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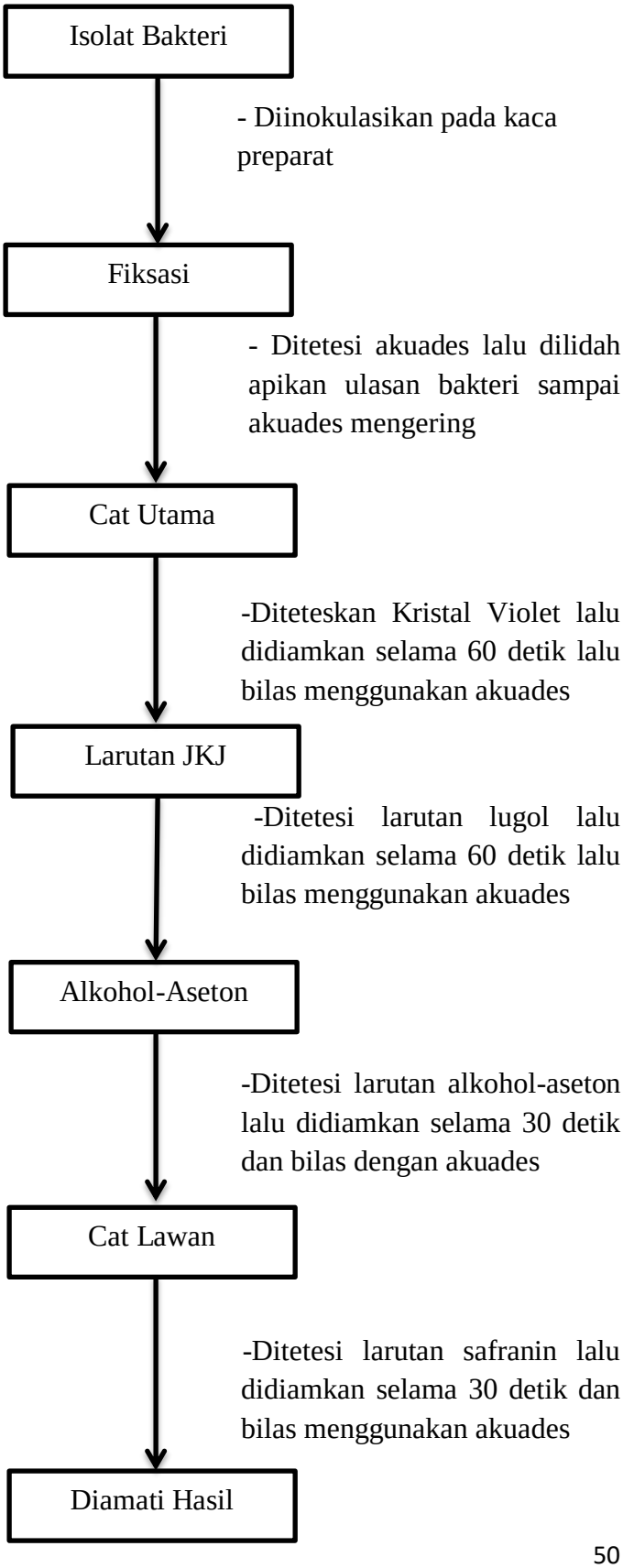
LAMPIRAN

Lampiran 1. Skema Penelitian

Lampiran 2. Skema Pengecatan Gram



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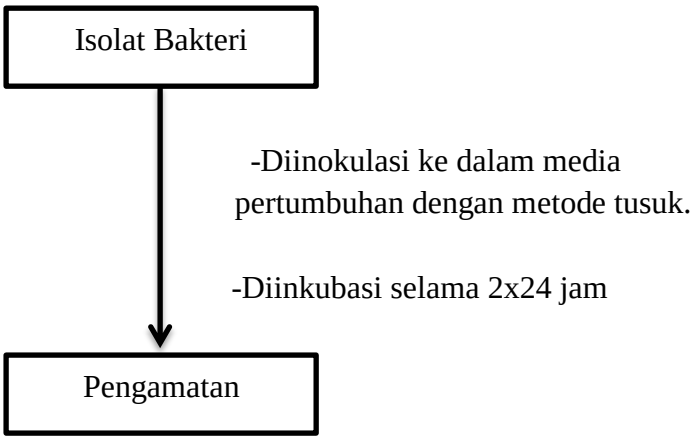

