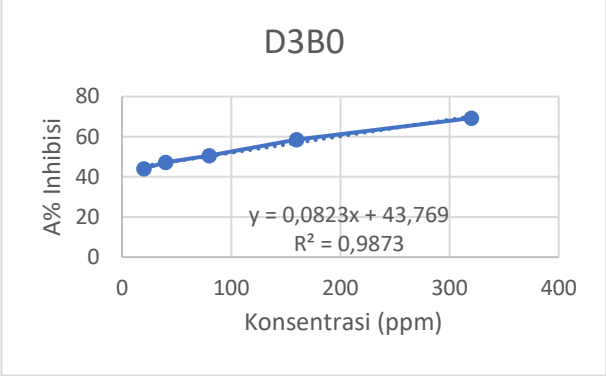

D2B1 R2
% Inhibisi
100
80
60
40
20
0
0
100
200
300
400
Konsentrasi (ppm)
y = 0,0961x + 46,979
R² = 0,9861

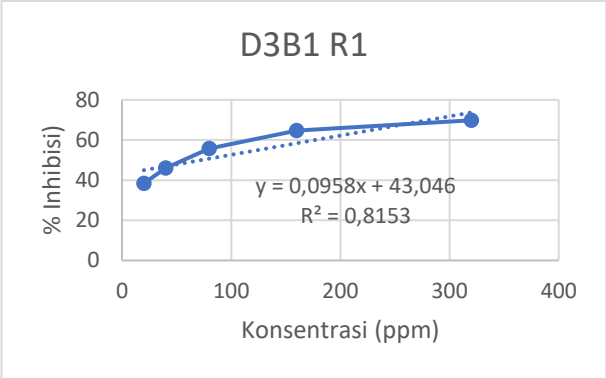

D2B2 R1
% Inhibisi
80
60
40
20
0
0
100
200
300
400
Konsentrasi (ppm)
y = 0,067x + 48,057
R² = 0,9408

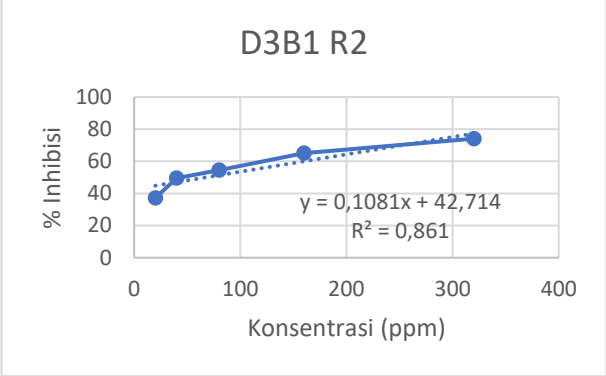

D2B2 R2
% Inhibisi
80
60
40
20
0
y = 0,0789x + 47,844
R² = 0,7878
0
100
200
300
400
Konsentrasi (ppm)

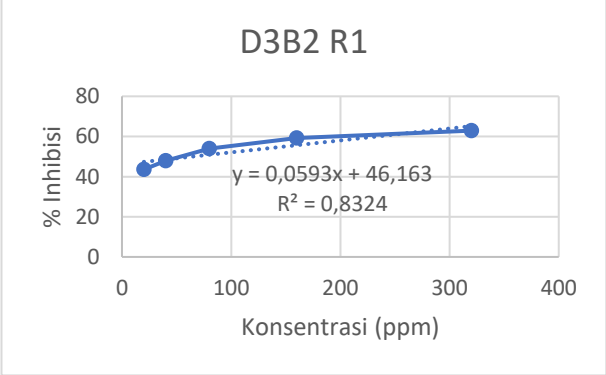

D2B3 R1
% Inhibisi
100
80
60
40
20
0
y = 0,1083x + 46,857
R² = 0,9996
0
100
200
300
400
Konsentrasi (ppm)

