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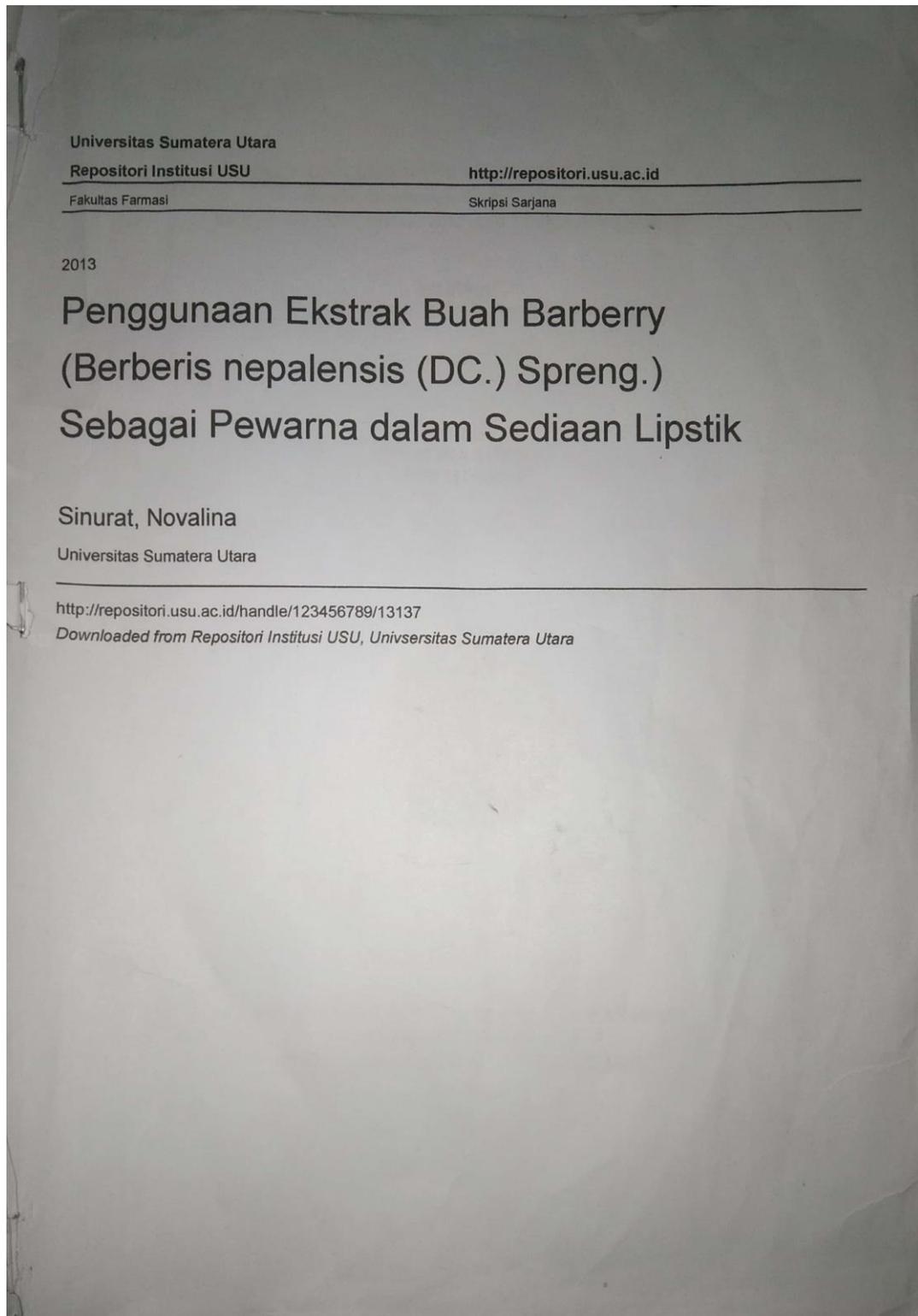
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**Lampiran 1. Ekstrak Buah Rasberi**



**Lampiran 2. Halaman Depan Literatur 1**

## Lampiran 3. Abstrak Literatur 1

**THE USE OF BARBERRY FRUITS  
(*Berberis nepalensis* (DC.) Spreng.) EXTRACT  
AS COLORANTS IN LIPSTICK PREPARATIONS**

**ABSTRACT**

Barberry fruits (*Berberis nepalensis* (DC.) Spreng.) is one of millions biological resources which has a potentation to be used as a natural colorant, because it has an attractive color. Barberry reddish purple color caused by anthocyanin pigment which can be used as a natural colorant. Natural colorant can be used to avoid a synthetic colorant that possible dangerous our health.