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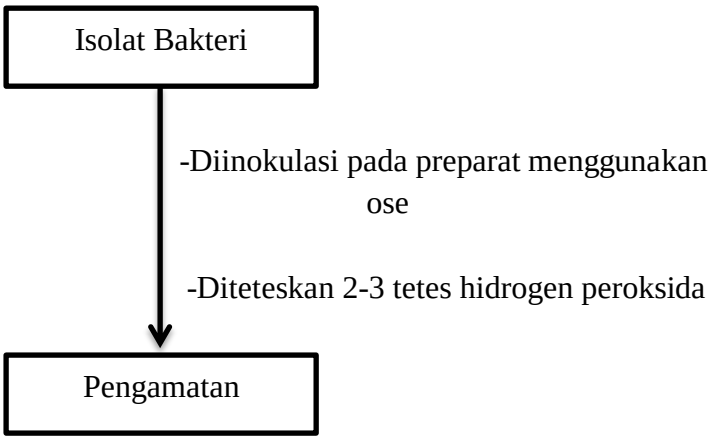
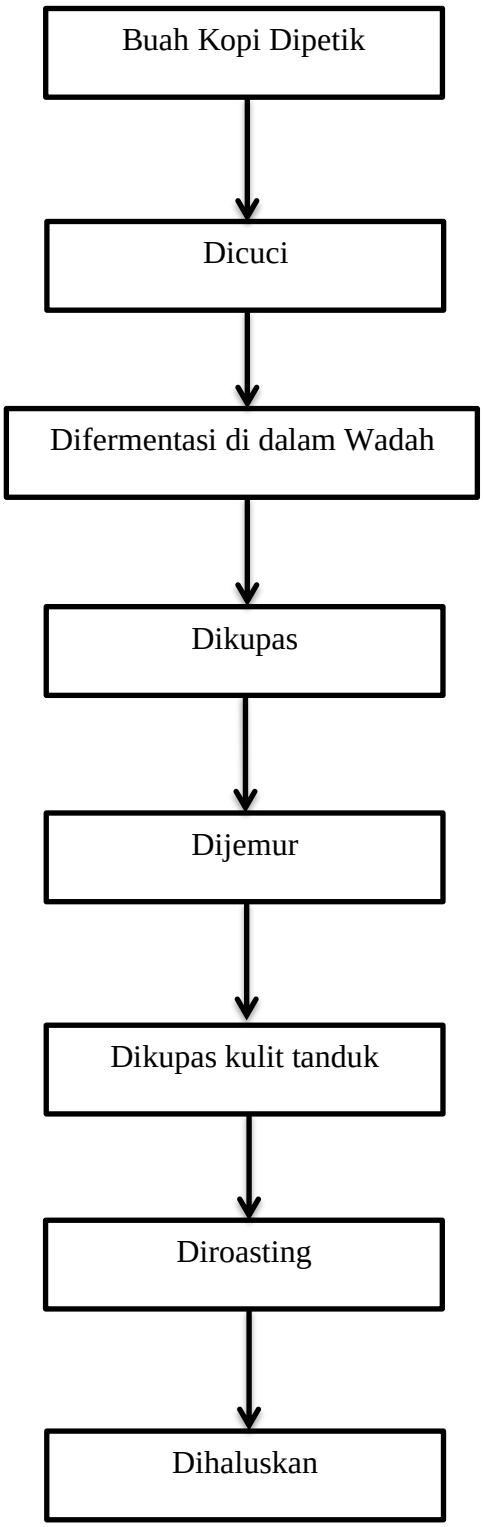
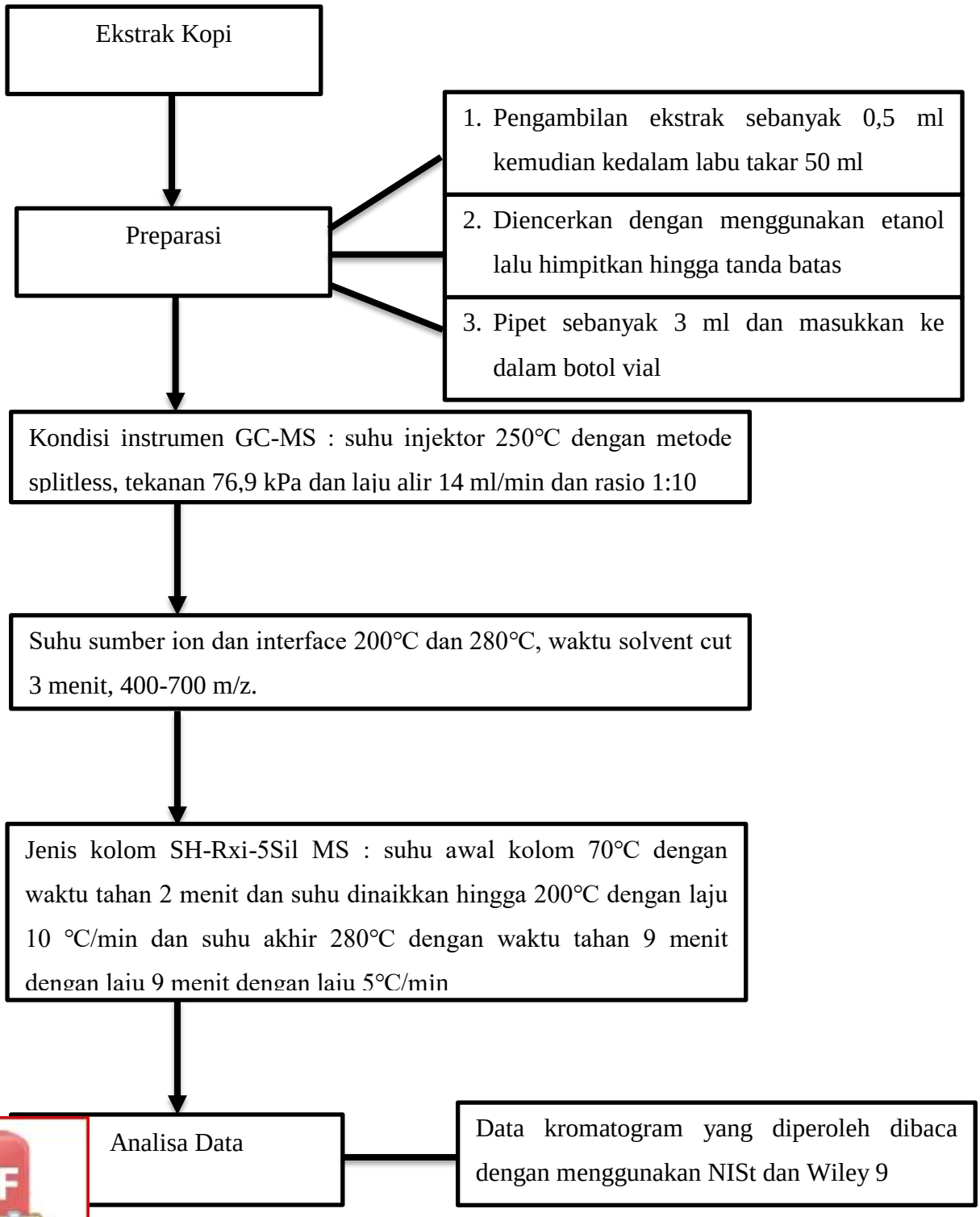


