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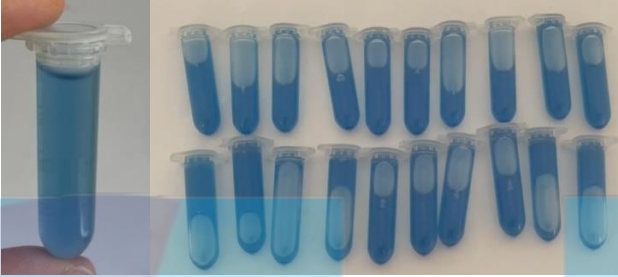

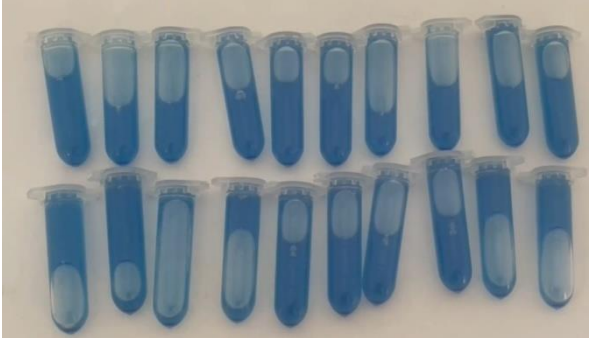
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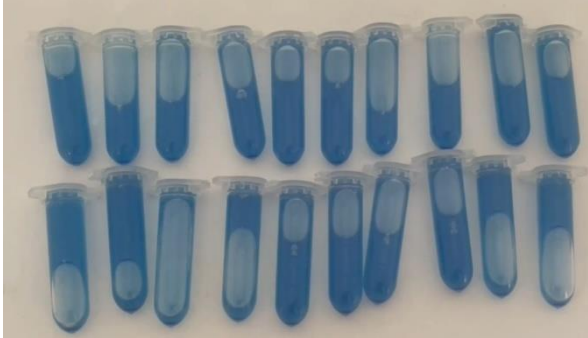
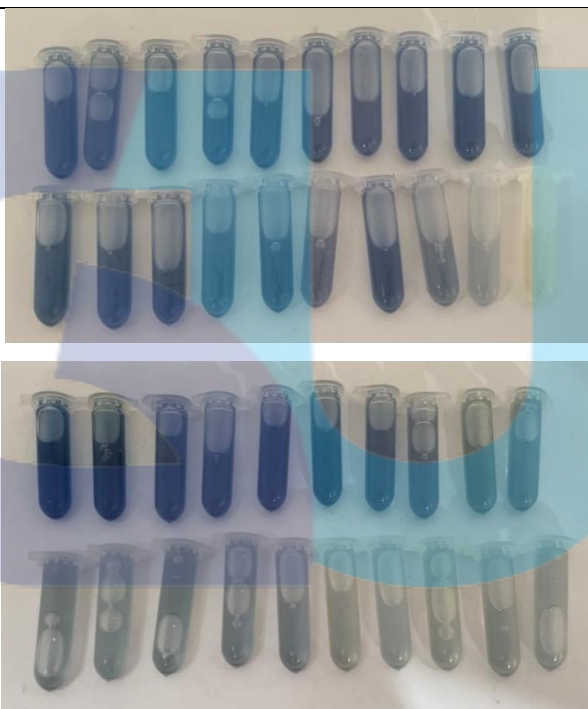
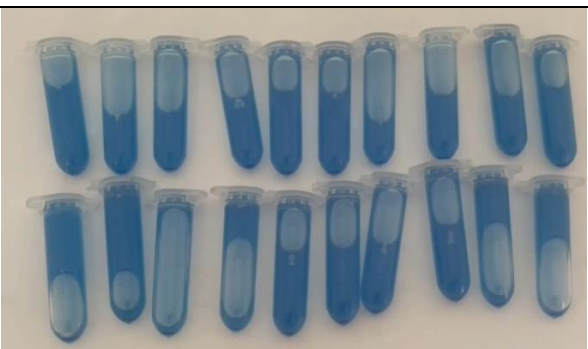
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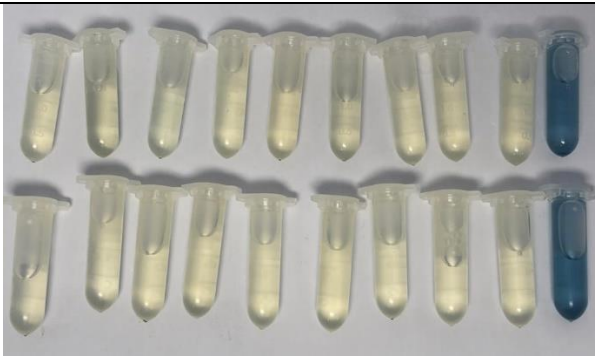
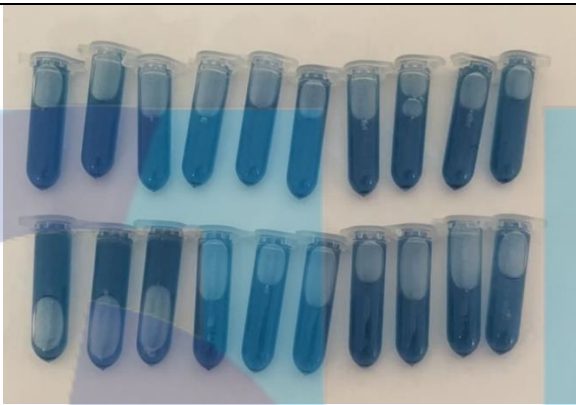

