

## **BAB V**

### **KESIMPULAN DAN SARAN**

#### **5.1 Kesimpulan**

Hasil penelitian menunjukan angka koefisien fenol yang berbeda-beda dari ketiga produk desinfektan. Sampel A dengan angka koefisien fenol 0,75, sampel B dengan angka koefisien fenol 0,86 dan sampel C angka koefisien fenol 1,05. Produk desinfektan dengan angka tertinggi (1,05) yaitu pada sampel C dan produk desinfektan dengan angka teredah yaitu (0,75) sampel A.

#### **5.2 Saran**

Dari hasil pengujian tersebut, penulis dapat memberikan saran : masyarakat lebih selektif lagi dalam memilih produk desinfektan yang akan digunakan sehari-hari.

## DAFTAR PUSTAKA

- Brewer, C. (2010). Variations in Phenol Coefficients Determinations of Certain Disinfectants. *American Journal of Public Health*. 31(1):261.
- Brooks, Geo. F., Butel, Janet S., Morse, S. 2005. *Mikrobiologi Kedokteran (Medical Microbiology)*. Jakarta: Salemba Medika.
- Campbell, J . B. Reece, L. G dan Mitchell. 2004. Biologi Edisi Kelima Jilid 3. Erlangga. Jakarta.
- Eka. (2006). *Desinfektan dan Antimikroba*. Jakarta: Penerbit Universitas Indonesia.
- Fazlara, A and Ekhtelat, M. (2012). *The Disinfectant Effects of Benzalkonium Chloride on Some Important Foodborne Pathogens*. American-Eurasian Journal of Agricultural & Environment Scientific.
- Hasdianah, H.R. 2012. *Panduan Laboratorium Mikrobiologi dan Rumah Sakit*. Yogyakarta: Nuha Medika.
- Lamichhane, K.R., Riordan, J.T., and Delgado, A. (2008). *Genetic Changes that Correlate with the Pine-oil Disinfectant Reduced Susceptibility Mechanism of Staphylococcus aureus*. Mexico: New Mexico State University.
- Liu, Jun., Guang Wei Lu., Miguel Sandoval., Yangzhen Ciringh., Gang Xue., David Jaeger., Kevin Kompanik., Jim Jiao., Karl M. Gelotte. 2009. Determination of Benzalkonium Chloride Partition in Micelle Solutions Using Ultrafiltration Method. *AAPS Pharm. Sci. Tech*, Vol 10, No.4.
- Pratiwi, S. (2008). *Mikrobiologi Farmasi*. Jakarta: Penerbit Erlangga. Hal. 17-18.
- Purohit, S.S., Saliys, A.K, Karkam, H.N. (2004). *Pharmaceutical Microbiology*. Jodhpur, India: Agrobios India. Hal. 332.
- Radji, M., 2007, "Uji Efektifitas antimikroba beberapa merk dagang pembersih tangan antiseptic". Majalah Ilmu Kefarmasian, Vol.IV, No.1.

Rasmika Dewi Dap, Susi Iravati, Sarto. 2008. *Efektivitas Beberapa Desinfektan Terhadap Isolat Bakteri Lantai Ruang Bedah Instalasi Bedah Sentral (IBS) Rumah Sakit Sanglah Denpasar*. Medicina.

Singleton, E. (2000). Disinfectan: *Phenol Coefficient Methods*. New York: AOAC International.

Siswandono. (2009). Kimia Medisinal. Surabaya: Airlangga University Press. Hal. 249-251. Jurnal Penelitian Farmasi Herbal Vol. 1 No. 1 Edition: Mei-Oktober 2018 <http://ejournal.delihu.ac.id/index.php/Jphf>

Somani, S.B., Ingole, W.N., and Kulkarni, S.N. (2011). Disinfection of Water by Using Sodium Chloride (NaCl) and Sodium Hypochlorite(NaOCl). Shegaon: Shri Sant Gajanan Maharaj College ofEngineering.

Waluyo, Lud. 2008. *Teknik Dasar dalam Mikrobiologi*. UMM Press. Malang.