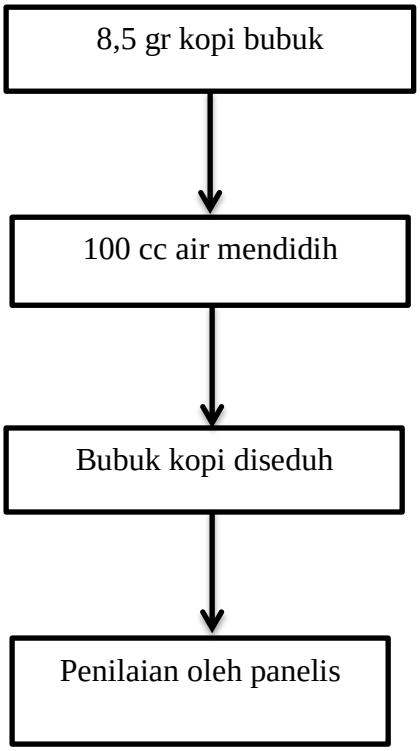
Lampiran 5. Skema Fermentasi Kopi



Lampiran 6. Skema Uji GC-MS



Lampiran 7. Uji Organoleptik



Meliputi:

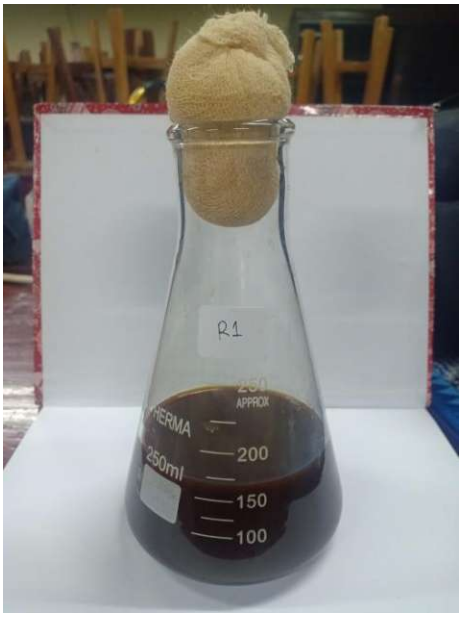
1. Rasa
2. Aroma
3. Warna

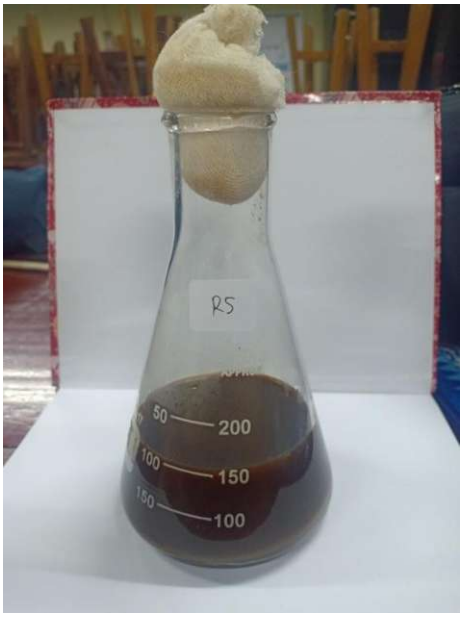
Lampiran 8. Penanganan pasca panen kopi

Pemetikan

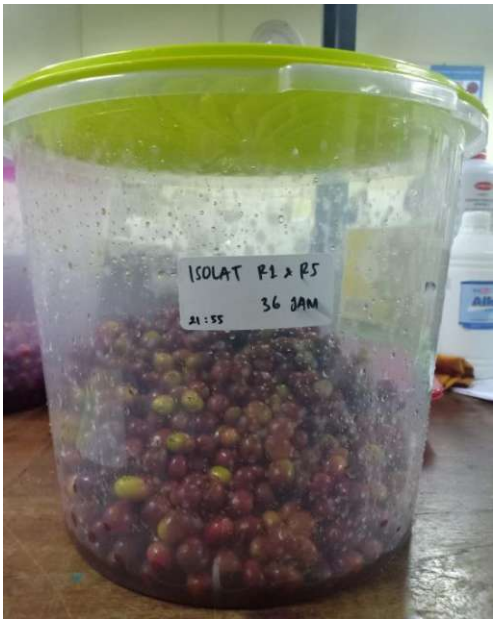
Pengumpulan

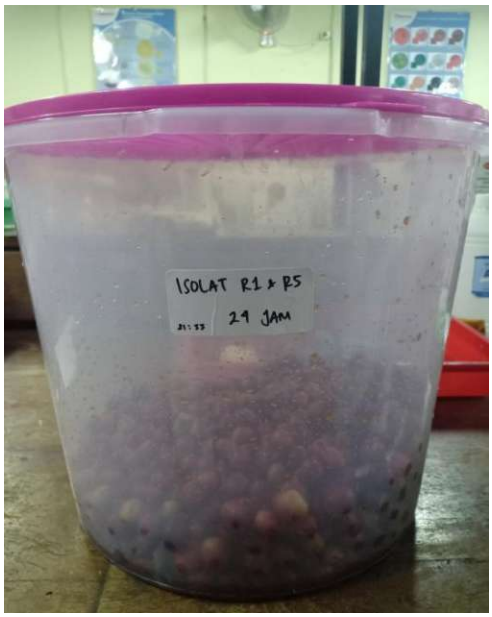
Lampiran 9. Kultur bakteri pada media kulit kopi