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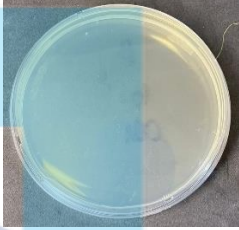




**APPENDIX A – STABILIZER OF ANTHOCYANIN WITH VARIOUS
CONCENTRATION OF L-HISTIDINE**

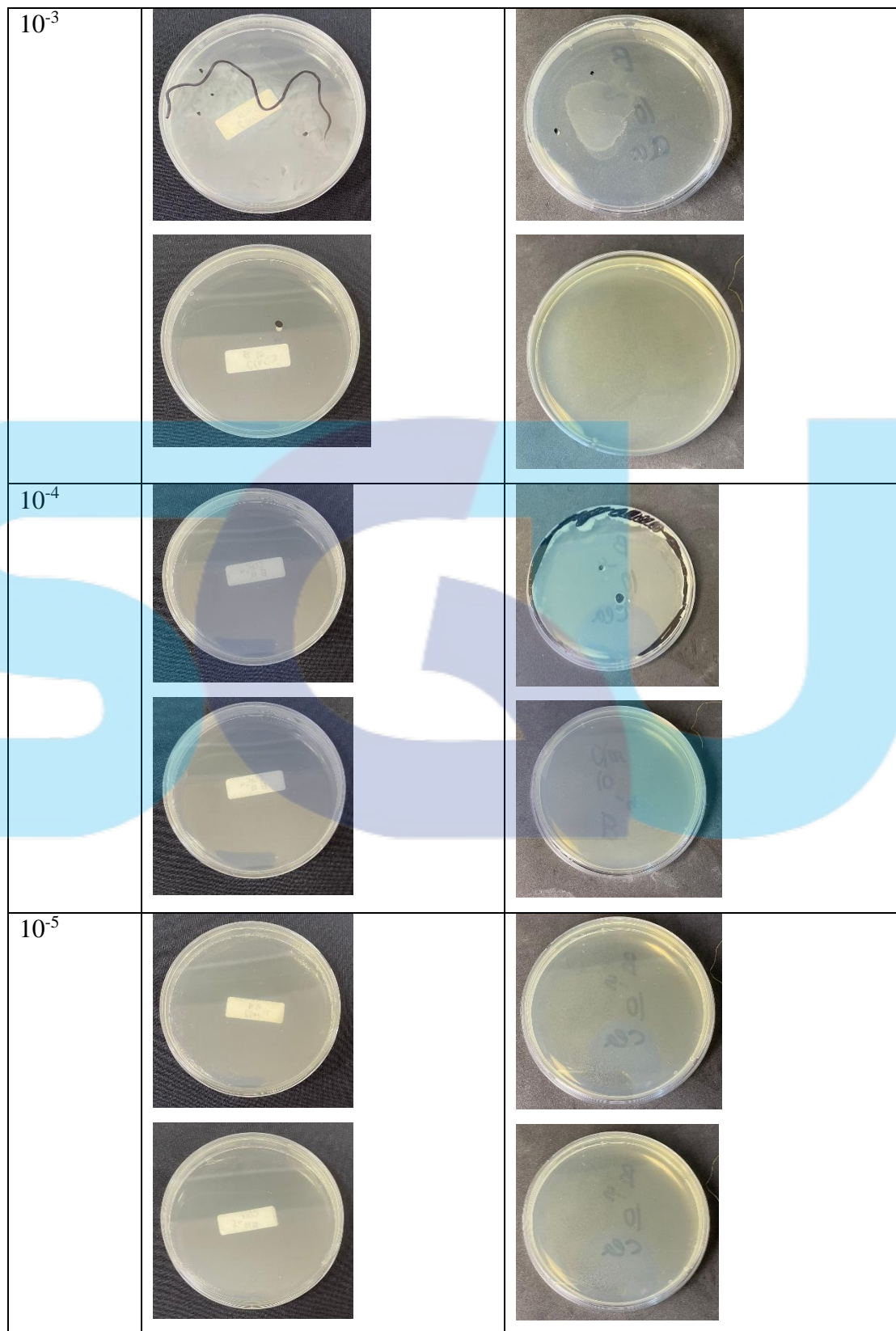
Control	Day 0	
	Day 14	
L-Histidine 2%	Day 0	