L

A

M

P

|

R

A

N

**Lampiran 1. Komposisi Media Yang Digunakan Dalam Penelitian**

**1. Pseudomonas Selektif Agar (PSA)**

Gelatin pepton .....	20,0 gr
Magnesium chloride .....	1,4 gr
Potassium sulphate .....	1,0 gr
Cetrimide .....	0,05 gr
Agar .....	3 gr

**2. Kliger's Iron Agar (KIA)**

Peptone from cassein.....	15,0 gr
Peptone from meat.....	5,0 gr
Meat extract.....	3,0 gr
Yeast extract.....	3,0 gr
Sodium chloride.....	5,0 gr
Lactose .....	10,0 gr
Glucose.....	1,0 gr
Ammonium iron (III) citrate .....	0,5 gr
Sodium thiosulphate .....	0,5 gr
Phenol red .....	0,024 gr
Agar .....	0,024 gr

**3. Sulfit Indol Motilitas (SIM)**

Pepton from casei.....	20,0 gr
Pepto from meat.....	5,6 gr
Ammonium iron (III) .....	0,2 gr
Sodium thiosulphate .....	0,2 gr
Agar .....	3,0 gr

#### **4. Lysine Iron Agar (LIA)**

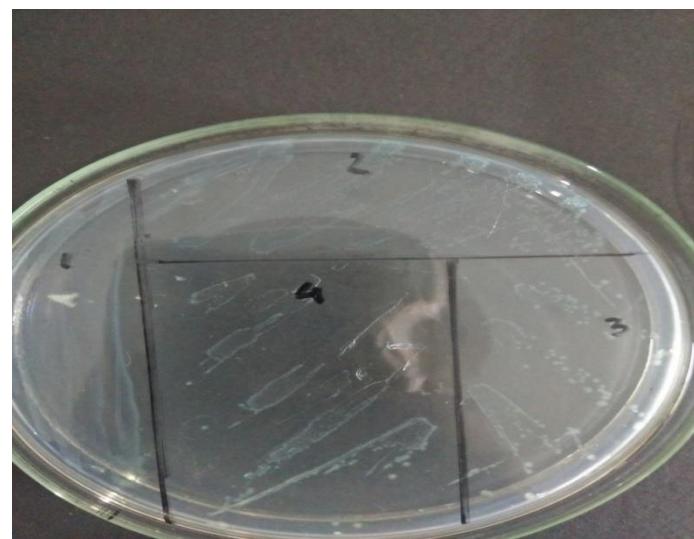
Pepton from meat.....	5,0 gr
Yeast extract.....	3,0 gr
Glucose.....	1,0 gr
Lysine monohidrochloride .....	10,0 gr
Sodium thiosulphate .....	0,04 gr
Ammonium iron (III) citrate .....	0,5 gr
Sodium thiosulphate .....	0,5 gr
Bromo cresol purple .....	0,024 gr
Agar .....	12,5 gr

#### **5. Citrate Agar**

Ammonium hidrogen fosfat .....	5,0 gr
Di – potassium hidrogen fosfat .....	3,0 gr
Sodium chloride .....	1,0 gr
Sodium citrate .....	2,0 r
Magnesium sulfat .....	0,5 gr
Bromo thymol blue.....	0,5 gr
Agar .....	12,5 gr

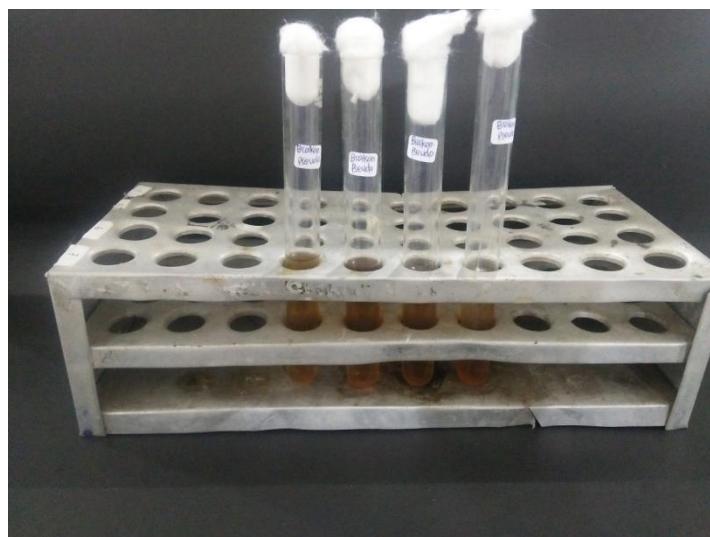
#### **6. Brain Heart Infusion (BHI)**

Caft Brain Infusion padat .....	12,5 gr
Beef Heart Infusion padat.....	5,0 gr
Protease pepton.....	10,0 gr
Glukose .....	2,0 gr
Sodium cloride .....	5,0 gr
Di-sodium phosphate.....	2,5 gr