The aim of this study was to make lipstick formula using natural colorant from barberry fruits extract.

Barberry extraction was made with maceration method used 96% ethanol with 5% addition citric acid, than the extract was concentrated by a rotary evaporator and freeze drying for 36 hours. The lipstick formula consisted of cera alba, vaselin alba, cetyl alcohol, lanolin, carnauba wax, castor oil, propylene glycol, Tween 80, titanium dioxide, buthyl hydroxyl toluene, nipagin, perfume and barberry extract addition with concentrations 0, 8, 10, 12, 14 and 16%. The test of lipsticks were physical quality check of the preparations for the homogeneity, stability, smear test, melting point, breaking point, lipstick pH, irritation and hedonic test.

All of the preparations had melting point at 52°C, homogeneous, stable in storage for 30 days in room temperature and did not cause irritation. Lipstick preparations with concentration of barberry extract 12, 14, dan 16% had a good smear power better than 8 and 10%. Lipstick preparations with concentration of barberry extract 0% and 8% had breaking point 124.9 g and 104.9 g. Lipstick preparation with concentration 10, 12, and 14% had breaking point 94.9 g and concentration 16% had breaking point 84.9 g. Lipstick preparations with concentration of barberry extract 0% had pH 6.0. Lipstick preparations with concentration 8, 10, and 12% had pH 3.8 and concentration 14 and 16% had pH 3.7. The lipstick sample with barberry extract in 8% and 10% gave reddish light purple color effect and included almost favorited categories, other wise the sample with barberry extract in 12, 14, and 16% gave reddish dark purple color effect and included favorited categories.

The study suggests that barberry fruits extract can be used as a lipstick colorant because fill a good lipstick colorant requirement.

*Key words: lipstick, barberry fruits, natural colorant*

**Lampiran 4. Halaman Depan Literatur 2**

**FORMULASI SEDIAAN LIPSTIK MENGGUNAKAN  
EKSTRAK BUAH RASBERI (*Rubus rosifolius* J.E.Smith)  
SEBAGAI PEWARNA**

**SKRIPSI**

**OLEH:  
WINDA TRINANDA  
NIM 081501062**



**PROGRAM STUDI SARJANA FARMASI  
FAKULTAS FARMASI  
UNIVERSITAS SUMATERA UTARA  
MEDAN  
2012**

Universitas Sumatera Utara

## Lampiran 5. Abstrak Literatur 2

**FORMULATION OF LIPSTICK USING RASPBERRY EXTRACT  
(*Rubus rosifolius* J.E.Smith) AS COLORANT****ABSTRACT**

Raspberry fruit (*Rubus rosifolius* J.E.Smith) included in family Rosaceae. The advantages of raspberry fruit are the harvest age is short that in 2-3 months the fruit can be harvested, easy cultivated and can bear fruits all of the years. The ripe raspberry fruit can be ate, for juice and jam, or as ingredient to make cake. Raspberry fruit is red, contains anthocyanin class cyanidin. Anthocyanin is pigment that can be used as a natural colorant which replace synthetic colorant that maybe has side effect to health.

The research was done to formulate lipstick by using the natural colorant which contained in raspberry fruit. Raspberry fruit was extracted by maceration used 96% ethanol and 1% citric acid then the solvent was evaporated used rotary evaporator and freeze dryer until thick extract of raspberry fruit was gotten. Lipstick formula consisted of components such as cera alba, lanolin, vaseline alba, *carnauba wax*, cetyl alcohol, castor oil, propylene glycol, titanium dioxide, strawberry perfume, butylated hydroxytoluene, nipagin, and addition of raspberry fruit extract as colorant with of 32%, 34%, 36%, 38% dan 40% concentrations. Testing to product included physical quality inspection such as homogeneity, melting point, breaking point, stability of shape, color and odor changes for 30 days storage at room temperature, pH, smear test, also irritation and hedonic test.

