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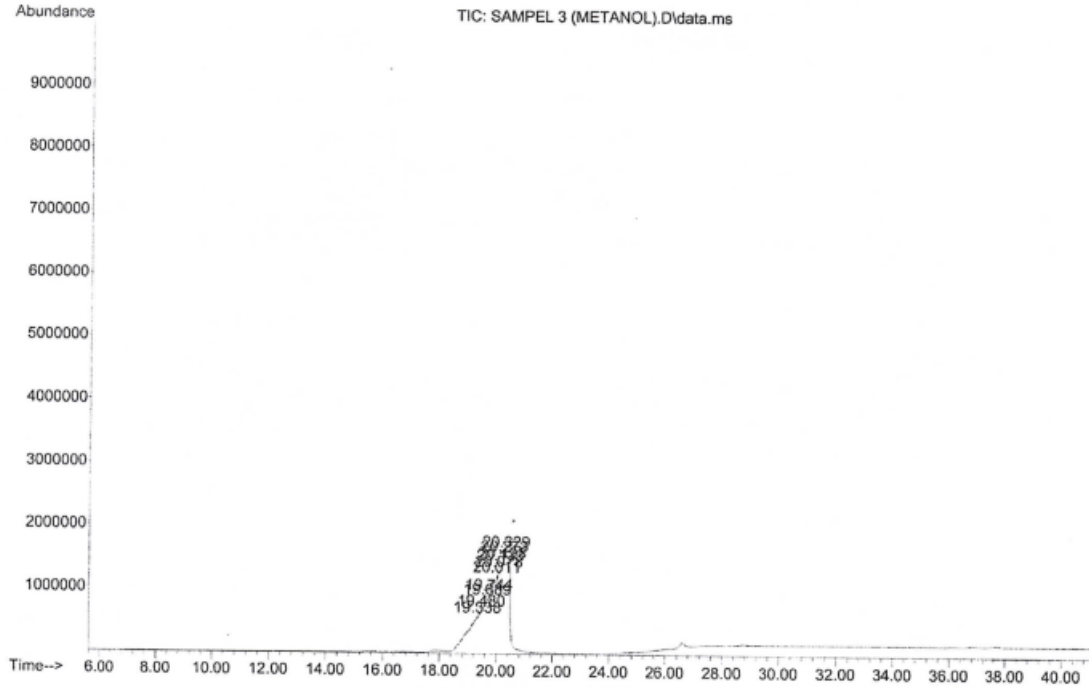
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LAMPIRAN

Lampiran 1. Hasil identifikasi GC-MS menggunakan pelarut metanol pada ekstrak propagul buah mangrove *Rhizophora mucronata*

File :C:\msdchem\1\data\MHS 2018\000000\SAMPEL 3 (METANOL).D
Operator : USMAN
Acquired : 19 Jul 2018 19:06 using AcqMethod STERIOD 30.M
Instrument : GCMSD
Sample Name:
Misc Info :
Vial Number: 1



Library Search Report

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Search Libraries: C:\Database\Wiley 9.L Minimum Quality: 0