Lampiran 10. Proses fermentasi kopi





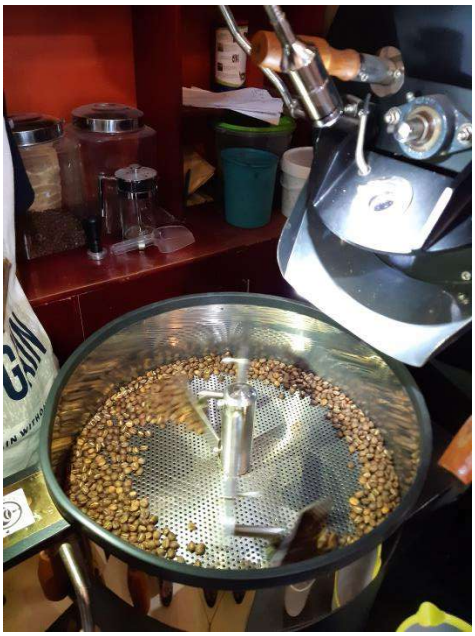
Proses Fermentasi

Lampiran 11. Penanganan setelah fermentasi kopi

Pengupasan Kulit Luar

Pengeringan

Pengelupasan Kulit Tanduk



Proses Roasting Biji Kopi

Biji Kopi Setelah Diroasting

Bubuk Kopi

Lampiran 12. Proses maserasi

Lampiran 13. Hasil uji GC-MS

DATA REPORT GCMS-QP2010 ULTRA SHIMADZU

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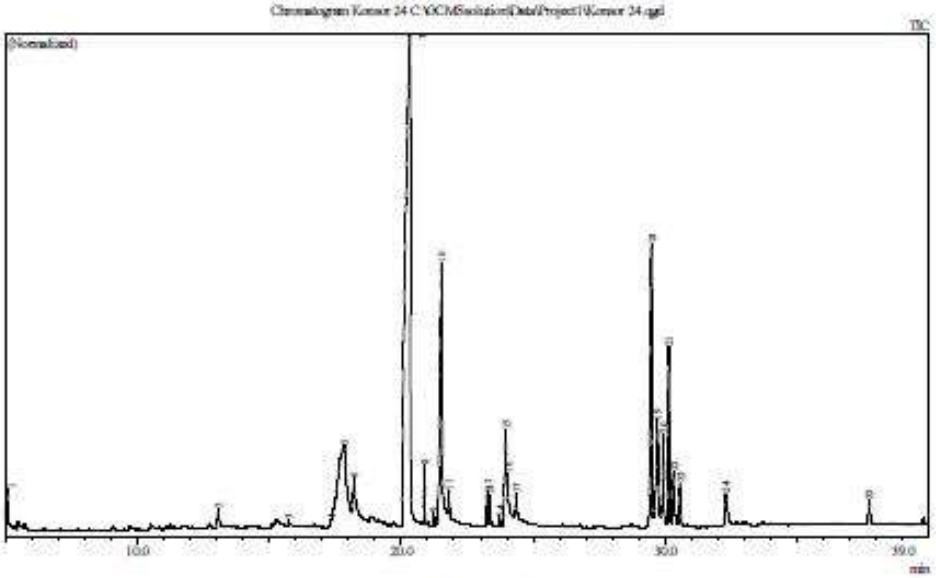

Peak Report TIC

Peak#	R.Time	Area	Area%	A/H	Name
1	5.088	3510716	0.81	3.69	3-Furanmethanol
2	13.071	1961868	0.46	3.63	2-METHOXY-4-VINYLPHENOL
3	15.720	340326	0.08	1.85	PHENOL, 2,4-BIS(1,1-DIMETHYLETHYL)-
4	17.358	4436870	1.03	22.48	ADIPIC ACID DIISOPROPYL ESTER
5	17.854	48937756	11.35	21.32	1,3,4,5-TETRAHYDROXY-CYCLOHEXANECARBOXYLIC ACID
6	18.218	7740766	1.80	6.49	1H-PURINE-2,6-DIONE, 3,7-DIHYDRO-1,3,7-TRIMETHYL-
7	20.329	175282848	40.66	11.89	1H-PURINE-2,6-DIONE, 3,7-DIHYDRO-1,3,7-TRIMETHYL-
8	20.883	3955322	0.92	2.23	HEXADECANOIC ACID, METHYL ESTER
9	21.236	1343533	0.31	3.75	Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)-
10	21.538	48574064	11.27	6.19	l-(+)-Ascorbic acid 2,6-dihexadecanoate
11	21.807	3433631	0.80	3.92	HEXADECANOIC ACID, ETHYL ESTER
12	23.267	2664904	0.62	2.50	9,12-OCTADECADIENOIC ACID (Z,Z)-, METHYL ESTER
13	23.361	2084479	0.48	2.42	9-OCTADECENOIC ACID, METHYL ESTER
14	23.738	738807	0.17	2.42	Octadecanoic acid, methyl ester
15	23.956	12841595	2.98	4.47	9,12-Octadecadienoic acid (Z,Z)-
16	24.028	7855496	1.82	5.10	OCTADEC-9-ENOIC ACID
17	24.353	3839831	0.89	4.89	Octadecanoic acid
18	29.477	37428995	8.68	4.42	2,3-DIMETHYLBENZOFURAN
19	29.705	16735010	3.88	5.34	Bicyclo[4.2.0]oct-1-ene, exo-7-(1-cyclohexen-1-yl)-
20	29.931	10282570	2.39	3.80	2,3-DIMETHYLBENZOFURAN
21	30.138	19430883	4.51	3.64	PREGN-5-EN-20-ONE, 3-(ACETYLOXY)-, (3.BETA.)-
22	30.306	4857862	1.13	3.33	PREGN-5-EN-20-ONE, 3-(ACETYLOXY)-, (3.BETA.)-
23	30.563	4447253	1.03	3.52	PREGN-5-EN-20-ONE, 3-(ACETYLOXY)-, (3.BETA.)-
24	32.289	5407159	1.25	5.78	9,12-Octadecadienoic acid (Z,Z)-, 2,3-dihydroxypropyl ester
25	37.725	2974638	0.69	4.22	2H-1-BENZOPYRAN-6-OL, 3,4-DIHYDRO-2,5,8-TRIMETHYL-2-(4,8,12-TRIMETI
		431107182	100.00		