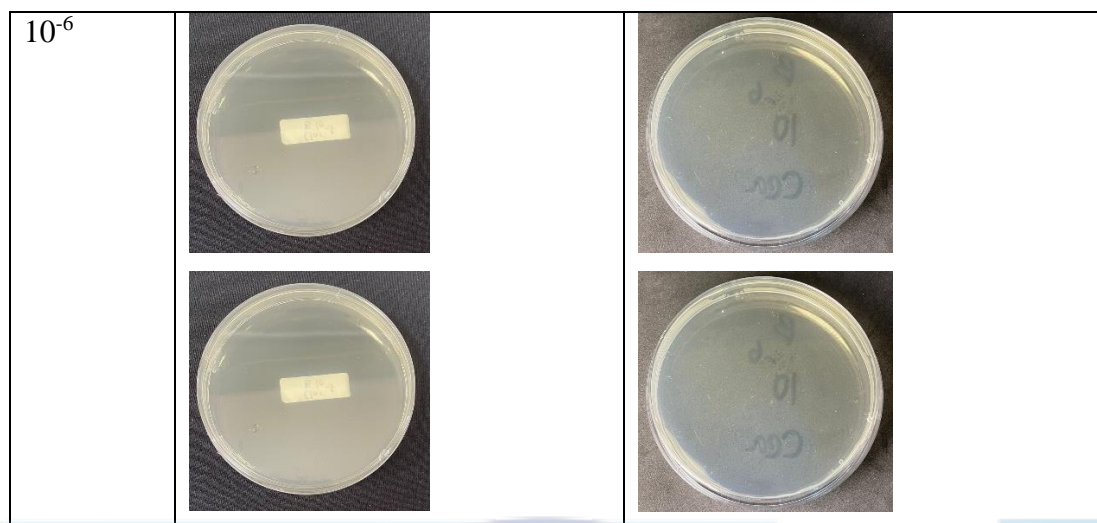
		
	Day 14	
L-Histidine 4%	Day 0	

	Day 14	
L-Histidine 6%	Day 0	
	Day 14	

APPENDIX B – BACTERIA ENUMERATION BEFORE AND AFTER AUTOCLAVE

Buffer (Dilution)	Before	After
10 ⁻¹		
		
10 ⁻²		
		





Before Autoclave: Extract + Buffer:

Dilution	Number of Counted Bacteria	
10 ⁻¹	29	45
10 ⁻²	20	13
10 ⁻³	5	1
10 ⁻⁴	0	0
10 ⁻⁵	0	0
10 ⁻⁶	0	0

$$N = \frac{\Sigma C}{V \times [n_1 + (0.1 \times n_2)] \times d}$$

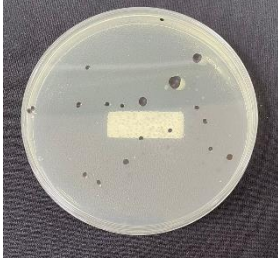
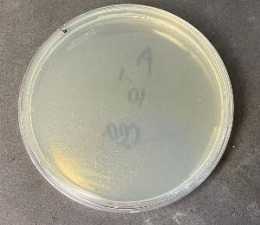