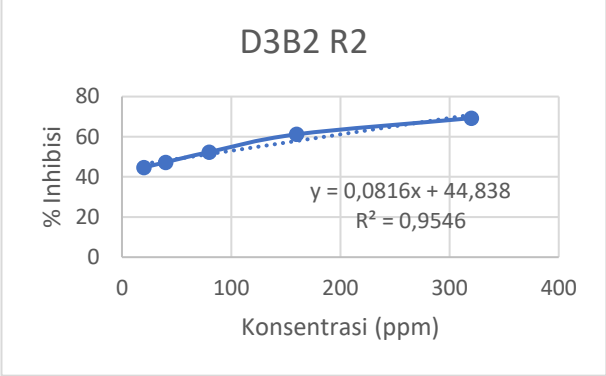

D2B3 R2
% Inhibisi
100
80
60
40
20
0
y = 0,0957x + 47,468
R² = 0,8486
0
100
200
300
400
Konsentrasi (ppm)

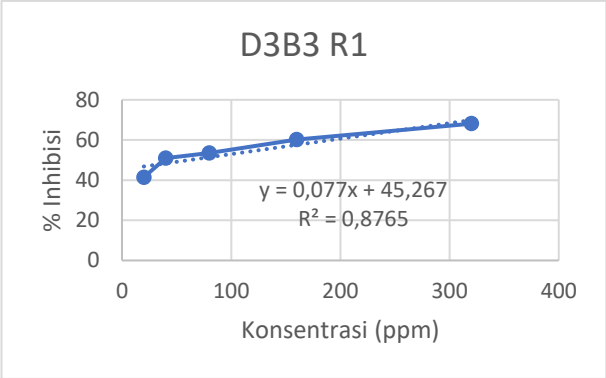

D3B0
A% Inhibisi
80
60
40
20
0
y = 0,0823x + 43,769
R² = 0,9873
0
100
200
300
400
Konsentrasi (ppm)

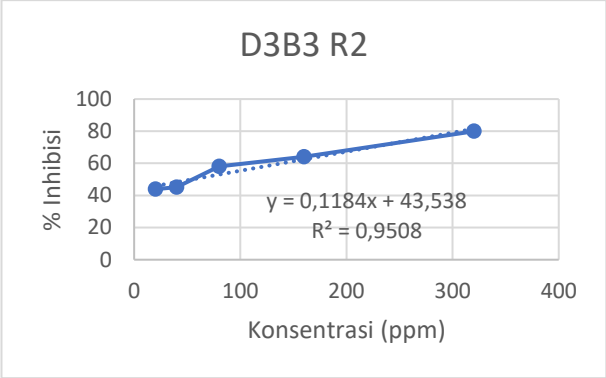

D3B1 R1
% Inhibisi)
80
60
40
20
0
y = 0,0958x + 43,046
R² = 0,8153
0
100
200
300
400
Konsentrasi (ppm)


D3B1 R2
% Inhibisi
100
80
60
40
20
0
y = 0,1081x + 42,714
R² = 0,861
0
100
200
300
400
Konsentrasi (ppm)


D3B2 R1
% Inhibisi
80
60
40
20
0
y = 0,0593x + 46,163
R² = 0,8324
0
100
200
300
400
Konsentrasi (ppm)


D3B2 R2
% Inhibisi
80
60
40
20
0
y = 0,0816x + 44,838
R² = 0,9546
0
100
200
300
400
Konsentrasi (ppm)



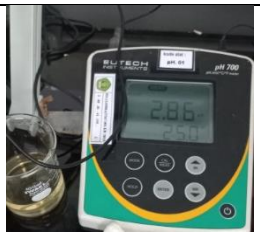
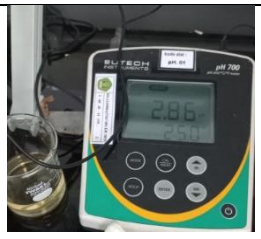


Lampiran 12. Pembuatan teh kombucha

PEMBUATAN TEH KOMBUCHA		
		
Penimbangan gula 350 gram		
		
Pelarutan gula dalam 2 Liter air	Penyeduhan teh dengan 9 kantong	Kultur SCOBY

		
Sterilisasi wadah pada suhu 121℃ selama 2 jam		Pemindahan teh ke wadah fermentasi
		