Hasil GC-MS Sampel Konsorsium Bakteri Probiotik 24 jam

DATA REPORT GCMS-QP2010 ULTRA SHIMADZU

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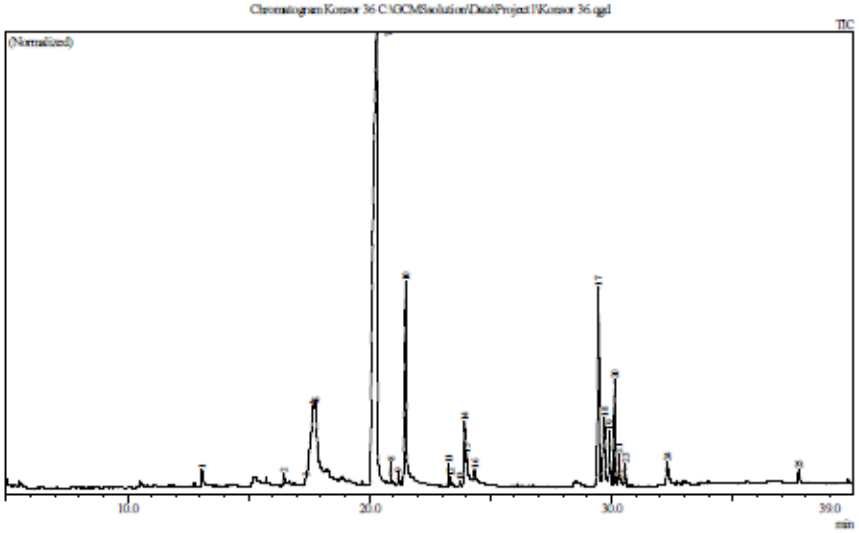


Peak Report TIC

Peak#	R.Time	Area	Area%	A/H	Name
1	13.076	2060354	0.62	4.09	2-METHOXY-4-VINYLPHENOL
2	16.463	1112830	0.34	3.22	Caffeine
3	17.375	632718	0.19	4.62	4,5-DECANEDIOL, 6-ETHYL-
4	17.650	21017580	6.36	9.45	1H-PURINE-2,6-DIONE, 3,7-DIHYDRO-1,3,7-TRIMETHYL-
5	17.733	7648367	2.32	3.46	1,3,4,5-TETRAHYDROXY-CYCLOHEXANECARBOXYLIC ACID
6	17.782	13682538	4.14	6.06	1H-PURINE-2,6-DIONE, 3,7-DIHYDRO-1,3,7-TRIMETHYL-
7	20.313	165945265	50.23	12.11	1H-PURINE-2,6-DIONE, 3,7-DIHYDRO-1,3,7-TRIMETHYL-
8	20.879	1555361	0.47	2.27	HEXADECANOIC ACID, METHYL ESTER
9	21.200	1365928	0.41	3.42	Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)-
10	21.500	28641925	8.67	4.74	l-(+)-Ascorbic acid 2,6-dihexadecanoate
11	23.264	1646338	0.50	2.53	9,12-OCTADECADIENOIC ACID (Z,Z)-, METHYL ESTER
12	23.358	563166	0.17	2.40	9-Octadecenoic acid (Z)-, methyl ester
13	23.735	355028	0.11	2.46	Octadecanoic acid, methyl ester
14	23.931	7559593	2.29	3.89	9,12-Octadecadienoic acid (Z,Z)-
15	24.008	5510152	1.67	5.77	9-Octadecenoic acid, (E)-
16	24.338	2604978	0.79	6.01	Octadecanoic acid
17	29.453	24819406	7.51	4.08	2,3-DIMETHYLBENZOFURAN
18	29.693	11959016	3.62	5.67	ISOLONGIFOLEN, 4,5-DEHYDRO-
19	29.920	6631819	2.01	3.95	1H-INDENE, 2,3-DIHYDRO-4,7-DIMETHYL-
20	30.123	11792095	3.57	3.63	PREGN-5-EN-20-ONE, 3-(ACETYLOXY)-, (3.BETA.)-
21	30.298	3910636	1.18	3.99	PREGN-5-EN-20-ONE, 3-(ACETYLOXY)-, (3.BETA.)-
22	30.400	679144	0.21	3.93	2-Methyl-cis-7,8-epoxyoctadecane
23	30.555	2555344	0.77	3.71	PREGN-5-EN-20-ONE, 3-(ACETYLOXY)-, (3.BETA.)-
24	32.286	4287918	1.30	6.50	9,12-OCTADECADIENOIC ACID (Z,Z)-, 2,3-DIHYDROXYPROPYL ESTER
25	37.725	1832860	0.55	4.64	2H-1-BENZOPYRAN-6-OL, 3,4-DIHYDRO-2,5,8-TRIMETHYL-2-(4,8,12-TRIMETI
		330370559	100.00		

