LAMPIRAN 1: Lembar Hasil Identifikasi Tumbuhan

LEMBAGA ILMU PENGETAHUAN INDONESIA
(INDONESIAN INSTITUTE OF SCIENCES)
PUSAT PENELITIAN BIOLOGI
(RESEARCH CENTER FOR BIOLOGY)
Cibinong Science Center, Jl. Raya Jakarta - Bogor KM. 46 Cibinong 16911
Telp. (+62 21) 87907636 - 87907604, Fax. 87907612
Website: www.biologi.lipi.go.id

Cibinong, 16 Agustus 2016

Nomor : [illegible]/IPH.1.01/If.07/VIII/2016
Lampiran : -
Perihal : *Hasil identifikasi/determinasi Tumbuhan*

Kepada Yth.
Bpk./Ibu/Sdr(i). **Ferdian**
Mhs. Tarumanagara
Jl. Letjend S. Parman No. 1
Jakarta - 11440

Dengan hormat,

Bersama ini kami sampaikan hasil identifikasi/determinasi tumbuhan yang Saudara kirimkan ke "Herbarium Bogoriense", Bidang Botani Pusat Penelitian Biologi-LIPI Bogor, adalah sebagai berikut :

No.	No. Kol.	Jenis	Suku
1	Ara	*Ficus auriculata* Lour.	Moraceae

Demikian, semoga berguna bagi Saudara.

Kepala Bidang Botani
Pusat Penelitian Biologi-LIPI,

Dr. Joeni Setijo Rahajoe
NIP. 196706241993032004

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LAMPIRAN 2: Lembar Persetujuan Etik

KOMISI ETIK RISET
FAKULTAS KEDOKTERAN
UNIVERSITAS TRISAKTI
Jalan Kyai Tapa,Grogol, (Kampus B) Jakarta 11440
Telp: (021) 5672731,5655786
Fax : (021) 5660706

PERSETUJUAN ETIK
Ethical Clearance
Nomor: 111/KER/FK/I/2017

Komisi Etik Riset Fakultas Kedokteran Universitas Trisakti setelah mempelajari dengan seksama dan mendengarkan penjelasan dari peneliti utama tentang kemungkinan adanya dampak etis terhadap subyek riset, masyarakat dan lingkungan, menetapkan penelitian dengan judul:

"PENGARUH DAUN ARA(*Ficus auriculata lour*) TERHADAP KADAR GLUTATION (GSH) PADA JANTUNG DAN DARAH TIKUS *Sprague dawley* YANG DIINDUKSI HIPOKSIA SISTEMIK KRONIK"

Peneliti Utama : Michael Chen
Lembaga/Tempat penelitian : FK Universitas Tarumanagara

Dinyatakan memenuhi persyaratan etik untuk dilaksanakan.

Jakarta, 30 Januari 2017

Ketua

Prof.DR.dr.Adi Hidayat,MS

Sekretaris

dr.Alvina.SpPK

LAMPIRAN 3: Hasil Analisa Gas Darah

Hasil Uji Mann-Whitney pO_2

Col.Stat	0A	0B	1A	1B	3A	3B	7A	7B
Mean	94.7	95.83	67.9	68.6	53.9	54.3	33.23	34.2
Std. Deviation	5.021	1.387	2.604	2.514	0.6481	1.934	0.8421	0.8042
Std. Error of Mean	2.511	0.6933	1.302	1.257	0.324	0.967	0.4211	0.4021
Mann-Whitney test			1A vs. 0A	1B vs. 0B	3A vs. 0A	3B vs. 0B	7A vs. 0A	7B vs. 0B
P value			0.0286	0.0286	0.0286	0.0286	0.0286	0.0286
Significantly different (P < 0.05)?			Yes	Yes	Yes	Yes	Yes	Yes
One- or two-tailed P value?			Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed