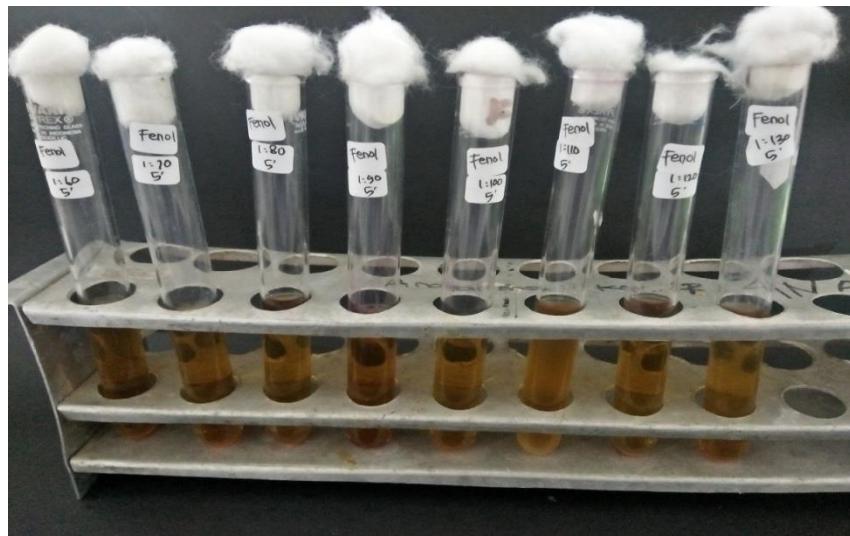
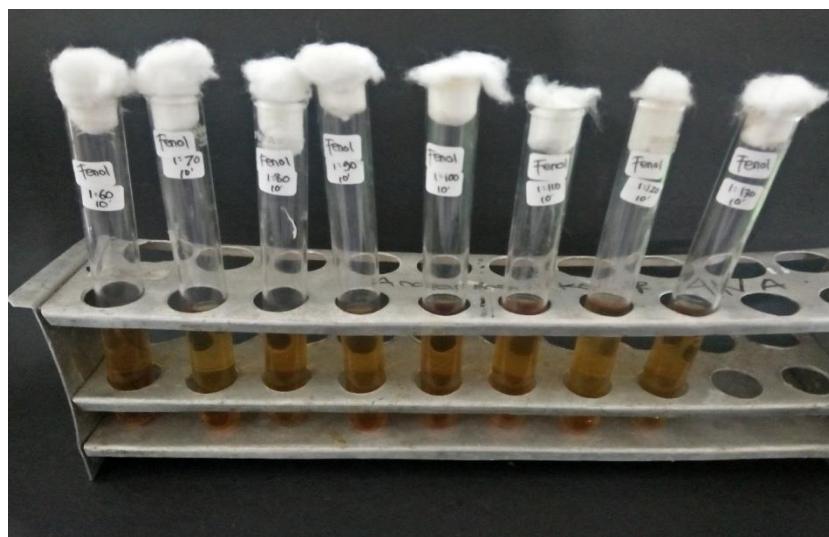
**Lampiran 2. Gambar Hasil Penelitian****Sampel Desifektan A, B dan C****Hasil lokulasi *Pseudomoas aerugiosa***



**Hasil Uji Biokimia *Pseudomonas aeruginosa***



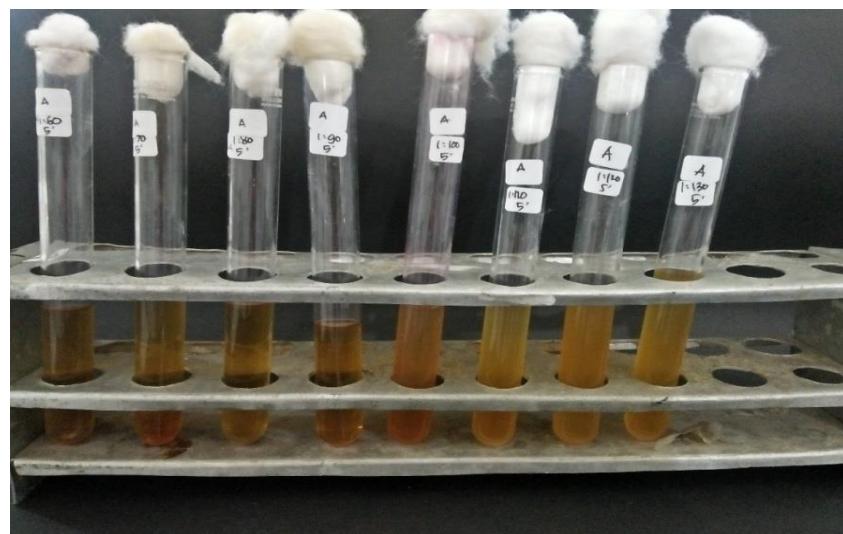
**Biakan *Pseudomonas aeruginosa* pada media BHI**