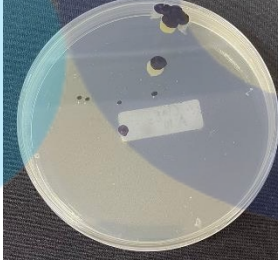
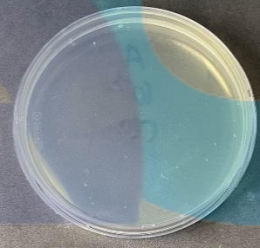




$$N = \frac{29 + 45 + 20 + 13}{1 \times [2 + (0.1 \times 2)] \times 10^{-1}}$$

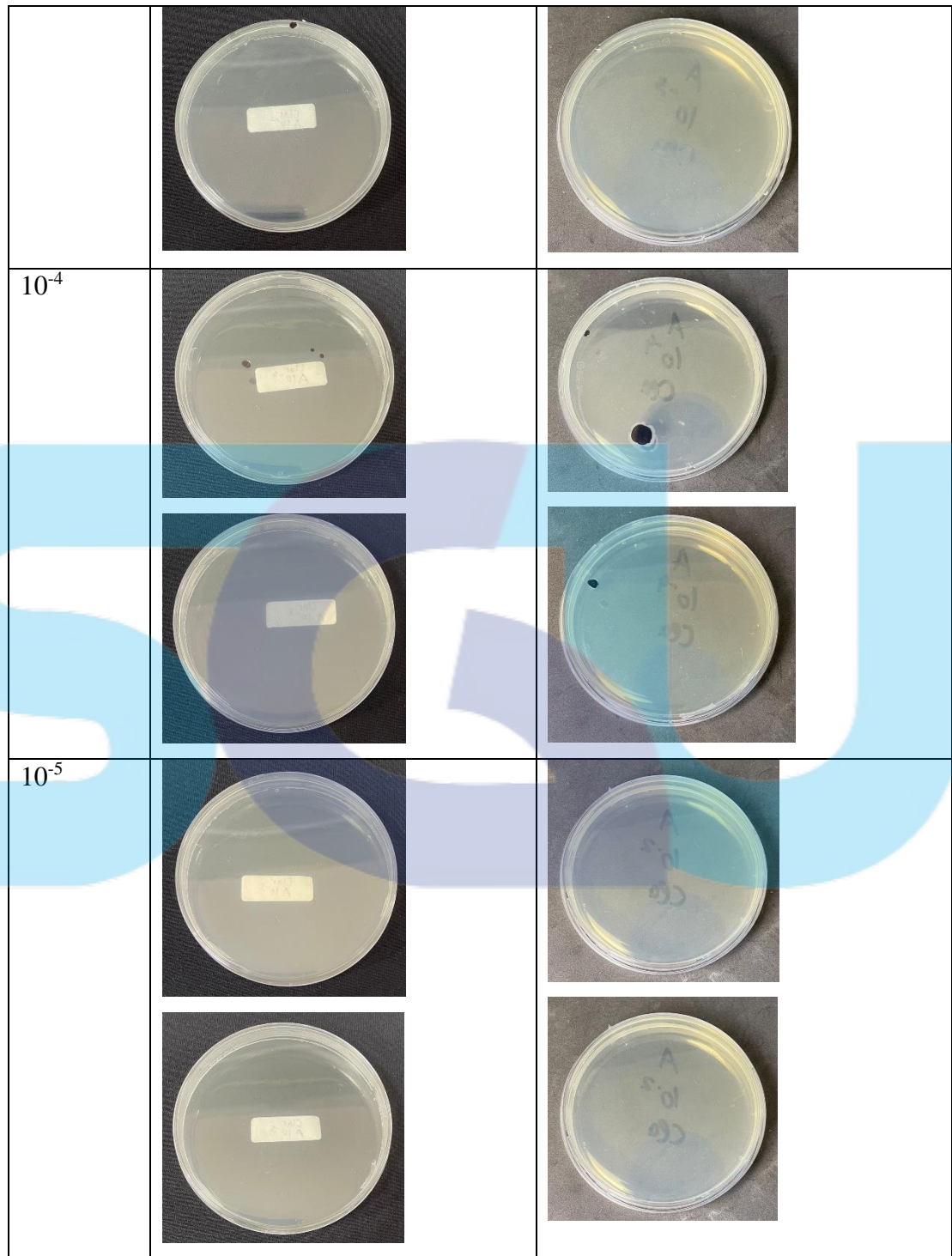
Total of microorganisms = 468.363 CFU/mL = 4.6 x 10² CFU/mL

