

ABSTRACT

THE EFFECT OF ROSELLE TEA (*Hibiscus sabdariffa*) TO BLOOD PRESSURE

Clarinda, 2011.

Tutor I: Dr. Iwan Budiman, dr., MS, MM, MKes, AIF

Tutor II: Ellya Rosa Delima, dr., MKes

Background Hypertension is a public health problem that often found worldwide. Hypertension become a major risk factor of several diseases, such as stroke, heart attack, heart failure, renal failure, and death. Using herbs as therapy has been developed in society nowadays. Many herbs can be used to treat hypertension.

Objective Purpose of this research is to determine the effect of Roselle tea in lowering the level of blood pressure.

Method This study uses a prospective true experimental test. Measured data is blood pressure (mmHg) in 20 men, 18-25 years old. Palpation-auscultation method was used for data's measurement. Paired *t* test with $\alpha = 0,05$ was used for analyzing the data.

Result The average of systolic blood pressure after consuming Roselle tea is 100.9 mmHg, lower than the average of systolic blood pressure before consuming Roselle tea, which is 114.9 mmHg (SD = 4.449) ($p = 0.000$). The average of diastolic blood pressure after consuming Roselle tea is 67.85 mmHg, lower than the average of diastolic blood pressure before consuming Roselle tea, which is 73.2 mmHg (SD = 4.682) ($p = 0.000$).

Conclusion Consumption of Roselle tea lowered the level of the blood pressure.

Key word: Roselle tea, blood pressure

DAFTAR ISI

	Halaman
LEMBAR PERSETUJUAN	ii
SURAT PERNYATAAN	iii
ABSTRAK.....	iv
<i>ABSTRACT</i>	v
KATA PENGANTAR	vi
DAFTAR ISI.....	viii
DAFTAR TABEL.....	x
DAFTAR GAMBAR	xi
DAFTAR BAGAN.....	xii
DAFTAR LAMPIRAN	xiii

BAB I PENDAHULUAN

1.1 Latar Belakang	1
1.2 Identifikasi Masalah	2
1.3 Tujuan Penelitian.....	2
1.4 Manfaat Karya Tulis Ilmiah	2
1.5 Kerangka Pemikiran dan Hipotesis	2
1.5.1 Kerangka Pemikiran	2
1.5.2 Hipotesis Penelitian.....	4
1.6 Lokasi dan Waktu Penelitian.....	4

BAB II TINJAUAN PUSTAKA

2.1 Rosella	5
2.1.1 Taksonomi	5
2.1.2 Deskripsi.....	5
2.1.3 Asal Usul dan Penyebaran.....	6
2.1.4 Ekologi	8
2.1.5 Kandungan.....	9
2.1.6 Penggunaan Rosella sebagai Makanan.....	11
2.1.7 Penggunaan Rosella sebagai Obat.....	12
2.2 Tekanan Darah	12
2.2.1 Fisiologi Tekanan Darah	11
2.2.2 Faktor yang Mempengaruhi Tekanan Darah.....	14
2.2.2.1 Faktor Utama	14
2.2.2.2 Faktor Tambahan.....	15
2.2.3 Cara Pengukuran Tekanan Darah.....	17
2.2.3.1 Metode Palpasi	17
2.2.3.2 Metode Auskultasi.....	18

2.2.3.3 Metode Gabungan Palpasi dan Auskultasi.....	19
2.3 Hipertensi	20
2.3.1 Definisi Hipertensi	20
2.3.2 Epidemiologi Hipertensi.....	20
2.3.3 Faktor Risiko Hipertensi	20
2.3.4 Klasifikasi Hipertensi.....	22
2.3.5 Gejala Klinik Hipertensi.....	23
2.3.6 Komplikasi Hipertensi.....	23
2.4 Pengaruh Teh Rosella terhadap Tekanan Darah	24

BAB III BAHAN DAN METODE PENELITIAN

3.1 Alat dan Bahan Penelitian	26
3.1.1 Bahan Penelitian.....	26
3.1.2 Alat Penelitian	26
3.2 Subjek Penelitian.....	26
3.3 Metode Penelitian.....	27
3.3.1 Desain Penelitian.....	27
3.3.2 Variabel Penelitian	27
3.3.3 Definisi Operasional Variabel.....	27
3.3.4 Prosedur Penelitian.....	27

BAB IV HASIL, PEMBAHASAN DAN PENGUJIAN HIPOTESIS

4.1 Hasil Penelitian.....	30
4.2 Pembahasan	31
4.3 Pengujian Hipotesis Penelitian.....	32

BAB V KESIMPULAN DAN SARAN

5.1 Kesimpulan.....	34
5.2 Saran.....	34

DAFTAR PUSTAKA	35
RIWAYAT HIDUP	37
LAMPIRAN	38

DAFTAR TABEL

Tabel 2.1 Kandungan Gizi <i>Calyx</i> Rosella per 100 gram.....	9
Tabel 2.2 Kandungan Gizi Daun Rosella per 100 gram.....	10
Tabel 2.3 Kandungan Gizi Biji Rosella per 100 gram	10
Tabel 2.4 Kandungan Asam Amino Rosella per 100 gram.....	11
Tabel 2.5 Klasifikasi Hipertensi	22
Tabel 4.1 <i>Paired Sample Statistics</i> Tekanan Darah Sistolik Sebelum dan Sesudah Konsumsi Teh Rosella	30
Tabel 4.2 Hasil Uji t Berpasangan Tekanan Darah Sistolik.....	30
Tabel 4.3 <i>Paired Sample Statistics</i> Tekanan Darah Diastolik Sebelum dan Sesudah Konsumsi Teh Rosella	31
Tabel 4.4 Hasil Uji t Berpasangan Tekanan Darah Diastolik	31
Tabel LI.1 Tekanan Darah Sistolik Sebelum dan Sesudah Konsumsi Teh Rosella	38
Tabel LI.2 Tekanan Darah Diastolik Sebelum dan Sesudah Konsumsi Teh Rosella	39
Tabel L1.3 Hasil Uji t Berpasangan	39

DAFTAR GAMBAR

Gambar 2.1 Bunga Rosella.....	6
Gambar 2.2 Tanaman Rosella	8
Gambar 2.3 <i>Calyx</i> Rosella Kering.....	10
Gambar 2.4 Minuman dari <i>Calyx</i> Rosella.....	11
Gambar 2.5 Pemeriksaan Tekanan Darah Metode Palpasi	17
Gambar 2.6 Tekanan Darah Sistolik dan Diastolik.....	19

DAFTAR BAGAN

Bagan 2.1 Bagan <i>Antocyanin</i> dan <i>Phenolic Acid</i> sebagai Vasorelaksasi.....	24
Bagan 2.2 Bagan <i>Anthocyanin</i> sebagai <i>ACE-Inhibitor</i>	25

DAFTAR LAMPIRAN

LAMPIRAN I DATA HASIL PERCOBAAN.....	38
LAMPIRAN II INFORMED CONSENT	40
LAMPIRAN III ETHICAL APROVAL.....	41