

APPENDICES



Tacca integrifolia found in Rimba, University of Malaya



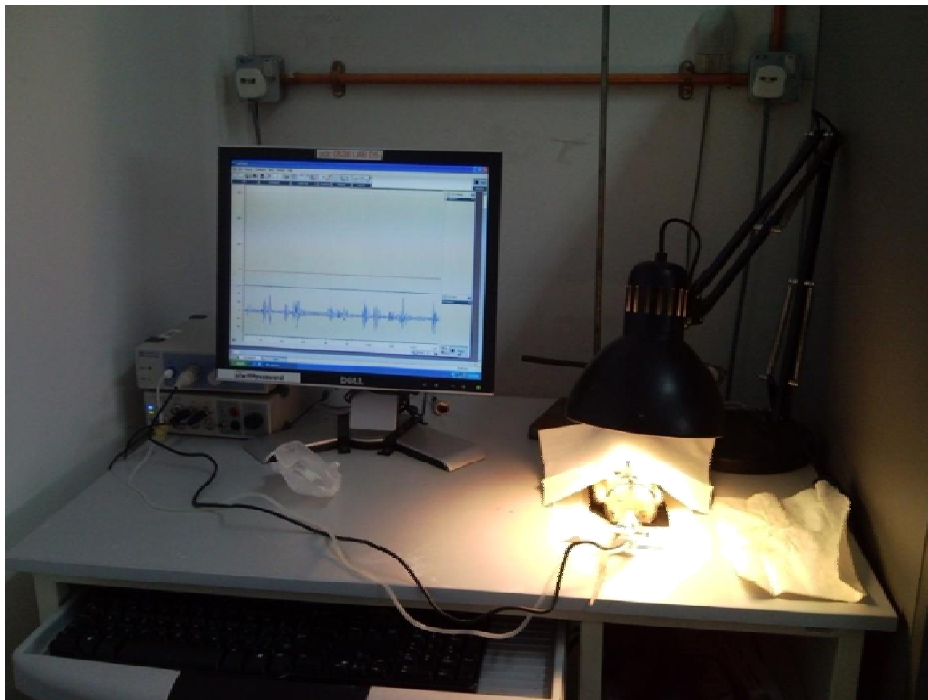
Tacca integrifolia collected from Field Study Centre, Gombak.



