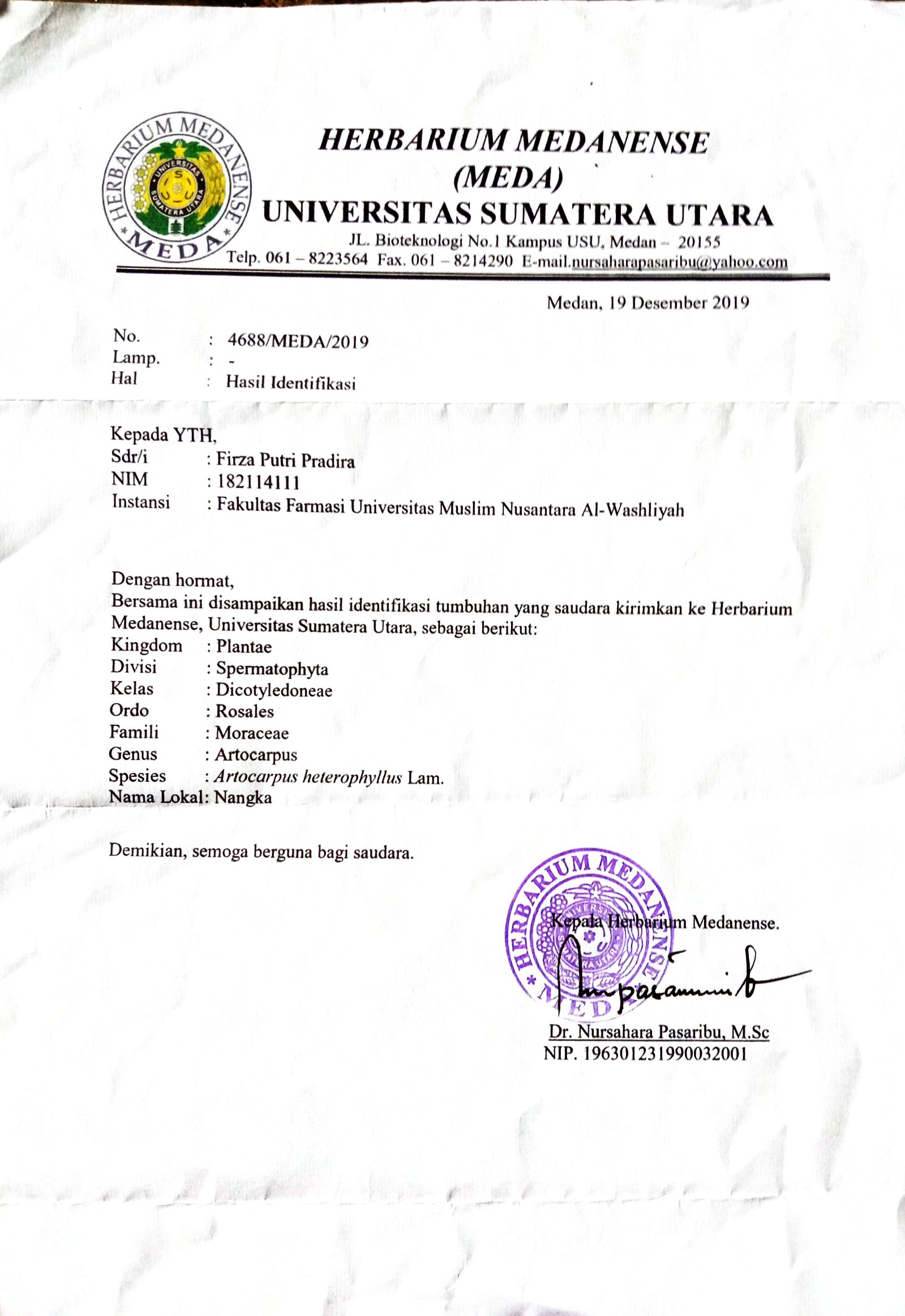
**Lampiran 1.** Hasil identifikasi tanaman biji nangka (*Artocarpus heterophyllus* Lam.)