Penambahan kultur SCOBY	Fermentasi selama 7 hari	Pemanasan teh 5 Liter pada suhu 50℃ selama 5 menit
		
Penimbangan natrium benzoat		
		
Pelarutan natrium benzoat	Pemindahan teh ke botol fermentasi	

Lampiran 13. Pengukuran pH

PENGUKURAN pH		
		
Kalibrasi (buffer pH 4)	D_0B_0	D_0B_1 replikasi 1
		
D_0B_1 replikasi 2	D_0B_2 replikasi 1	D_0B_2 replikasi 2
		
D_0B_3 replikasi 1	D_0B_3 replikasi 2	D_1B_0
		
D_1B_1 replikasi 1	D_1B_1 replikasi 2	D_1B_2 replikasi 1
		
D_1B_2 replikasi 2	D_1B_3 replikasi 1	D_1B_3 replikasi 2

		
D_2B_0	D_2B_1 replikasi 1	D_2B_1 replikasi 2
		
D_2B_2 replikasi 1	D_2B_2 replikasi 2	D_2B_3 replikasi 1
		
D_2B_3 replikasi 2	D_3B_0	D_3B_1 replikasi 1
		
D_3B_1 replikasi 2	D_3B_2 replikasi 1	D_3B_2 replikasi 2
		
D_3B_3 replikasi 1	D_3B_3 replikasi 2	

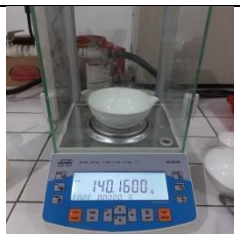
Lampiran 14. Penimbangan Cawan Kosong

PENIMBANGAN CAWAN KOSONG		
		
D_0B_0	D_0B_1 Replikasi 1	D_0B_1 Replikasi 2
		
D_0B_2 Replikasi 1	D_0B_2 Replikasi 2	D_0B_3 Replikasi 1
		
D_0B_3 Replikasi 2	D_1B_0	D_1B_1 Replikasi 1
		
D_1B_1 Replikasi 2	D_1B_2 Replikasi 1	D_1B_2 Replikasi 1
		
D_1B_3 Replikasi 1	D_1B_3 Replikasi 1	D_2B_0

		
D_2B_1 Replikasi 1	D_2B_1 Replikasi 2	D_2B_2 Replikasi 1
		
D_2B_2 Replikasi 2	D_2B_3 Replikasi 1	D_2B_3 Replikasi 2
		
D_3B_0	D_3B_1 Replikasi 1	D_3B_1 Replikasi 2
		
D_3B_2 Replikasi 1	D_3B_2 Replikasi 1	D_3B_3 Replikasi 1
		
D_3B_3 Replikasi 1		

Lampiran 15. Penimbangan cawan dan ekstrak

PENIMBANGAN CAWAN + EKSTRAK		
		
D_0B_0	D_0B_1 Replikasi 1	D_0B_1 Replikasi 2
		
D_0B_2 Replikasi 1	D_0B_2 Replikasi 2	D_0B_3 Replikasi 1
		
D_0B_3 Replikasi 2	D_1B_0	D_1B_1 Replikasi 1
		
D_1B_1 Replikasi 2	D_1B_2 Replikasi 1	D_1B_2 Replikasi 1
		
D_1B_3 Replikasi 1	D_1B_3 Replikasi 1	D_2B_0

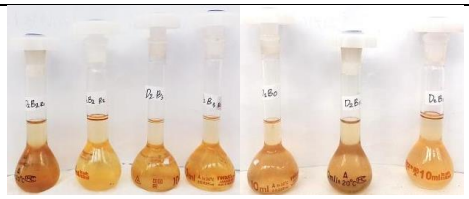
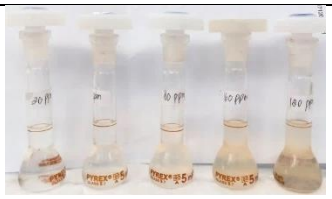
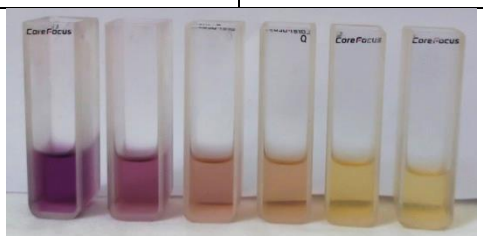
		