Hasil Uji Mann-Whitney pCO_2

Col. Stat	0A	0B	1A	1B	3A	3B	7A	7B
Mean	39.6	40.34	35.05	36.1	30.9	31.6	21.73	22.9
Std. Deviation	0.6481	0.8807	2.228	3.448	0.7394	0.6325	2.136	1.344
Std. Error of Mean	0.324	0.4403	1.114	1.724	0.3697	0.3162	1.068	0.6721
Mann-Whitney test			1A vs. 0A	1B vs. 0B	3A vs. 0A	3B vs. 0B	7A vs. 0A	7B vs. 0B
P value			0.0286	0.1143	0.0286	0.0286	0.0286	0.0286
Significantly different (P < 0.05)?			Yes	No	Yes	Yes	Yes	Yes
One- or two-tailed P value?			Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed

Hasil Uji Mann-Whitney pH

Col. Stat	0A	0B	1A	1B	3A	3B	7A	7B
Mean	7.425	7.43	7.408	7.42	7.393	7.398	7.365	7.37
Std. Deviation	0.04435	0.03916	0.025	0.05354	0.03403	0.04856	0.06245	0.08206
Std. Error of Mean	0.02217	0.01958	0.0125	0.02677	0.01702	0.02428	0.03122	0.04103
Mann-Whitney test			1A vs. 0A	1B vs. 0B	3A vs. 0A	3B vs. 0B	7A vs. 0A	7B vs. 0B
P value			0.8286	0.9714	0.3429	0.4	0.2	0.4
Significantly different (P < 0.05)?			No	No	No	No	No	No
One- or two-tailed P value?			Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed

Hasil Uji Mann-Whitney HCO_3

Col. Stat	0A	0B	1A	1B	3A	3B	7A	7B
Mean	24.5	24.8	20.85	22.1	18.35	19.1	13.33	13.8
Std. Deviation	1.374	1.189	0.4123	1.257	1.19	1.08	0.7632	0.7746
Std. Error of Mean	0.6868	0.5944	0.2062	0.6285	0.5951	0.5401	0.3816	0.3873
Mann-Whitney test			1A vs. 0A	1B vs. 0B	3A vs. 0A	3B vs. 0B	7A vs. 0A	7B vs. 0B
P value			0.0286	0.0286	0.0286	0.0286	0.0286	0.0286
Significantly different (P < 0.05)?			Yes	Yes	Yes	Yes	Yes	Yes
One- or two-tailed P value?			Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed

Hasil Uji Mann-Whitney Saturasi O_2

Col. Stat	0A	0B	1A	1B	3A	3B	7A	7B
Mean	93.65	94.5	76.83	78.6	57.1	58.5	50.96	51.8
Std. Deviation	1.578	2.947	5.151	5.039	2.077	3.962	2.624	2.546
Std. Error of Mean	0.789	1.474	2.576	2.52	1.038	1.981	1.312	1.273
Mann-Whitney test			1A vs. 0A	1B vs. 0B	3A vs. 0A	3B vs. 0B	7A vs. 0A	7B vs. 0B
P value			0.0286	0.0286	0.0286	0.0286	0.0286	0.0286
Significantly different (P < 0.05)?			Yes	Yes	Yes	Yes	Yes	Yes
One- or two-tailed P value?			Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed

Hasil Uji Mann-Whitney Hemoglobin

Col. Stat	0A	0B	1A	1B	3A	3B	7A	7B
Mean	121.2	120.8	150.5	138.2	163.6	161.2	200.8	194.9
Std. Deviation	5.463	2.09	9.68	4.043	3.171	2.232	3.938	6.279
Std. Error of Mean	2.731	1.045	4.84	2.022	1.585	1.116	1.969	3.14
Mann-Whitney test			1A vs. 0A	1B vs. 0B	3A vs. 0A	3B vs. 0B	7A vs. 0A	7B vs. 0B
P value			0.0286	0.0286	0.0286	0.0286	0.0286	0.0286
Significantly different (P < 0.05)?			Yes	Yes	Yes	Yes	Yes	Yes
One- or two-tailed P value?			Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed

Hasil Uji Mann-Whitney Hematokrit

Col. Stat	0A	0B	1A	1B	3A	3B	7A	7B
Mean	45.9	45.6	52.8	47.6	58.5	55.6	64.73	64.2
Std. Deviation	2.273	4.258	2.93	1.445	2.62	2.148	1.595	3.184
Std. Error of Mean	1.137	2.129	1.465	0.7223	1.31	1.074	0.7973	1.592
Mann-Whitney test			1A vs. 0A	1B vs. 0B	3A vs. 0A	3B vs. 0B	7A vs. 0A	7B vs. 0B
P value			0.0286	0.6857	0.0286	0.0286	0.0286	0.0286
Significantly different (P < 0.05)?			Yes	No	Yes	Yes	Yes	Yes
One- or two-tailed P value?			Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed

Hasil Uji Mann-Whitney Sel Darah Merah

Col. Stat	0A	0B	1A	1B	3A	3B	7A	7B
Mean	6.7	6.7	8.1	7.1	8.6	8.3	9.35	9.7
Std. Deviation	0.2944	0.216	0.2582	0.1414	0.8446	0.483	1.261	0.5354
Std. Error of Mean	0.1472	0.108	0.1291	0.07071	0.4223	0.2415	0.6305	0.2677
Mann-Whitney test			1A vs. 0A	1B vs. 0B	3A vs. 0A	3B vs. 0B	7A vs. 0A	7B vs. 0B
P value			0.0286	0.0571	0.0286	0.0286	0.0286	0.0286
Significantly different (P < 0.05)?			Yes	No	Yes	Yes	Yes	Yes
One- or two-tailed P value?			Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed

LAMPIRAN 4: Hasil Absorbansi dan Kadar GSH Darah

Perlakuan	Pemberian Dosis Ekstrak Daun Ara	Absorbansi	Rerata Absorbansi	Kadar GSH	Rerata Kadar GSH
Normoksia	A	0.029	0.030	0.436	0.485
		0.030		0.475	
		0.031		0.514	
		0.031		0.514	
	B	0.028	0.027	0.398	0.349
		0.026		0.320	
		0.027		0.359	
		0.026		0.320	
Hipoksia 1 Hari	A	0.028	0.026	0.398	0.320
		0.025		0.282	
		0.025		0.282	
		0.026		0.320	
	B	0.025	0.025	0.282	0.282
		0.026		0.320	
		0.025		0.282	
		0.024		0.243	
Hipoksia 3 Hari	A	0.023	0.023	0.205	0.214
		0.022		0.166	
		0.025		0.282	
		0.023		0.205	
	B	0.022	0.021	0.166	0.137
		0.022		0.166	
		0.019		0.050	
		0.022		0.166	

Hipoksia 7 Hari	A	0.018	0.021	0.127	0.118
		0.020		0.166	
		0.019		0.089	
		0.020		0.089	
	B	0.020	0.019	0.089	0.060
		0.018		0.012	
		0.019		0.050	
		0.020		0.089	

LAMPIRAN 5: Hasil Absorbansi dan Kadar GSH Otak

Perlakuan	Pemberian Dosis Ekstrak Daun Ara	Absorbansi	Rerata Absorbansi	Kadar GSH	Rerata Kadar GSH
Normoksia	A	0.022	0.024	0.272	0.272
		0.022		0.309	
		0.024		0.233	
		0.026		0.272	
	B	0.021	0.021	0.155	0.185
		0.020		0.196	
		0.021		0.154	
		0.023		0.233	
Hipoksia 1 Hari	A	0.018	0.018	0.194	0.204
		0.017		0.233	
		0.018		0.195	
		0.018		0.194	
	B	0.015	0.016	0.116	0.155
		0.016		0.195	
		0.018		0.155	
		0.016		0.155	
Hipoksia 3 Hari	A	0.016	0.015	0.079	0.117
		0.015		0.156	
		0.015		0.117	
		0.012		0.117	
	B	0.011	0.012	0.078	0.059
		0.011		0.040	
		0.013		0.040	
		0.014		0.078	

Hipoksia 7 Hari	A	0.011	0.011	0.078	0.078
		0.013		0.078	
		0.010		0.117	
		0.010		0.040	
	B	0.009	0.009	0.040	0.023
		0.010		0.005	
		0.009		0.040	
		0.008		0.005	

LAMPIRAN 6: Hasil Uji Regresi Linear Ekstrak Daun Ara

Uji Regresi Linear DPPH Asam Askorbat (Vitamin C)