**Lampiran 2**. Bagan alir penelitian pengolahan biji nangka

Biji nangka segar 3.200 gram

Disortasi basah, dicuci, dikeringkan dilemari pengering. Disortasi kering dan ditimbang.

Simplisia kering 1.400 gram

Dihaluskan dengan blender, ditimbang dan disimpan dalam wadah tertutup

Serbuk simplisia 1.200 gram

Skrining biji nangka

Karakterisasi simplisia

Pembuatan Ekstrak Etanol Biji Nangka (EEBJ)

* Alkaloid
* Flavonoid
* Tanin
* Steroid / triterpenoid
* Saponin
* Glikosida
* Makroskopis
* Mikroskopis
* Kadar Air
* Kadar Sari Larut Air
* Kadar Sari Larut Etanol
* Kdar Abu Total
* Kadar Abu Tidak Larut Asam

Ekstraksi dilakukan dengan metode maserasi menggunakan pelarut etanol 96% dan diuapkan dengan *Rotary Evaporator*

Ekstrak

Hasil

**Lampiran 3.** Bagan alir uji sitotoksisitas terhadap larva udang *Artemia salina Leach*

Dilarutkan dalam labu tentukur 100 ml

Larutan Induk

1 gram ekstrak etanol biji nangka

Dibuat variasi konsentrasi dari larutan induk

3000 μg/ml

500 μg/ml

Kontrol

3500 μg/ml

1500 μg/ml

2500 μg/ml

2000 μg/ml

1000 μg/ml

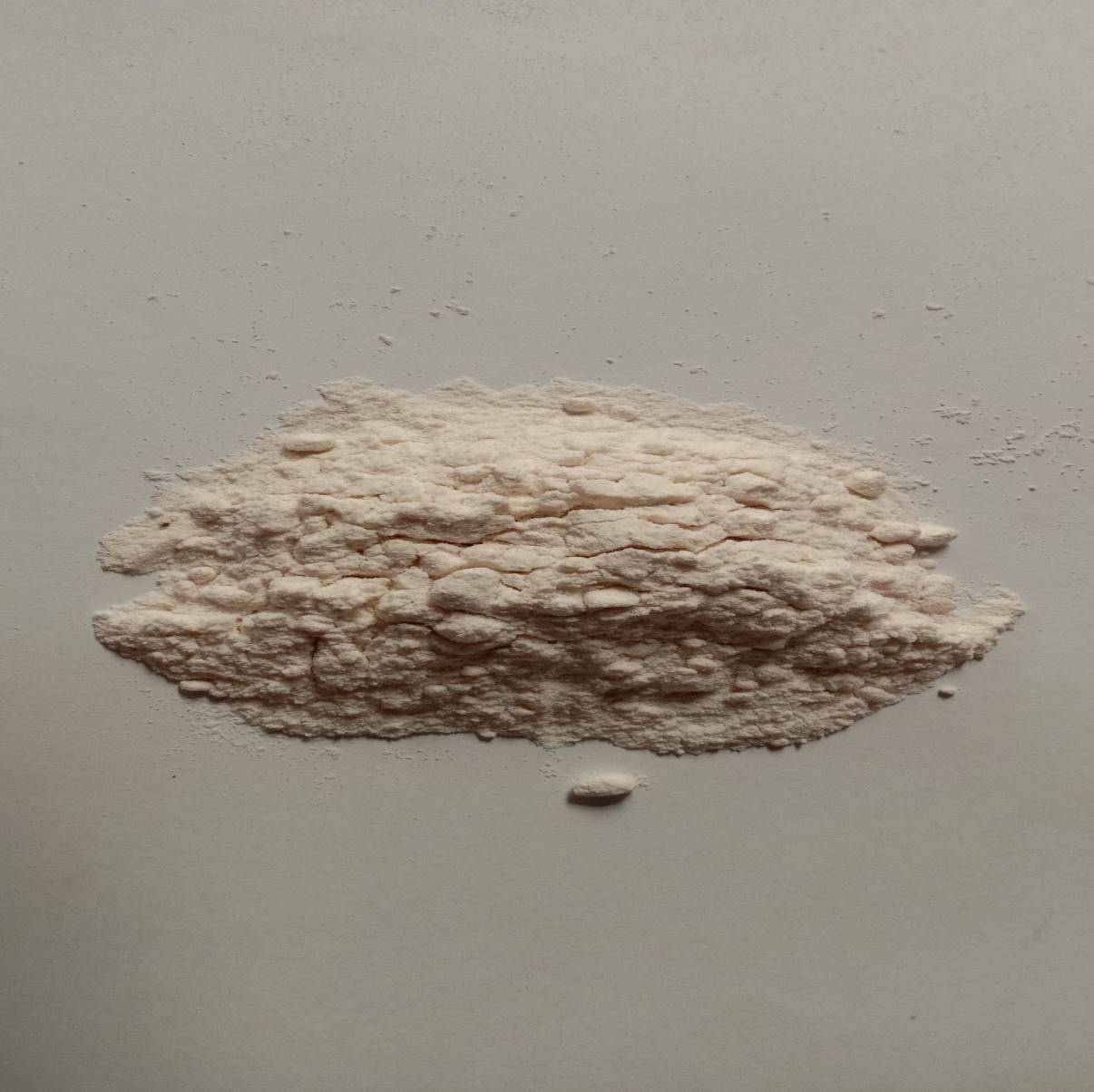
4000 μg/ml

* Masing-masing konsentrasi dibuat sebanyak 3 kali pengulangan
* Dimasukkan ke dalam masing-masing vial
* Ditambahkan 10 ml ekstrak etanol biji pinang dan 10 ekor nauplii
* Vial diletakkan di tempat terang
* mortalitas dihitung setelah 24 jam

**Lampiran 4.** Pengolahansimplisia biji nangka



Biji nangka yang dikeringkan



Serbuk biji nangka



Ekstrak biji nangka

**Lampiran 5.** Pengujian Ekstrak Etanol Biji Nangka



Penimbangan ektrak etanol biji nangka yang digunakan



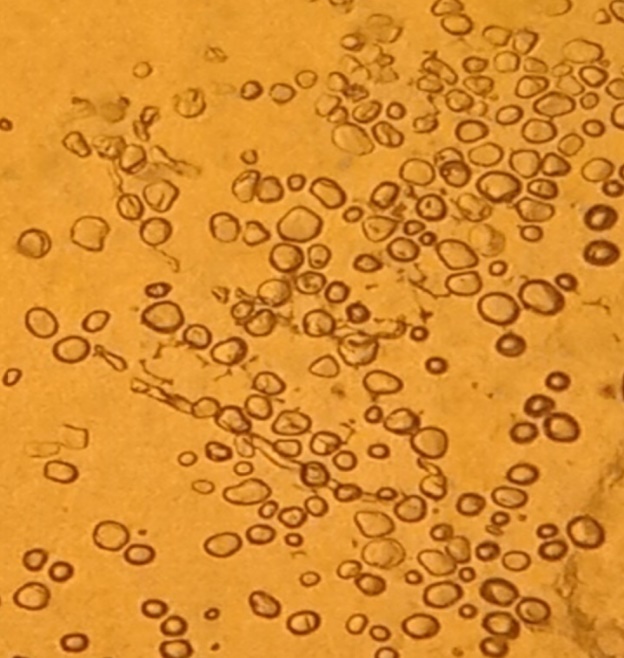
Larutan Induk Baku



Larutan uji yang digunakan

**Lampiran 6.** Hasil mikroskopik simplisia

Hasil mikroskopik pada biji nangka dapat dilihat pada gambar sebagai berikut:

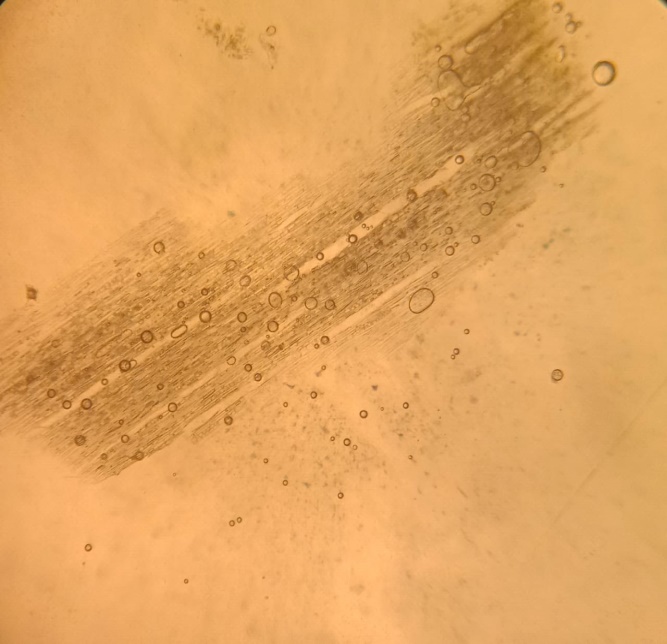


**1**

Keterangan:

1. Pati biji nangka

Hasil mikroskopik pada batang nangka menurut MMI sebagai berikut:

****

**1**

**2**

**3**

**4**

**5**

Keterangan :

1. Trakea
2. Pati
3. Serabut
4. Hablur Kalsium Oksalat
5. Jari-jari empelur

**Lampiran 7**. Perhitungan karakterisasi simplisia

1. Perhitungan kadar air

|  |  |  |  |
| --- | --- | --- | --- |
| Berat sampel | Volume awal | Volume akhir | Volume air |
| 5 g | 1,2 ml | 1,4 ml | 0,2 ml |
| 5 g | 1,3 m l | 1,7 ml | 0,4 ml |
| 5 g | 1,4 ml | 1,7 ml | 0,3 ml |

%Kadar air = x 100%

1. Berat simplisia I = 5 g

Volume air = 0,2 ml

% Kadar air = x 100% = 6%

1. Berat simplisia II = 5 g

Volume air = 0,4 ml

% Kadar air = x 100% = 8%

1. Berat simplisia III = 5 g

Volume air = 0,3 ml

% Kadar air = x 100% = 6%

% Kadar air rata-rata = = 6%

**Lampiran 7**. (Lanjutan)

1. Penetapan kadar sari larut dalam air

|  |  |  |  |
| --- | --- | --- | --- |
| Berat sampel | Bobot awal | Bobot akhir | Berat sari |
| 5 g | 33,08 g | 33,25 g | 0,17 g |
| 5 g | 32,22 g | 32,42 g | 0,20 g |
| 5 g | 31,19 g | 31,38 g | 0,19 g |

%Kadar sari larut dalam air = 100%

1. Berat simplisia I = 5 g

Berat sari = 0,17 g

%Kadar sari larut dalam air = x 100% = 17%

1. Berat simplisia II = 5 g

Berat sari = 0,20 g

%Kadar sari larut dalam air = x 100% = 20%

1. Berat simplisia III = 5 g

Berat sari = 0,19 g

%Kadar sari larut dalam air = x 100% = 19%

%Kadar sari larut dalam air rata-rata = = 18,6%

**Lampiran 7**. (Lanjutan)

1. Penetapan kadar sari larut dalam etanol

|  |  |  |  |
| --- | --- | --- | --- |
| Berat sampel | Berat cawan kosong | Berat cawan berisi | Berat sari |
| 5 g | 23,71 g | 23,82 g | 0,11 g |
| 5 g | 31,73 g | 31,87 g | 0,14 g |
| 5 g | 32,55 g | 32,70 g | 0,15 g |