Unknown Spectrum: Apex
Integration Events: ChemStation Integrator - events.e

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
1	19.336	-6.11	C:\Database\Wiley 9.L Propane, 1-(1-methylethoxy)- (CAS) \$\$ Propyl isopropyl ether	12771	000627-08-7	53
			1-Butene, 1-(methylthio)-, (Z)- \$\$ (1Z)-1-(Methylsulfanyl)-1-butene	12407	017414-15-2	47
			MOME INOSITOL	162404	000000-00-0	43
2	19.480	9.52	C:\Database\Wiley 9.L Propane, 1-(1-methylethoxy)- (CAS) \$\$ Propyl isopropyl ether	12771	000627-08-7	59
			1-Butene, 1-(methylthio)-, (Z)- \$\$ (1Z)-1-(Methylsulfanyl)-1-butene	12407	017414-15-2	46
			MOME INOSITOL	162404	000000-00-0	43
3	19.686	17.25	C:\Database\Wiley 9.L Propane, 1-(1-methylethoxy)- (CAS) \$\$ Propyl isopropyl ether	12771	000627-08-7	59
			2-methyl-1-thia-cyclopentane \$\$ 2 - methyl - 1 - thia - cyclopentane	12403	999012-40-3	50
			1-Butene, 1-(methylthio)-, (Z)- \$\$ (1Z)-1-(Methylsulfanyl)-1-butene	12407	017414-15-2	46
4	19.743	6.09	C:\Database\Wiley 9.L Propane, 1-(1-methylethoxy)- (CAS) \$\$ Propyl isopropyl ether	12771	000627-08-7	59
			2-methyl-1-thia-cyclopentane \$\$ 2 - methyl - 1 - thia - cyclopentane	12404	999012-40-4	58
			2-methyl-1-thia-cyclopentane \$\$ 2 - methyl - 1 - thia - cyclopentane	12403	999012-40-3	50
5	20.012	28.55	C:\Database\Wiley 9.L Propane, 1-(1-methylethoxy)- (CAS) \$\$ Propyl isopropyl ether	12771	000627-08-7	59
			2-methyl-1-thia-cyclopentane \$\$ 2 - methyl - 1 - thia - cyclopentane	12404	999012-40-4	47
			1-Butene, 1-(methylthio)-, (Z)- \$\$ (1Z)-1-(Methylsulfanyl)-1-butene	12407	017414-15-2	43
6	20.080	9.97	C:\Database\Wiley 9.L Propane, 1-(1-methylethoxy)- (CAS) \$\$ Propyl isopropyl ether	12771	000627-08-7	59
			1-Butene, 1-(methylthio)-, (Z)- \$\$ (1Z)-1-(Methylsulfanyl)-1-butene	12407	017414-15-2	46
			9,11-Octadecadiynoic acid, 8-hydro xy-, methyl ester	473971	006084-80-6	45
7	20.131	10.44	C:\Database\Wiley 9.L Propane, 1-(1-methylethoxy)- (CAS) \$\$ Propyl isopropyl ether	12771	000627-08-7	59
			1-Butene, 1-(methylthio)-, (Z)- \$\$ (1Z)-1-(Methylsulfanyl)-1-butene	12407	017414-15-2	46
			Ethane, isothiocyanato- (CAS) \$\$ E thyl isothiocyanate \$\$ Ethyl musta rd oil	5498	000542-85-8	43
8	20.199	7.01	C:\Database\Wiley 9.L Propane, 1-(1-methylethoxy)- (CAS) \$\$ Propyl isopropyl ether	12771	000627-08-7	59
			2-methyl-1-thia-cyclopentane \$\$ 2	12403	999012-40-3	50

KHAT.M Thu Sep 27 14:35:57 2018

Page: 1

Library Search Report

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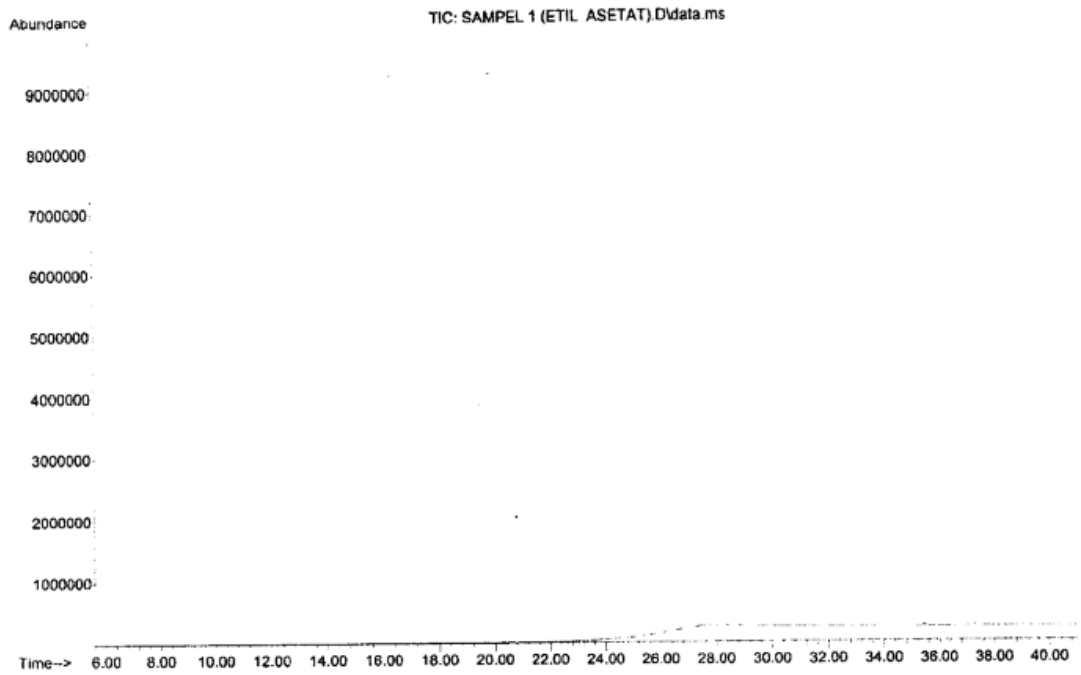
Search Libraries: C:\Database\Wiley 9.L Minimum Quality: 0