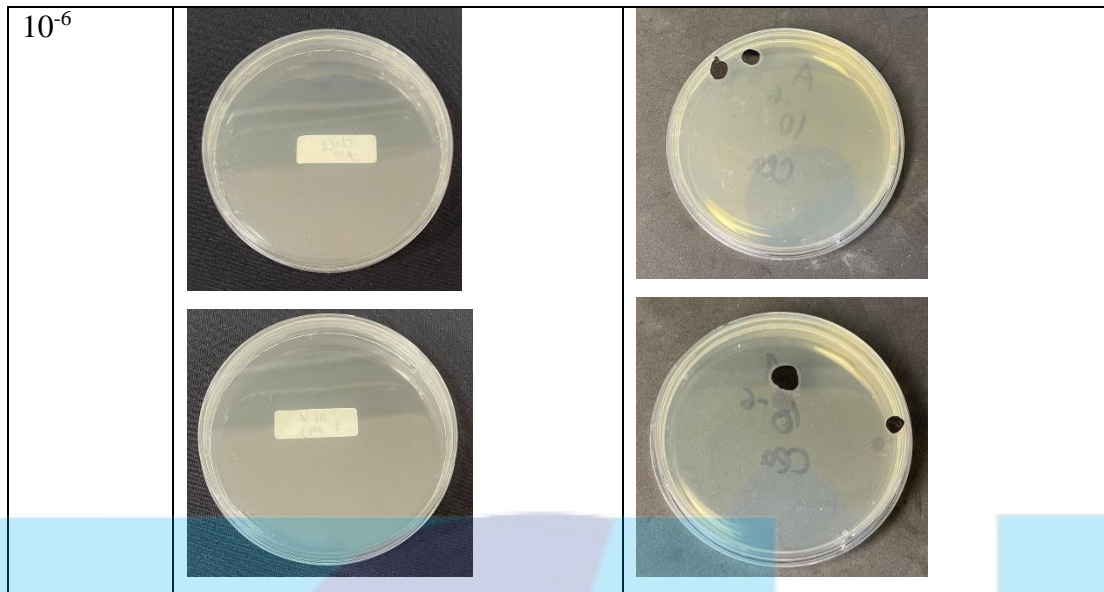
After Autoclave: Extract + Buffer:

Dilution	Number of Bacteria	
10 ⁻¹	0	0
10 ⁻²	1	1
10 ⁻³	2	0
10 ⁻⁴	3	0
10 ⁻⁵	0	0
10 ⁻⁶	0	0

Number of microorganisms = $<1,0 \times 10^1$ CFU/mL

Water for Injection (Dilution)	Before	After
10 ⁻¹		
		
10 ⁻²		
		
10 ⁻³		





Before Autoclave: Extract + WFI:

Dilution	Number of Counted Bacteria	
10 ⁻¹	19	2
10 ⁻²	7	2
10 ⁻³	7	1
10 ⁻⁴	3	0
10 ⁻⁵	0	0
10 ⁻⁶	0	0

$$N = \frac{\Sigma C}{V \times [n_1 + (0.1 \times n_2)] \times d}$$

$$N = \frac{19}{1 \times [1 + (0.1 \times 0)] \times 10^{-1}}$$

$$N = \frac{190}{1} = 190 \text{ CFU/mL} = 1.9 \times 10^2 \text{ CFU/mL}$$

Total of microorganisms = 190 CFU/mL = 1.9 x 10² CFU/mL

After Autoclave: Extract + WFI:

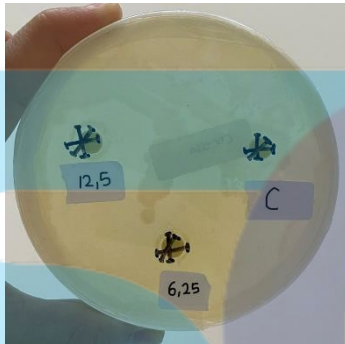
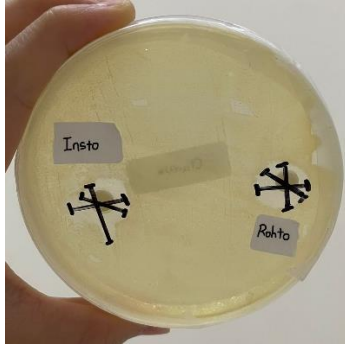
Dilution	Number of Bacteria	
10 ⁻¹	0	1
10 ⁻²	0	1
10 ⁻³	2	0
10 ⁻⁴	2	1
10 ⁻⁵	0	0