D_2B_1 Replikasi 1	D_2B_1 Replikasi 2	D_2B_2 Replikasi 1
		
D_2B_2 Replikasi 2	D_2B_3 Replikasi 1	D_2B_3 Replikasi 2
		
D_3B_0	D_3B_1 Replikasi 1	D_3B_1 Replikasi 2
		
D_3B_2 Replikasi 1	D_3B_2 Replikasi 2	D_3B_3 Replikasi 1
		
D_3B_3 Replikasi 2		

Lampiran 16. Hasil Ekstrak

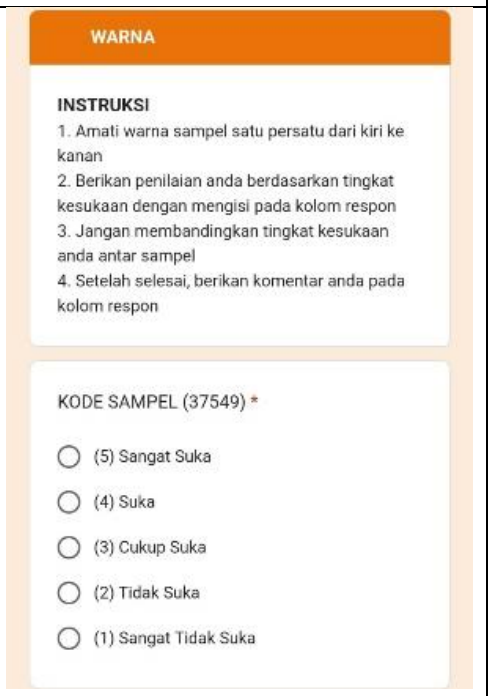
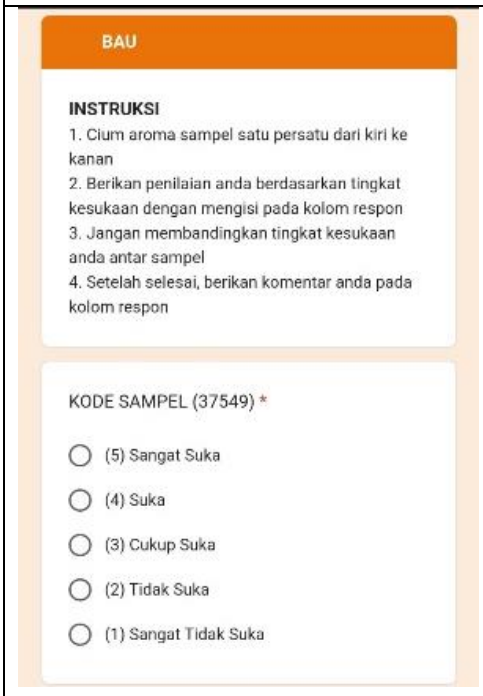
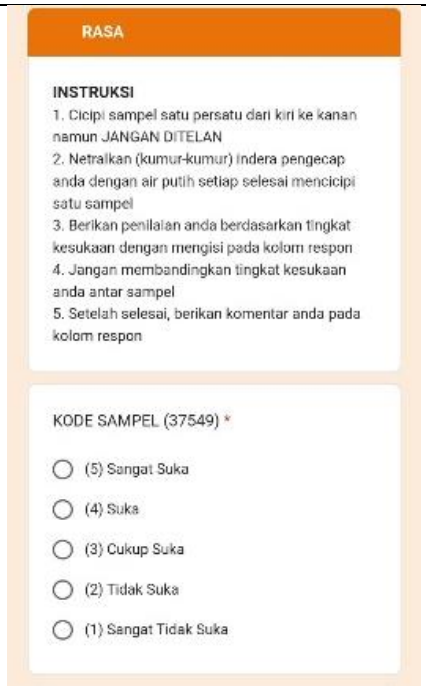
HASIL EKSTRAK			
			