Unknown Spectrum: Apex
 Integration Events: ChemStation Integrator - events.e

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			- methyl - 1 - thia - cyclopentane			
			2-methyl-1-thia-cyclopentane \$\$ 2	12404	999012-40-4	49
			- methyl - 1 - thia - cyclopentane			
9	20.274	10.19	C:\Database\Wiley 9.L			
			Propane, 1-(1-methylethoxy)- (CAS)	12771	000627-08-7	59
			\$\$ Propyl isopropyl ether			
			1-Butene, 1-(methylthio)-, (2)- \$\$	12407	017414-15-2	46
			(1Z)-1-(Methylsulfanyl)-1-butene			
			MOME INOSITOL	162404	000000-00-0	43
10	20.331	7.08	C:\Database\Wiley 9.L			
			Propane, 1-(1-methylethoxy)- (CAS)	12771	000627-08-7	59
			\$\$ Propyl isopropyl ether			
			2-methyl-1-thia-cyclopentane \$\$ 2	12403	999012-40-3	50
			- methyl - 1 - thia - cyclopentane			
			1-Butene, 1-(methylthio)-, (Z)- \$\$	12407	017414-15-2	43
			(1Z)-1-(Methylsulfanyl)-1-butene			

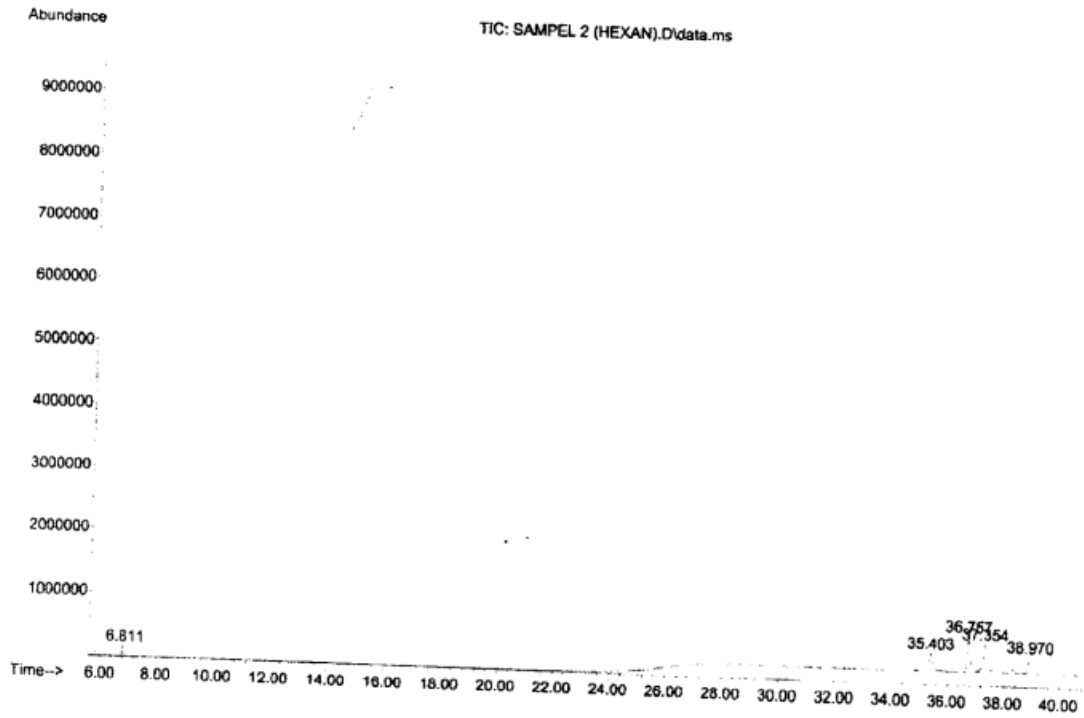
Lampiran 2. Hasil identifikasi GC-MS menggunakan pelarut etil asetat pada ekstrak propagul buah mangrove *Rhizophora mucronata*