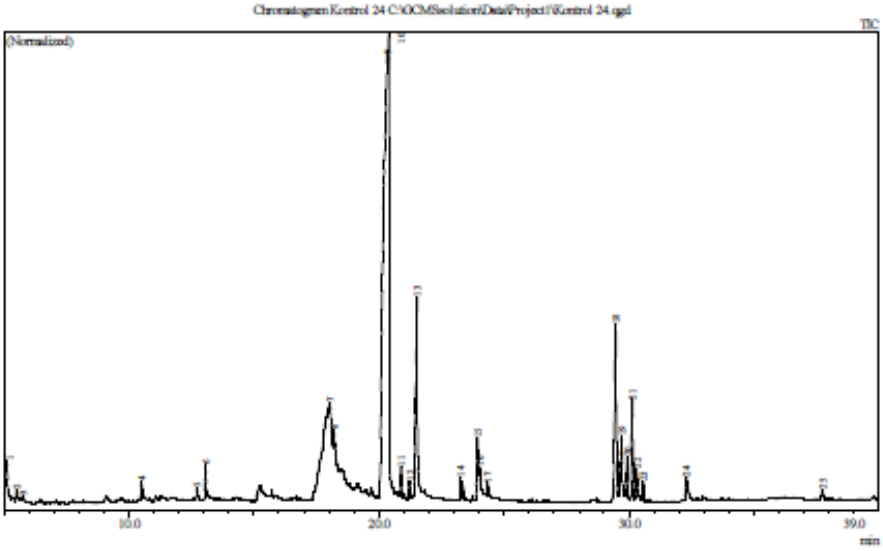
Hasil GC-MS Sampel Konsorsium Bakteri Probiotik 36 jam

DATA REPORT GCMS-QP2010 ULTRA SHIMADZU

Sample Information

Analyzed by	: Admin
Analyzed	: 29/07/2020 8:08:04 PM
Sample Type	: Unknown
Level #	: 1
Sample Name	: Kontrol 24
Sample ID	:
IS Amount	: [1]=1
Sample Amount	: 1

Chromatogram Kontrol 24 C:\GCMSsolution\Data\Project1\Kontrol 24.qgd



Peak Report TIC

Peak#	R.Time	Area	Area%	A/H	Name
1	5.109	6142065	1.38	5.25	3-Furanmethanol
2	5.507	1860187	0.42	4.49	2-FURANMETHANOL
3	5.765	1452581	0.33	6.25	PYRAZINE, 2,6-DIMETHYL-
4	10.500	2868430	0.65	5.01	4H-Pyran-4-one, 2,3-dihydro-3,5-dihydroxy-6-methyl-
5	12.725	1521134	0.34	3.84	5-(Hydroxymethyl)-2-(dimethoxymethyl)furan
6	13.058	3958663	0.89	3.45	2-METHOXY-4-VINYLPHENOL
7	18.033	62796553	14.13	24.32	1,3,4,5-TETRAHYDROXY-CYCLOHEXANECARBOXYLIC ACID
8	18.195	9516863	2.14	6.20	1H-PURINE-2,6-DIONE, 3,7-DIHYDRO-1,3,7-TRIMETHYL-
9	20.333	179491251	40.40	12.43	1H-PURINE-2,6-DIONE, 3,7-DIHYDRO-1,3,7-TRIMETHYL-
10	20.404	53417719	12.02	3.54	1H-PURINE-2,6-DIONE, 3,7-DIHYDRO-1,3,7-TRIMETHYL-
11	20.887	2233559	0.50	2.23	HEXADECANOIC ACID, METHYL ESTER
12	21.224	1889646	0.43	3.28	Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)-
13	21.516	31859430	7.17	4.86	l-(+)-Ascorbic acid 2,6-dihexadecanoate
14	23.269	1965109	0.44	2.51	9,12-OCTADECADIENOIC ACID (Z,Z)-, METHYL ESTER
15	23.942	8242859	1.86	4.00	9,12-Octadecadienoic acid (Z,Z)-
16	24.017	6215002	1.40	5.71	9-Octadecenoic acid, (E)-
17	24.345	2975689	0.67	5.78	Octadecanoic acid
18	29.459	23783304	5.35	4.08	2,3-DIMETHYLBENZOFURAN
19	29.696	12793507	2.88	5.97	ISOLONGIFOLEN, 4,5-DEHYDRO-
20	29.924	5588906	1.26	3.87	1H-INDENE, 2,3-DIHYDRO-4,7-DIMETHYL-
21	30.128	11631140	2.62	3.50	PREGN-5-EN-20-ONE, 3-(ACETYLOXY)-, (3.BETA.)-
22	30.303	3311949	0.75	3.40	PREGN-5-EN-20-ONE, 3-(ACETYLOXY)-, (3.BETA.)-
23	30.561	2222465	0.50	3.53	PREGN-5-EN-20-ONE, 3-(ACETYLOXY)-, (3.BETA.)-
24	32.289	5033629	1.13	6.55	9,12-Octadecadienoic acid (Z,Z)-, 2,3-dihydroxypropyl ester
25	37.729	1536027	0.35	4.46	2H-1-BENZOPYRAN-6-OL, 3,4-DIHYDRO-2,5,8-TRIMETHYL-2-(4,8,12-TRIMETI
		444307667	100.00		