Best-fit values ± SE	
Slope	13,69
Y-intercept	-31,28
X-intercept	2,285
1/slope	0,07305
Std. Error	
Slope	2,302
Y-intercept	9,766
95% Confidence Intervals	
Slope	6,362 to 21,01
Y-intercept	-62,36 to -0,2008
X-intercept	0,02960 to 3,164
Goodness of Fit	
R square	0,9218
Sy.x	7,279
Is slope significantly non-zero?	
F	35,36
DFn, DFd	1, 3
P value	0,0095
Deviation from zero?	Significant
Equation	Y = 13,69*X - 31,28
Data	
Number of X values	5
Maximum number of Y replicates	1
Total number of values	5
Number of missing values	0

Uji Regresi Linear DPPH Ekstrak Daun Ara

Best-fit values ± SE	
Slope	0,2347
Y-intercept	0,09858
X-intercept	-0,4200
1/slope	4,260
Std. Error	
Slope	0,04353
Y-intercept	2,575
95% Confidence Intervals	
Slope	0,04743 to 0,4220
Y-intercept	-10,98 to 11,18
X-intercept	-207,1 to 29,60
Goodness of Fit	
R square	0,9356
Sy.x	2,753
Is slope significantly non-zero?	
F	29,08
DFn, DFd	1, 2
P value	0,0327
Deviation from zero?	Significant
Equation	Y = 0,2347*X + 0,09858
Data	
Number of X values	4
Maximum number of Y replicates	1
Total number of values	4
Number of missing values	0

Uji Regresi Linear Fenolik

Best-fit values ± SE	
Slope	0,0002950
Y-intercept	0,1055
X-intercept	-357,6
1/slope	3390
Std. Error	
Slope	5,005e-005
Y-intercept	0,02601
95% Confidence Intervals	
Slope	0,0001357 to 0,0004543
Y-intercept	0,02273 to 0,1883
X-intercept	-1370 to -50,66
Goodness of Fit	
R square	0,9205
Sy.x	0,01583
Is slope significantly non-zero?	
F	34,74
DFn, DFd	1, 3
P value	0,0097
Deviation from zero?	Significant
Equation	Y = 0,0002950*X + 0,1055
Data	
Number of X values	5
Maximum number of Y replicates	1
Total number of values	5
Number of missing values	0

Uji Regresi Linear Flavonoid

Best-fit values ± SE	
Slope	0,001611
Y-intercept	0,006800
X-intercept	-4,220
1/slope	620,6
Std. Error	
Slope	0,0001585
Y-intercept	0,003086
95% Confidence Intervals	
Slope	0,001171 to 0,002051
Y-intercept	-0,001767 to 0,01537
X-intercept	-12,82 to 0,8814
Goodness of Fit	
R square	0,9628
Sy.x	0,003314
Is slope significantly non-zero?	
F	103,4
DFn, DFd	1, 4
P value	0,0005
Deviation from zero?	Significant
Equation	Y = 0,001611*X + 0,006800
Data	
Number of X values	6
Maximum number of Y replicates	1
Total number of values	6
Number of missing values	0

Uji Regresi Linear Toksisitas (BSLT)

Best-fit values ± SE	
Slope	0,007082
Y-intercept	1,662
X-intercept	-234,7
1/slope	
Std. Error	
Slope	0,001385
Y-intercept	0,7782
95% Confidence Intervals	
Slope	0,001122 to 0,01304
Y-intercept	-1,686 to 5,010
X-intercept	-3765 to 153,4
Goodness of Fit	
R square	0,9289
Sy.x	1,057
Is slope significantly non-zero?	
F	26,14
DFn, DFd	1, 2
P value	0,0362
Deviation from zero?	Significant
Equation	Y = 0,007082*X + 1,662
Data	
Number of X values	4
Maximum number of Y replicates	1
Total number of values	4
Number of missing values	0