D_0B_0	D_0B_1	D_0B_2	D_0B_3
			
D_1B_0	D_1B_1	D_1B_2	D_1B_3
			
D_2B_0	D_2B_1	D_2B_2	D_2B_3
			
D_3B_0	D_3B_1	D_3B_2	D_3B_1

Lampiran 17. Pengukuran aktivitas antioksidan dengan DPPH

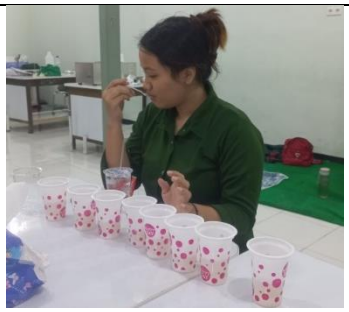
PROSEDUR		
		
Pemekatan teh pada Suhu 50℃ dan 50 rpm	Proses pemekatan teh sebanyak 50 mL	Penimbangan padatan DPPH (3,9 mg)
		
Larutan DPPH (0,4 mM)	Pengukuran panjang gelombang maksimum (520 nm)	

HASIL PENGUKURAN	
	
Larutan sampel (500 ppm)	Larutan sampel seri pengenceran (20;40;80;160;320 ppm)
	
Larutan setelah diinkubasi selama 30 menit	

Lampiran 18. Form uji hedonik

<table>
<tr><th colspan="2">FORM UJI HEDONIK</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Cover</td><td>Parameter warna</td></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Parameter aroma</td><td>Parameter rasa</td></tr>
</table>

Lampiran 19. Kegiatan uji hedonik

<table>
<tr><th colspan="2">UJI HEDONIK</th></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Hari 0</td><td>Hari 7</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Hari 14</td><td>Hari 21</td></tr>
</table>

Lampiran 20. Hasil pengujian dengan statistik

1. Aktivitas antioksidan

Descriptives

IC50

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1.00	2	15.6586800	.00000000	.00000000	15.6586800	15.6586800	15.65868	15.65868
2.00	2	14.0239550	1.91176925	1.35182500	-3.1526102	31.2005202	12.67213	15.37578
3.00	2	10.8144550	1.21532564	.85936500	-.1048126	21.7337226	9.95509	11.67382
4.00	2	7.4379500	1.42640408	1.00862000	-5.3777822	20.2536822	6.42933	8.44657
5.00	2	26.8127100	.00000000	.00000000	26.8127100	26.8127100	26.81271	26.81271
6.00	2	23.3823000	1.73038929	1.22357000	7.8353691	38.9292309	22.15873	24.60587
7.00	2	20.9408150	2.38447013	1.68607500	-.4827992	42.3644292	19.25474	22.62689
8.00	2	18.8663350	.34156793	.24152500	15.7974689	21.9352011	18.62481	19.10786
9.00	2	53.6223700	.00000000	.00000000	53.6223700	53.6223700	53.62237	53.62237
10.00	2	37.0285600	7.90907420	5.59256000	-34.0316524	108.0887724	31.43600	42.62112
11.00	2	28.2001800	1.23665905	.87445000	17.0892393	39.3111207	27.32573	29.07463
12.00	2	27.7394600	1.81271066	1.28178000	11.4529009	44.0260191	26.45768	29.02124
13.00	2	75.7108400	.00000000	.00000000	75.7108400	75.7108400	75.71084	75.71084
14.00	2	69.9946350	3.66859019	2.59408500	37.0336599	102.9556101	67.40055	72.58872
15.00	2	63.9823450	1.02183294	.72254500	54.8015403	73.1631497	63.25980	64.70489
16.00	2	58.0226150	4.87184551	3.44491500	14.2508197	101.7944103	54.57770	61.46753
Total	32	34.5148878	22.11048646	3.90861873	26.5432074	42.4865683	6.42933	75.71084