10^{-6}	2	2
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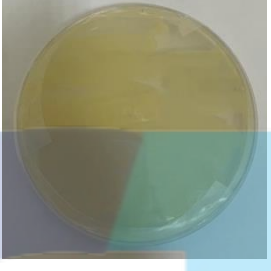
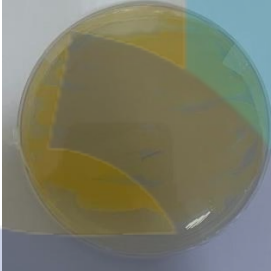
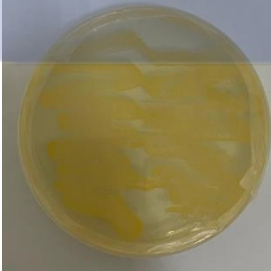
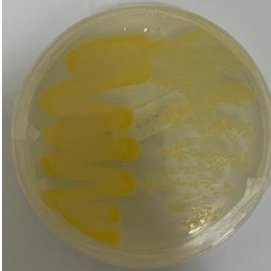
Number of microorganisms = $<1,0 \times 10^1$ CFU/mL

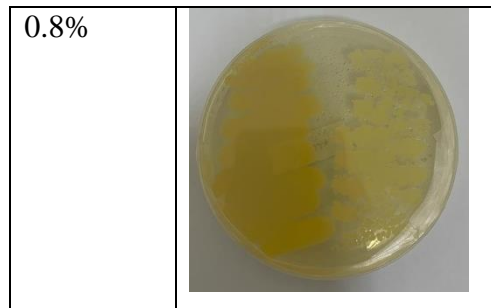


APPENDIX C – SIZE INHIBITION



APPENDIX D – MINIMUM BACTERICIDAL CONCENTRATION (MBC)

25%	
12.5%	
6.25%	
3.125%	
1.6%	



SGU

CURRICULUM VITAE



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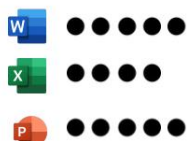
EDUCATION

Swiss German University Tangerang
Pharmaceutical Chemical Engineering
2019-Present

Kusuma Bangsa Senior High School Palembang
Science
2016-2019

Kusuma Bangsa Junior High School Palembang
2013-2016

COMPUTER COMPETENCES



LANGUAGES

Indonesian - Native
English - Fluent
German - Intermediate

ABOUT ME

I am a responsible and hard-working person. I am willing to learn something new and experience new things. I am able to work together with others as well as independently.

INTERNSHIP EXPERIENCE

Bayer AG, Germany | Jan 2022 - Aug 2022

Working under Energy Management department, helping in calculating the energy needed. Also in charge to help with the documents related to production in PUE.

PT. Merck Tbk., Indonesia | July 2021 - Aug 2021

Working under Site Pharma Tech Department, helping with the documents related to drug production and finding the right parameters for the imported products that will be produced by Merck Indonesia.

ORGANIZATION EXPERIENCE

- 2021 | Head Swiss German University Kaderisasi Event Division
- 2021 | Treasurer and Event Member at Virtual Innovative Chemistry Event 2021
- 2020 - 2021 | Head of Swiss German University's Student Board of Executives Fundraising Division
- 2020 - 2021 | Treasurer of Swiss German University's Association of Chemical Engineering Students (ACES)
- 2020 - 2021 | Head of Swiss German University's Bible Fellowship Club Creative Division
- 2020 | Committee of Indonesian Fun Science Award (IFSA) Workshop 3.0
- 2020 | Head of Committee of Swiss German University's BEM Team Building
- 2020 | Mentor of Swiss German University's Orientation Week
- 2019 - 2020 | Member of Swiss German University's Event Club
- 2019 - 2020 | Member of Swiss German University's Bible Fellowship Club Creative Division
- 2019 - 2020 | Vice Head of Swiss German University's Student Board of Executives Fundraising Division
- 2019 - 2020 | Member of Swiss German University's Association of Chemical Engineering Students (ACES) Event Division
- 2019 | Committee of Swiss German University's BEM Gathering