LAMPIRAN 7: Uji Statistik Kadar GSH Darah dan Otak

Nilai Rerata dan Uji Mann-Whitney untuk Perbedaan Kadar GSH Darah

Col. Stat	0A	0B	1A	1B	3A	3B	7A	7B
Mean	0.485	0.349	0.320	0.282	0.214	0.014	0.118	0.060
Std. Deviation	0.037	0.037	0.055	0.031	0.049	0.058	0.037	0.037
Std. Error of Mean	0.019	0.019	0.027	0.016	0.024	0.029	0.018	0.018
Mann-Whitney test			1A vs. 0A	1B vs. 0B	3A vs. 0A	3B vs. 0B	7A vs. 0A	7B vs. 0B
P value			0.0286	0.0857	0.0286	0.0286	0.0286	0.0286
Significantly different (P < 0.05)?			Yes	No	Yes	Yes	Yes	Yes
One- or two-tailed P value?			Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed

Nilai Rerata dan Uji Mann-Whitney untuk Perbedaan Kadar GSH Otak

Col. Stat	0A	0B	1A	1B	3A	3B	7A	7B
Mean	0.272	0.184	0.204	0.155	0.117	0.059	0.078	0.022
Std. Deviation	0.031	0.038	0.019	0.032	0.031	0.022	0.031	0.020
Std. Error of Mean	0.016	0.019	0.009	0.016	0.016	0.011	0.016	0.010
Mann-Whitney test			1A vs. 0A	1B vs. 0B	3A vs. 0A	3B vs. 0B	7A vs. 0A	7B vs. 0B
P value			0.0571	0.4857	0.0286	0.0286	0.0286	0.0286
Significantly different (P < 0.05)?			No	No	Yes	Yes	Yes	Yes
One- or two-tailed P value?			Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed

LAMPIRAN 8: Uji Statistik Korelasi antara Kadar GSH Darah dan Otak

Uji Regresi Linear antara Kadar GSH Darah dan Kadar GSH Otak Kelompok Tikus A

Best-fit values ± SE	
Slope	0,5471
Y-intercept	0,01214
X-intercept	-0,02220
1/slope	1,828
Std. Error	
Slope	0,05562
Y-intercept	0,01754
95% Confidence Intervals	
Slope	0,3078 to 0,7865
Y-intercept	-0,06331 to 0,08760
X-intercept	-0,2733 to 0,08383
Goodness of Fit	
R square	0,9798
Sy.x	0,01514
Is slope significantly non-zero?	
F	96,77
DFn, DFd	1, 2
P value	0,0102
Deviation from zero?	Significant
Equation	Y = 0,5471*X + 0,01214
Data	
Number of X values	4
Maximum number of Y replicates	1
Total number of values	4
Number of missing values	0

Uji Regresi Linear antara Kadar GSH Darah dan Kadar GSH Otak Kelompok Tikus B

Best-fit values ± SE	
Slope	0,5811
Y-intercept	-0,01498
X-intercept	0,02578
1/slope	1,721
Std. Error	
Slope	0,02986
Y-intercept	0,007063
95% Confidence Intervals	
Slope	0,4526 to 0,7096
Y-intercept	-0,04537 to 0,01541
X-intercept	-0,03302 to 0,06594
Goodness of Fit	
R square	0,9947
Sy.x	0,006832
Is slope significantly non-zero?	
F	378,7
DFn, DFd	1, 2
P value	0,0026
Deviation from zero?	Significant
Equation	Y = 0,5811*X + 0,01498
Data	
Number of X values	4
Maximum number of Y replicates	1
Total number of values	4
Number of missing values	0

Uji Korelasi Pearson antara Kadar GSH Darah dan Kadar GSH Otak Kelompok Tikus A

Pearson r	
r	0,9898
95% confidence interval	0,5902 to 0,9998
R squared	0,9798
P value	
P (two-tailed)	0,0102
P value summary	*
Significant? (alpha = 0.05)	Yes
Number of XY Pairs	4

Uji Korelasi Pearson antara Kadar GSH Darah dan Kadar GSH Otak Kelompok Tikus A

Pearson r	
r	0,9974
95% confidence interval	0,8755 to 0,9999
R squared	0,9947
P value	
P (two-tailed)	0,0026
P value summary	**
Significant? (alpha = 0.05)	Yes
Number of XY Pairs	4