**Hasil Uji Fenol 5%****5 menit****10 menit**

### Hasil Uji Produk Desinfektan A

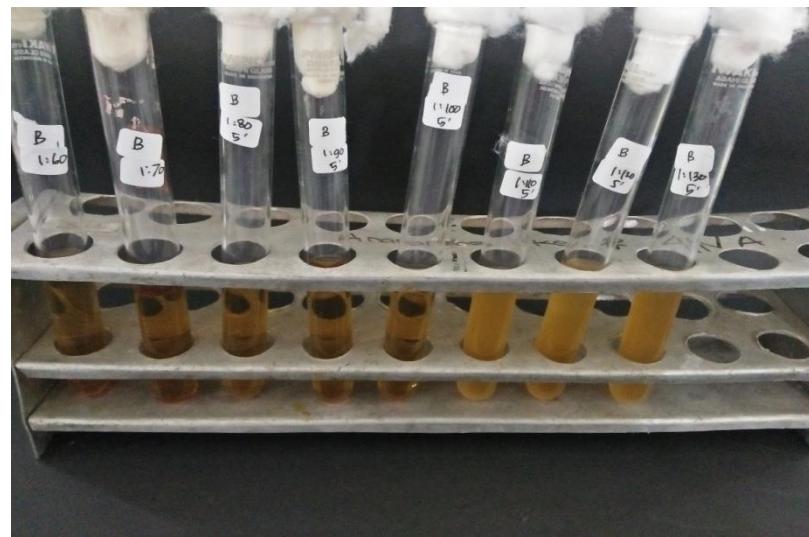


5 menit

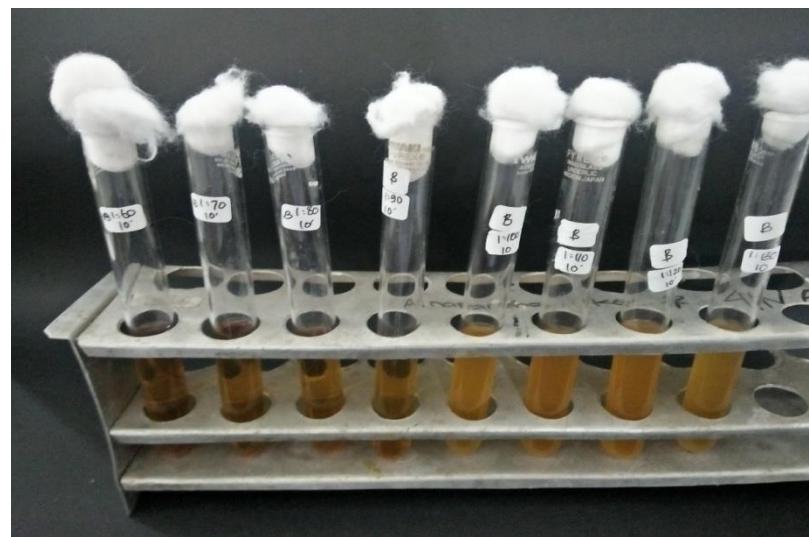


10 menit

### Hasil Uji Produk Desinfektan B



5 menit

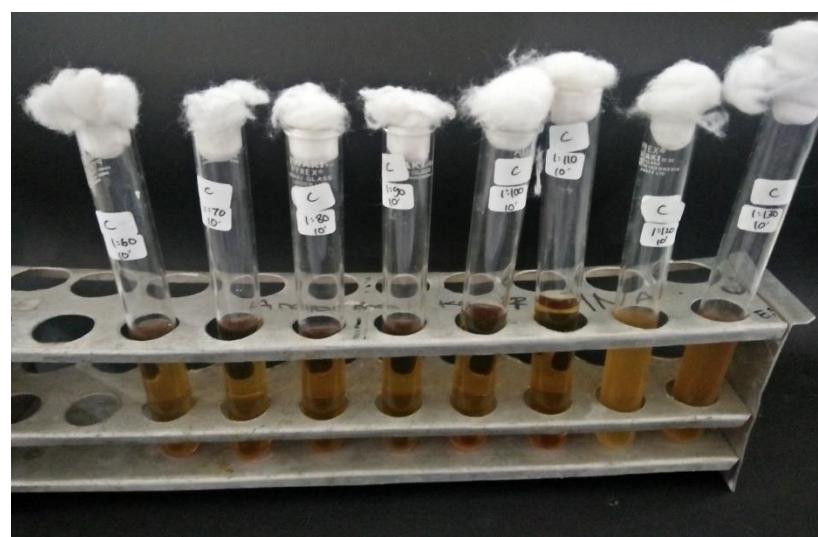


10 menit

### Hasil Uji Produk Desinfektan C



5 menit



10 menit