ANOVA

IC50

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15033.513	15	1002.234	131.906	.000
Within Groups	121.569	16	7.598		
Total	15155.082	31			

Duncan[a]

		Subset for alpha = 0.05										
SAMPEL	N	1	2	3	4	5	6	7	8	9	10	11
4.00	2	7.4379500										
3.00	2	10.8144550	10.8144550									
2.00	2		14.0239550	14.0239550								
1.00	2		15.6586800	15.6586800	15.6586800							
8.00	2			18.8663350	18.8663350	18.8663350						
7.00	2				20.9408150	20.9408150	20.9408150					
6.00	2					23.3823000	23.3823000	23.3823000				
5.00	2						26.8127100	26.8127100				
12.00	2							27.7394600				
11.00	2							28.2001800				
10.00	2								37.0285600			
9.00	2									53.6223700		
16.00	2									58.0226150		
15.00	2										63.9823450	
14.00	2											69.9946350
13.00	2											75.7108400
Sig.		.238	.114	.114	.087	.139	.059	.126	1.000	.130	1.000	.055

2. Nilai pH

Descriptives

Hasil

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
D0B0	2	3.7000	.00000	.00000	3.7000	3.7000	3.70	3.70
D0B1	2	3.0150	.02121	.01500	2.8244	3.2056	3.00	3.03
D0B2	2	3.0450	.02121	.01500	2.8544	3.2356	3.03	3.06
D0B3	2	3.0650	.00707	.00500	3.0015	3.1285	3.06	3.07
D1B0	2	2.8300	.00000	.00000	2.8300	2.8300	2.83	2.83
D1B1	2	2.8450	.02121	.01500	2.6544	3.0356	2.83	2.86
D1B2	2	2.8500	.01414	.01000	2.7229	2.9771	2.84	2.86
D1B3	2	2.8700	.01414	.01000	2.7429	2.9971	2.86	2.88
D2B0	2	2.5800	.00000	.00000	2.5800	2.5800	2.58	2.58
D2B1	2	2.6400	.04243	.03000	2.2588	3.0212	2.61	2.67
D2B2	2	2.6700	.00000	.00000	2.6700	2.6700	2.67	2.67
D2B3	2	2.6950	.00707	.00500	2.6315	2.7585	2.69	2.70
D3B0	2	2.5100	.00000	.00000	2.5100	2.5100	2.51	2.51
D3B1	2	2.5300	.01414	.01000	2.4029	2.6571	2.52	2.54
D3B2	2	2.5600	.02828	.02000	2.3059	2.8141	2.54	2.58
D3B3	2	2.5850	.00707	.00500	2.5215	2.6485	2.58	2.59
Total	32	2.8119	.29617	.05236	2.7051	2.9187	2.51	3.70

ANOVA

Hasil

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.715	15	.181	616.077	.000
Within Groups	.005	16	.000		
Total	2.719	31			

Hasil

Duncan[a]

Sampel	N	Subset for alpha = 0.05									
		1	2	3	4	5	6	7	8	9	10
D3B0	2	2.5100									
D3B1	2	2.5300	2.5300								
D3B2	2		2.5600	2.5600							
D2B0	2			2.5800							
D3B3	2			2.5850							
D2B1	2				2.6400						
D2B2	2				2.6700	2.6700					
D2B3	2					2.6950					
D1B0	2						2.8300				
D1B1	2						2.8450	2.8450			
D1B2	2						2.8500	2.8500			
D1B3	2							2.8700			
D0B1	2								3.0150		
D0B2	2								3.0450	3.0450	
D0B3	2									3.0650	
D0B0	2										3.7000
Sig.		.260	.099	.185	.099	.164	.285	.185	.099	.260	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