LAMPIRAN 9: Uji Regresi Linear Standar GSH

Best-fit values ± SE	
Slope	0,0259 ± 0,001073
Y-intercept	0,01767 ± 0,003247
X-intercept	-0,6821
1/slope	38,61
95% Confidence Intervals	
Slope	0,02292 to 0,02888
Y-intercept	0,00865 to 0,02668
X-intercept	-1,145 to -0,3046
Goodness of Fit	
R square	0,9932
Sy.x	0,004487
Is slope significantly non-zero?	
F	583,1
DFn, DFd	1, 4
P value	<0,0001
Deviation from zero?	Significant
Equation	Y = 0,0259*X + 0,01767
Data	
Number of X values	6
Maximum number of Y replicates	1
Total number of values	6
Number of missing values	0

LAMPIRAN 10: Dokumentasi Daun Ara

Pengumpulan Daun Ara di Kuntum Farmfield, Bogor

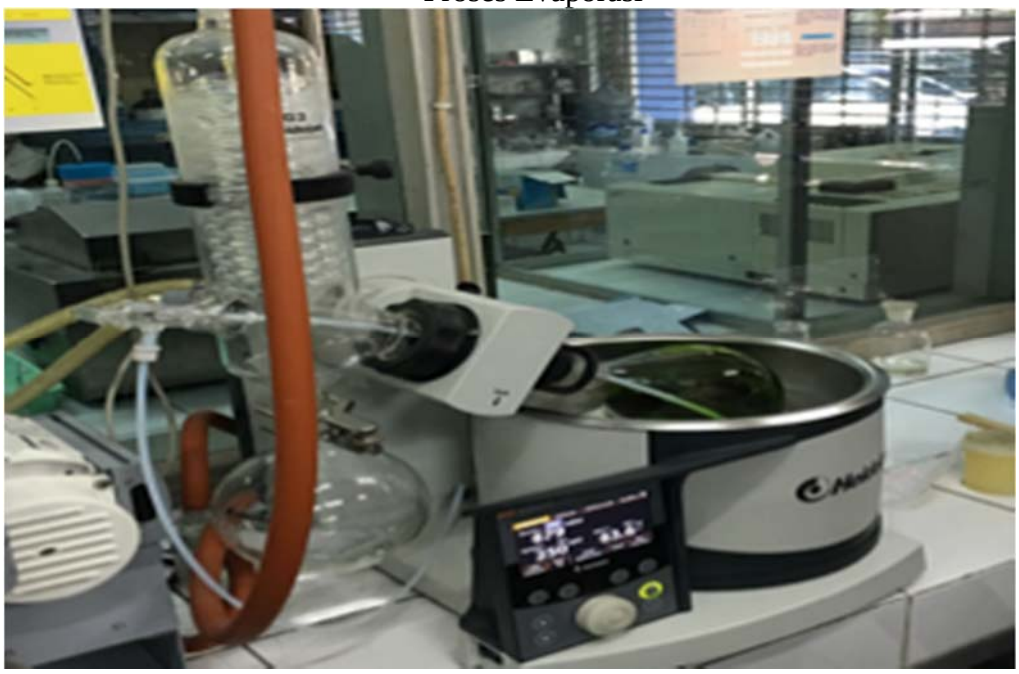
Pohon Ara

Proses Pengeringan

Simplisia

Proses Maserasi dan Penyaringan Simplisia

Proses Evaporasi



LAMPIRAN 11: Dokumentasi di Laboratorium

Proses Perlakuan Hipoksia

Proses Anastesi terhadap Tikus

Proses Pembedahan Tikus

Organ Otak Tikus

DAFTAR RIWAYAT HIDUP

A. Identitas Diri

1. Nama : Madeline Hari Kusmanto
2. NIM : 405140260
3. Jenis Kelamin : Perempuan
4. Tempat/Tanggal Lahir : Semarang, 20 September 1996
5. Agama : Kristen
6. No. Telpon : 087720091996
7. Email : mady_wu@yahoo.com

B. Riwayat Pendidikan

1. SD Kristen Masehi, Kudus
2. SMP Kristen Tri Tunggal, Semarang
3. SMA Kristen Krista Mitra, Semarang