Formulation of lipstick using colorant of raspberry fruit extract showed that products were stable for 30 days, homogeneous, melting point in 58°C, had the good strength of lipstick, easily applied with smooth color, pH ranged from 3.7 to 3.8 and did not cause irritation and the preferred product was product 5 with 40% concentration colorant of raspberry fruit extract. Therefore, it can be concluded that raspberry fruit extract can be used as colorant in formulation of lipstick and it is safe to use.

Keyword: *Raspberry*, *Rubus rosifolius* J.E.Smith , *Lipstick*, *Lipstick Components*

## Lampiran 6. Kartu Laporan Pertemuan Bimbingan KTI

POLITEKNIK KESEHATAN  
 JURUSAN FARMASI  
 AL. AIRLANGGA NO. 20 MEDAN

**KARTU LAPORAN PERTEMUAN BIMBINGAN KTI**

Nama : Desy Tiarna Marik  
 NIM : P07539017049



Pembimbing :

NO	TGL	PERTEMUAN	PEMBAHASAN	PARAF MAHASISWA	PARAF PEMBIMBING
1	28/01-20	Pertama	Diskusi Judul KTI	Desy	
2	29/01-2020	Kedua	Mengerahkan Judul KTI	Desy	
3	03/01-2020	Ketiga	Diskusi Formula	Desy	
4	06/03-2020	Keempat	Pengerahan BAB I, II, III	Desy	
5	19/03/2020	Kelima	Revisi BAB I, II, III	Desy	
6	12/03-2020	Keenam	Acc Proposal KTI	Desy	
7	9/6-2020	Ketujuh	Pengerahan Bab IV	Desy	
8	3/6-2020	Delapan	Revisi Bab IV	Desy	
9	5/6-2020	Kesembilan	Acc Bab IV	Desy	
10	6/6-2020	Dasar	Pengerahan Bab V	Desy	
11	7/6-2020	Dasar	Revisi Bab V	Desy	
12	8/6-2020	Dasar	Acc Bab IV	Desy	

Ketua,  
  
 Dra. Masnah, M.Kes., Apt  
 NIP. 196204281995032001

## Lampiran 7. Surat Komisi Etik Penelitian



**KEMENTERIAN KESEHATAN REPUBLIK INDONESIA**  
**KOMISI ETIK PENELITIAN KESEHATAN**  
**POLITEKNIK KESEHATAN KEMENKES MEDAN**

Jl. Jamin Ginting Km. 13,5 Kel. Lau Cih Medan Tuntungan Kode Pos 20136  
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**PERSETUJUAN KEPK TENTANG  
 PELAKSANAAN PENELITIAN BIDANG KESEHATAN  
 Nomor: of .200 /KEPK/POLTEKES KEMENKES MEDAN 2020**

Yang bertanda tangan di bawah ini, Ketua Komisi Etik Penelitian Kesehatan Politeknik Kesehatan Kemenkes Medan, setelah dilaksanakan pembahasan dan penilaian usulan penelitian yang berjudul:

**“Studi Literatur Perbandingan Zat Warna Antosianin Dari Ekstrak Buah Barberry (*Berberis nepalensis* (DC.) Spreng. ) Dan Ekstrak Buah Rasberi (*Rubus rosifolius* J.E.Smith ) Sebagai Pewarna Alami Dalam Sediaan Lipstik”**

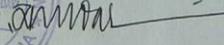
Yang menggunakan manusia dan hewan sebagai subjek penelitian dengan ketua Pelaksana/ Peneliti Utama : **Desy Tiarna Manik**  
 Dari Institusi : **Jurusan D-III Farmasi Politeknik Kesehatan Kemenkes Medan**

Dapat disetujui pelaksanaannya dengan syarat :

- Tidak bertentangan dengan nilai – nilai kemanusiaan dan kode etik penelitian kesehatan
- Melaporkan jika ada amandemen protokol penelitian.
- Melaporkan penyimpangan/ pelanggaran terhadap protokol penelitian.
- Melaporkan secara periodik perkembangan penelitian dan laporan akhir.
- Melaporkan kejadian yang tidak diinginkan.

Persetujuan ini berlaku sejak tanggal ditetapkan sampai dengan batas waktu pelaksanaan penelitian seperti tertera dalam protokol dengan masa berlaku maksimal selama 1 (satu) tahun.

Medan, Juni 2020  
 Komisi Etik Penelitian Kesehatan  
 Poltekkes Kemenkes Medan

Ketua,  
  
 Desy Tiarna Manik, M.Kes  
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