File :C:\msdchem\1\data\MHS 2018\0719\01\SAMPEL 1 (ETIL ASETAT).D
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Instrument : GCMSD
Sample Name:
Misc Info :
Vial Number: 1



Lampiran 3. Hasil identifikasi GC-MS menggunakan pelarut n-heksan pada ekstrak propagul buah mangrove *Rhizophora mucronata*

File : C:\msdchem\1\data\MRS 2018\... \SAMPEL 2 (HEXAN).D
Operator : USMAN
Acquired : 19 Jul 2018 18:06 using AcqMethod STERIOD 30.M
Instrument : GCMSD
Sample Name :
Misc Info :
Vial Number: 1



Library Search Report

Data Path : C:\msdchem\1\data\MHS 2018\000001\
Data File : SAMPEL 2 (HEXAN).D
Acq On : 19 Jul 2018 18:06
Operator : USMAN
Sample :
Misc :
ALS Vial : 1 Sample Multiplier: 1

Search Libraries: C:\Database\Wiley 9.L Minimum Quality: 0

Unknown Spectrum: Apex
Integration Events: ChemStation Integrator - events.e

P<#	RT	Area#	Library/ID	Ref#	CAS#	Qual
1	6.813	3.72	C:\Database\Wiley 9.L 2-Pentene, 4,4-dimethyl-, (E)- \$\$ (E)-4,4-Dimethyl-2-pentene Oxalic acid, cyclohexyl ethyl este Cyclohexane, bromo- (CAS) \$\$ Bromo cyclohexane \$\$ BROMO-CYCLOHEXANE	9621 179585 89006	000690-08-4 999179-58-5 000109-85-0	78 40 40
2	35.406	15.77	C:\Database\Wiley 9.L SILIKONFETT SILIKONFETT SILICONE GREASE, SILICONFETT	796148 796591 796139	000000-00-0 000000-00-0 000000-00-0	43 43 43
3	36.757	35.37	C:\Database\Wiley 9.L (23S)-ethylcholest-5-en-3.beta.-ol Stigmast-5-en-3-ol, (3.beta.)- (CA S) \$\$ Rhamnol \$\$ Cinchol \$\$ Cupreo 24.XI.-ETHYLCHOLEST-5-EN-3.BETA.-O L \$\$ 24.xi.-Stigmast-5-en-3.beta.- ol (CAS)	679166 679099 679129	113845-28-6 000083-46-5 019044-06-5	96 96 95
4	37.351	26.96	C:\Database\Wiley 9.L Alnulin \$\$ d-Friedocolean-14-en-3-o l, (3.beta.)- (CAS) \$\$ Skimmiol \$\$ Taraxerol Taraxasterol \$\$ Urs-20(30)-en-3-ol # 1,7-Dimethyltricyclo[6.2.2.0(4,9)] dodec-6-en-3-one	692651 692775 191258	000127-22-0 001059-14-9 999191-25-8	64 40 38
5	38.971	18.18	C:\Database\Wiley 9.L N-Cyano-N',N',N'',N'''-tetramethyl- 1,3,5-triazinetriamine 1-Adamantanecarboxamide, N,N-dimet hyl-, \$\$ N,N-Dimethyl-1-adamantane carboxamide 1,1,1,3,5,5,5-Heptamethyltrisiloxa ne \$\$ Bis(trimethylsiloxy)methylsi lane	198244 199514 238341	074150-88-2 001502-00-7 001873-86-7	55 46 42

Lampiran 4. Hasil Perhitungan LC_{50} untuk ekstrak propagul buah mangrove jenis *R. mucronata* dengan menggunakan pelarut metanol

LC50 METANOL

Intercept	-8,00667
<u>X Variable 1</u>	<u>5,605</u>

$$y = ax + b$$

$$y = 5,61x + (-8,01)$$

$$5 = 5,61x - 8,01$$

$$5 + 8,01 = 5,61x$$

$$x = (5 + 8,01) / 5,61 \quad 2,319073$$

$$x = 2,32$$

$$LC50 = \text{antilog } x$$

$$LC50 = \text{antilog } 2,32 \quad 208,9296$$

$$LC50 = 208,93$$

SUMMARY
OUTPUT

<i>Regression Statistics</i>	
Multiple R	0,976237407
R Square	0,953039474
Adjusted R Square	0,906078949
Standard Error	1,759550132
Observations	3