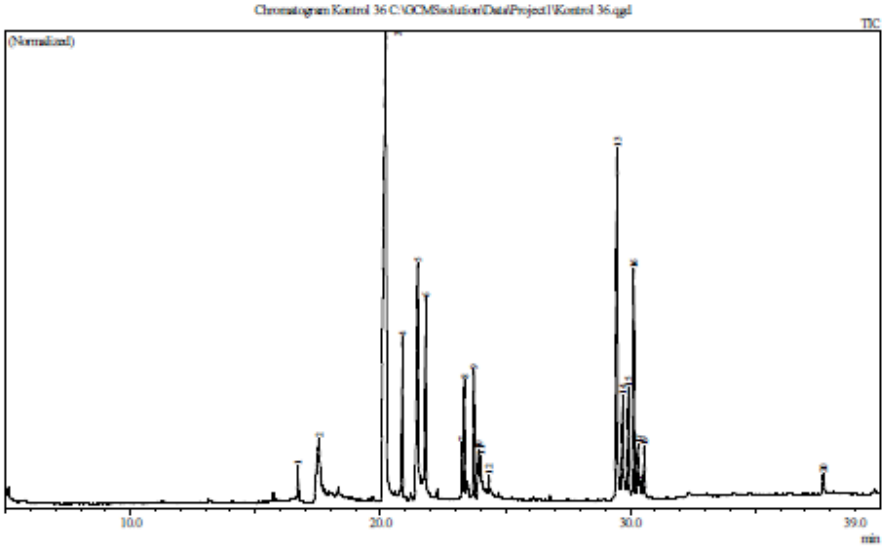
Hasil GC-MS Sampel Kontrol 24 Jam

DATA REPORT GCMS-QP2010 ULTRA SHIMADZU

Sample Information

Analyzed by	: Admin
Analyzed	: 29/07/2020 7:14:39 PM
Sample Type	: Unknown
Level #	: 1
Sample Name	: Kontrol 36
Sample ID	:
IS Amount	: [1]=1
Sample Amount	: 1

Chromatogram Kontrol 36 C:\GCMSsolution\Data\Project1\Kontrol 36.qgd



Peak Report TIC

Peak#	R.Time	Area	Area%	A/H	Name
1	16.703	1595217	0.57	1.96	Propanoic acid, 2-methyl-, 1-(1,1-dimethylethyl)-2-methyl-1,3-propanediyl ester
2	17.541	14769102	5.23	10.24	1,3,4,5-TETRAHYDROXY-CYCLOHEXANECARBOXYLIC ACID
3	20.226	92245876	32.68	8.20	1H-PURINE-2,6-DIONE, 3,7-DIHYDRO-1,3,7-TRIMETHYL-
4	20.881	8843677	3.13	2.33	HEXADECANOIC ACID, METHYL ESTER
5	21.497	27370599	9.70	4.83	n-Hexadecanoic acid
6	21.812	15976296	5.66	3.36	HEXADECANOIC ACID, ETHYL ESTER
7	23.271	3530550	1.25	2.64	9,12-OCTADECADIENOIC ACID (Z,Z)-, METHYL ESTER
8	23.365	7470856	2.65	2.60	9-OCTADECENOIC ACID, METHYL ESTER
9	23.744	8670813	3.07	2.78	Octadecanoic acid, methyl ester
10	23.926	3919422	1.39	3.52	9,12-Octadecadienoic acid (Z,Z)-
11	24.008	4080640	1.45	4.36	OCTADEC-9-ENOIC ACID
12	24.346	1116389	0.40	2.78	9-OCTADECENOIC ACID (Z)-
13	29.480	37804595	13.39	4.46	2,3-DIMETHYLBENZOFURAN
14	29.705	11281425	4.00	4.61	Bicyclo[4.2.0]oct-1-ene, exo-7-(1-cyclohexen-1-yl)-
15	29.933	10319845	3.66	3.88	2,3-DIMETHYLBENZOFURAN
16	30.140	20727516	7.34	3.74	PREGN-5-EN-20-ONE, 3-(ACETYLOXY)-, (3.BETA.)-
17	30.307	4964625	1.76	3.93	PREGN-5-EN-20-ONE, 3-(ACETYLOXY)-, (3.BETA.)-
18	30.408	1139761	0.40	4.25	Phenanthro[3,2-b]furan-7,11-dione, 1,2,3,4,8,9-hexahydro-4,4,8-trimethyl-, (+)-
19	30.564	4626190	1.64	3.76	PREGN-5-EN-20-ONE, 3-(ACETYLOXY)-, (3.BETA.)-
20	37.732	1796649	0.64	4.04	2H-1-BENZOPYRAN-6-OL, 3,4-DIHYDRO-2,5,8-TRIMETHYL-2-(4,8,12-TRIMETI
		282250043	100.00		

Hasil GC-MS Sampel Kontrol 36 Jam

Lampiran 14. Uji organoleptik

Proses Pengujian Organoleptik