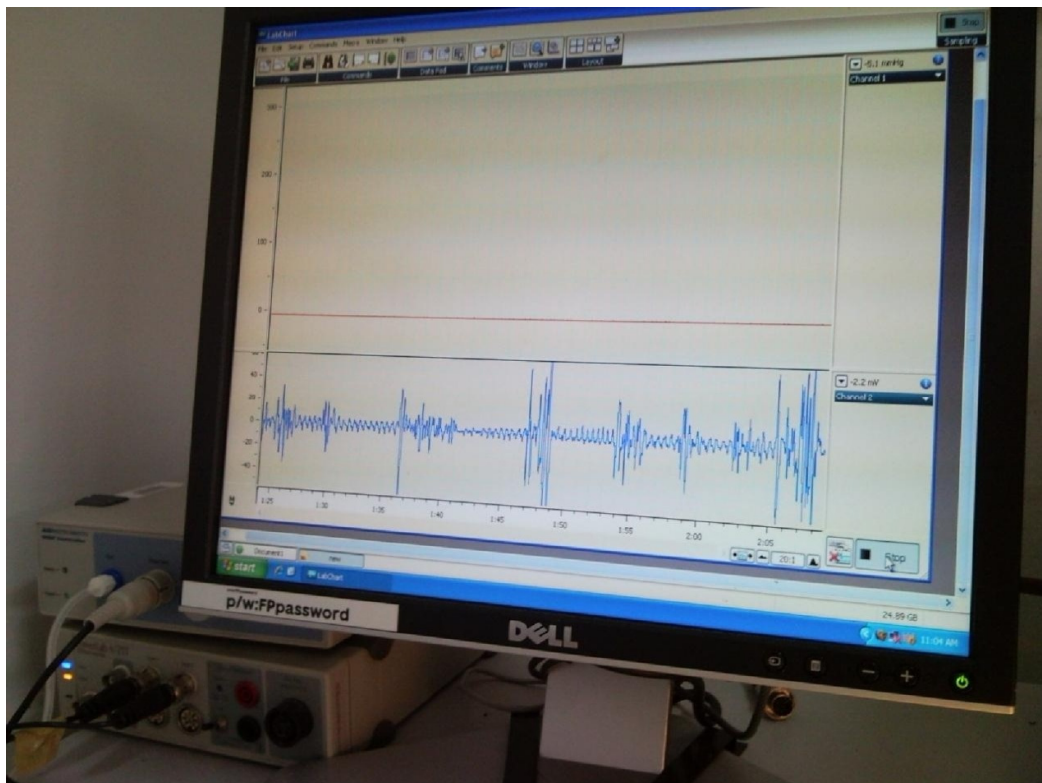
The flower of *Tacca integrifolia*



Anti-hypertension treatment on SHR rat. SHR were fed with water extract using feeding needle.



Systolic blood pressure measurement on SHR using Non-invasive blood pressure (NiBp) system



Systolic blood pressure reading were recorded



Blood collection of SHR for liver function test and renal function test

Preparations of solutions

A. ACE Bioassay

1. 100mM phosphate buffer pH8.3

Monobasic:

31.21g of $\text{NaH}_2\text{PO}_4 \cdot 2\text{H}_2\text{O}$ + 1L dH_2O

Dibasic:

71.64g of $\text{Na}_2\text{HPO}_4 \cdot 12\text{H}_2\text{O}$ + 1L dH_2O

0.1M 1 L phosphate buffer = 26.5 ml monobasic + 473.5 ml dibasic + 500 ml dH_2O

Adjust pH to pH8.3 by adding sodium hydroxide (NaOH) or hydrogen chloride (HCl)

2. 300mM sodium chloride; JMR 58.44

$$g = M \times \text{JMR} \times V$$

$$= 0.3 \times 58.44 \times 0.2 \text{ L}$$

$$= 3.5064 \text{ g} + 200 \text{ ml } \text{dH}_2\text{O}$$

3. 5mM HHL; JFR 429.47

$$g = M \times \text{JMR} \times V$$

$$= 0.005 \times 429.47 \times 0.2 \text{ L}$$

$$= 0.43 \text{ g} + 200 \text{ ml } \text{dH}_2\text{O}$$

4. 1 N HCl

$$a = 1 \times 150 \text{ ml} \times 36.5$$

$$10 \times 1 \times 1.18 \times 37$$

$$= 12.54 \text{ ml HCl}$$

$$1\text{N HCl} = 12.54 \text{ ml HCl} + 137.46 \text{ ml } \text{dH}_2\text{O}$$

B. Determination of Total Flavonoid

1. 100 mg/ml of Stock Quercetin

0.1 g quercetin + 1 ml methanol

2. 5% sodium nitrate

5g NaNO₂ + 95 ml dH₂O

3. 10% aluminium chloride

10 g AlCl₃ + 90 ml dH₂O

C. DPPH radical scavenging activity

1. 0.001M DPPH

a. 0.0394g of DPPH + 100 ml methanol

2. 1 mg/ml Ascorbic acid

a. 5 mg of ascorbic acid + 5 ml methanol

D. Ferric Reducing Power Assay

1. 2.0 M phosphate buffer pH6.6

0.4 M Monobasic stock

24 g + 500 ml dH₂O

0.4 M Dibasic stock

28.4 g + 500 ml dH₂O

187.5 ml monobasic + 112.5 ml dibasic + 600 ml dH₂O = 0.2 M phosphate

buffer

pH adjust to pH 6.6 by adding sodium hydroxide (NaOH) or hydrogen chloride (HCl)

2. 10 mg/ml of 1% potassium ferricyanide

0.6 g of KFe + 60 ml dH₂O

3. 100 mg/ml of 10% Trichloroacetic acid (TCA)

6 g TCA + 15 ml dH₂O

4. 1 mg/ml of 0.1% ferric chloride

0.01g of FeCl₂ + 10 ml dH₂O

E. Metal Chelating Assay

1. 2 mM FeCl₂

0.0397 g of FeCl₂ + 10 ml deionized water

2. 5 mM Ferrozine

0.0246 g of ferrozine + 10 ml deionized water

3. 0.1 g/ml EDTA

1 g of EDTA + 4 ml of deionized water.

pH was adjusted with sodium hydroxide (NaOH) until EDTA completely dissolved.