ANOVA

	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
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Regression	1	62,83205	62,83205	20,29448054	0,139061147
Residual	1	3,096016667	3,096016667		
Total	2	65,92806667			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95,0%</i>	<i>Upper 95,0%</i>
Intercept	-8,006666667	2,687757223	-2,978939689	0,206182028	-42,15786022	26,14452689	-42,15786022	26,14452689
X Variable 1	5,605	1,24418983	4,504939571	0,139061147	-10,20393071	21,41393071	-10,20393071	21,41393071

Lampiran 5. Hasil Perhitungan LC_{50} untuk ekstrak propagul buah mangrove jenis *R. mucronata* dengan menggunakan pelarut n-heksan

LC50 N-HEKSAN

Intercept -7,87333
X Variable 1 3,565

$y = ax + b$

$y = 3,57x + (-7,87)$

$5 = 3,57x - 7,87$

$5 + 7,87 = 3,57x$

$x = (5 + 7,87) / 3,57 = 3,605042$

O

LC50 = antilog x

LC50 = antilog 3,61 4073,803

LC50 = 4073,80

SUMMARY
 OUTPUT

<i>Regression Statistics</i>	
Multiple R	0,866025404
R Square	0,75
Adjusted R Square	0,5
Standard Error	2,910810311
Observations	3

ANOVA

	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
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Regression	1	25,41845	25,41845	3	0,333333333
Residual	1	8,472816667	8,472816667		
Total	2	33,89126667			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95,0%</i>	<i>Upper 95,0%</i>
Intercept	-7,873333333	4,446336195	-1,770746293	0,327276429	-64,36939135	48,62272468	-64,36939135	48,62272468
X Variable 1	3,565	2,05825371	1,732050808	0,333333333	-22,58759303	29,71759303	-22,58759303	29,71759303

Lampiran 6. Hasil Perhitungan LC_{50} untuk ekstrak propagul buah mangrove jenis *R. mucronata* dengan menggunakan pelarut etil asetat

LC50 ETIL
ASETAT

Intercept	-10,5933333
<u>X Variable 1</u>	<u>5,605</u>

$$y = ax + b$$

$$y = 5,61x + (-10,59)$$

$$5 = 5,61x - 10,59$$

$$5 + 10,59 = 5,61x$$

$$x = (5 + 10,59) / 5,61 \quad 2,778966132$$

$$x = 2,79$$

LC50 = antilog x

LC50 = antilog

2,79	616,5950019
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LC50 = 616,59

SUMMARY
OUTPUT

<i>Regression Statistics</i>	
Multiple R	0,866025404
R Square	0,75
Adjusted R Square	0,5
Standard Error	4,576463336
Observations	3

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	62,83205	62,83205	3	0,333333333
Residual	1	20,94401667	20,94401667		
Total	2	83,77606667			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95,0%</i>	<i>Upper 95,0%</i>
Intercept	10,59333333	6,990663218	1,515354553	0,371347574	-99,4181314278	23146475	99,41813142	78,23146475
X Variable 1	5,605	3,236048259	1,732050808	0,333333333	-35,5128917146	72289171	35,51289171	46,72289171

Lampiran 7. Data Uji Toksisitas

Sampel	Kons ($\mu\text{g/ml}$)	Log Kons	Ulangan 1		Ulangan 2		Ulangan 3		Jumlah Larva Mati	Jumlah Larva Uji	% Mati	% Mortalitas perlakuan	% MORTALITAS KONTROL	% Mortalitas terkoreksi	Probit	LC ₅₀ $\mu\text{g/ml}$
			Mati	Hidup	Mati	Hidup	Mati	Hidup								
Ekstrak Metanol	1000	3	10	0	10	0	10	0	30	30	100	100	3	99,97	8,09	208,93
	100	2	5	5	6	4	0	10	11	30	37	37	3	36,64	4,64	
	10	1	0	10	0	10	0	10	0	30	0	0	3	-0,03	-3,12	
Ekstrak n- heksan	1000	3	2	8	2	8	1	9	5	30	17	17	3	16,64	4,01	4073,80
	100	2	0	10	0	10	0	10	0	30	0	0	3	-0,03	-3,12	
	10	1	0	10	0	10	0	10	0	30	0	0	3	-0,03	-3,12	
Ekstrak Etil asetat	1000	3	10	0	10	0	10	0	30	30	100	100	3	99,97	8,09	616,59
	100	2	0	10	0	10	0	10	0	30	0	0	3	-0,03	-3,12	
	10	1	0	10	0	10	0	10	0	30	0	0	3	-0,03	-3,12	