3. Uji hedonik

a. Warna

Descriptives

Warna

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
D0B0	30	3.00	1.438	.263	2.46	3.54	1	5
D0B1	30	3.47	1.383	.252	2.95	3.98	1	5
D0B2	30	3.37	1.189	.217	2.92	3.81	1	5
D0B3	30	3.00	1.390	.254	2.48	3.52	1	5
D1B0	30	2.90	1.626	.297	2.29	3.51	1	5
D1B1	30	3.33	1.446	.264	2.79	3.87	1	5
D1B2	30	2.67	1.398	.255	2.14	3.19	1	5
D1B3	30	2.70	1.368	.250	2.19	3.21	1	5
D2B0	30	3.07	1.461	.267	2.52	3.61	1	5
D2B1	30	3.07	1.258	.230	2.60	3.54	1	5
D2B2	30	2.67	1.446	.264	2.13	3.21	1	5
D2B3	30	3.43	1.501	.274	2.87	3.99	1	5
D3B0	30	2.87	1.408	.257	2.34	3.39	1	5
D3B1	30	3.10	1.155	.211	2.67	3.53	1	5
D3B2	30	2.83	1.262	.230	2.36	3.30	1	5
D3B3	30	3.13	1.279	.234	2.66	3.61	1	5
Total	480	3.04	1.382	.063	2.91	3.16	1	5

ANOVA

Warna

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	30.992	15	2.066	1.084	.369
Within Groups	884.333	464	1.906		
Total	915.325	479			

b. Aroma

Descriptives

Aroma

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
D0B0	30	2.77	1.331	.243	2.27	3.26	1	5
D0B1	30	3.30	1.368	.250	2.79	3.81	1	5
D0B2	30	3.20	1.472	.269	2.65	3.75	1	5
D0B3	30	2.93	1.437	.262	2.40	3.47	1	5
D1B0	30	3.43	1.331	.243	2.94	3.93	1	5
D1B1	30	3.13	1.432	.261	2.60	3.67	1	5
D1B2	30	2.90	1.423	.260	2.37	3.43	1	5
D1B3	30	3.53	1.306	.238	3.05	4.02	1	5
D2B0	30	2.83	1.392	.254	2.31	3.35	1	5
D2B1	30	3.23	1.455	.266	2.69	3.78	1	5
D2B2	30	2.87	1.479	.270	2.31	3.42	1	5
D2B3	30	3.47	1.224	.224	3.01	3.92	1	5
D3B0	30	3.10	1.373	.251	2.59	3.61	1	5
D3B1	30	3.13	1.408	.257	2.61	3.66	1	5
D3B2	30	2.50	1.548	.283	1.92	3.08	1	5
D3B3	30	3.03	1.608	.294	2.43	3.63	1	5
Total	480	3.09	1.418	.065	2.96	3.21	1	5

ANOVA

Aroma

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	35.065	15	2.338	1.168	.293
Within Groups	928.433	464	2.001		
Total	963.498	479			

c. Rasa

Descriptives

Rasa

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
D0B0	30	3.20	1.540	.281	2.62	3.78	1	5
D0B1	30	3.00	1.509	.275	2.44	3.56	1	5
D0B2	30	2.90	1.583	.289	2.31	3.49	1	5
D0B3	30	2.63	1.299	.237	2.15	3.12	1	5
D1B0	30	2.73	1.484	.271	2.18	3.29	1	5
D1B1	30	3.13	1.408	.257	2.61	3.66	1	5
D1B2	30	2.83	1.416	.259	2.30	3.36	1	5
D1B3	30	2.93	1.574	.287	2.35	3.52	1	5
D2B0	30	2.83	1.341	.245	2.33	3.33	1	5
D2B1	30	3.17	1.487	.272	2.61	3.72	1	5
D2B2	30	3.20	1.495	.273	2.64	3.76	1	5
D2B3	30	3.03	1.402	.256	2.51	3.56	1	5
D3B0	30	3.20	1.584	.289	2.61	3.79	1	5
D3B1	30	3.17	1.487	.272	2.61	3.72	1	5
D3B2	30	3.13	1.502	.274	2.57	3.69	1	5
D3B3	30	3.23	1.478	.270	2.68	3.79	1	5
Total	480	3.02	1.465	.067	2.89	3.15	1	5

ANOVA

Rasa

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.058	15	1.071	.491	.945
Within Groups	1011.733	464	2.180		
Total	1027.792	479			