%Kadar sari larut dalam etanol =

1. Berat simplisia I = 5 g

Berat sari = 0,11 g

%Kadar sari larut dalam etanol = x x 100% = 11%

1. Berat simplisia II = 5 g

Berat sari = 0,14 g

%Kadar sari larut dalam etanol = x x 100% = 14%

1. Berat simplisia III = 5 g

Berat sari = 0,15 g

%Kadar sari larut dalam etanol = x x 100% = 15%

%Kadar sari larut dalam etanol rata-rata =

= 13,33%

**Lampiran 7**. (Lanjutan)

1. Penetapan kadar abu total

|  |  |
| --- | --- |
| Berat sampel | Berat abu total |
| 2 g | 0,05 g |
| 2 g | 0,04 g |
| 2 g | 0,03 g |

%Kadar abu total = x100%

1. Berat simplisia I = 2 g

Berat abu = 0,05 g

%Kadar abu total = x100% = 2,88%

1. Berat simplisia II = 2 g

Berat abu = 0,04 g

%Kadar abu total = x100% = 2,05%

1. Berat simplisia III = 2 g

Berat abu = 0,03 g

%Kadar abu total = x100% = 1,61%

%Kadar abu total rata-rata = =2,18%

**Lampiran 7**. (Lanjutan)

1. Penetapan kadar abu tidak larut dalam asam

|  |  |
| --- | --- |
| Berat sampel | Berat abu |
| 2 g | 0,01 g |
| 2 g | 0,01 g |
| 2 g | 0 g |

%Kadar abu tidak larut dalam asam = x 100%

1. Berat simplisia I = 2 g

Berat abu = 0,01 g

%Kadar abu tidak larut dalam asam = x100%

= 0,5%

1. Berat simplisia II = 2 g

Berat abu = 0,01 g

%Kadar abu tidak larut dalam asam = x100%

= 0,5%

1. Berat simplisia II = 2 g

Berat abu = 0 g

%Kadar abu tidak larut dalam asam = x100%

= 0%

%Kadar abu tidak larut dalam asam rata-rata =

= 0,333%

**Lampiran 8.** Perhitungan konsentrasi larutan uji sitotoksisitas

LIB =

=

=

=

=10.000μg/ml

Perhitungan volume konsentrasi larutan yang di ambil dari LIB

Konsentrasi LIB x Vol. konsentrasi = (Konsentrasi x Vol.) yang akan di ambil

C500 → C1 x V1 = C2 x V2

10.000 x V1= 500 x 30

=

= 1,5 ml

C1000 → C1 x V1 = C2 x V2

10.000 x V1= 1000 x 30

=

= 3 ml

C1500 → C1 x V1 = C2 x V2

10.000 x V1= 1500 x 30

=

= 4,5 mlC2000 → C1 x V1 = C2 x V2

10.000 x V1= 2000 x 30

=

= 6 ml

C2500 → C1 x V1 = C2 x V2

10.000 x V1= 2500 x 30

=

= 7,5 ml

C3000 → C1 x V1 = C2 x V2

10.000 x V1= 3000 x 30

=

= 9 ml

C3500 → C1 x V1 = C2 x V2

10.000 x V1= 3500 x 30

=

= 10,5 ml

C4000 → C1 x V1 = C2 x V2

10.000 x V1= 4000 x 30

=

= 12 ml

**Lampiran 9.** Perhitungan mortalitas hewan uji

mortalitas = x 100%

Konsentrasi 0 ppm = x 100

= 0%

Konsentrasi 500 ppm = x 100%

= 36,67%

Konsentrasi 1000 ppm = x 100%

= 40%

Konsentrasi 1500 ppm = x 100%

= 50%

Konsentrasi 2000 ppm = x 100%

= 56,67%

Konsentrasi 2500 ppm = x 100%

= 63,33%

Konsentrasi 3000 ppm = x 100%

= 73,33

Konsentrasi 3500 ppm = x 100%

= 76,67%

Konsentrasi 4000 ppm = x 100%

= 83,33%

**Lampiran 10.** Perhitungan Nilai LC50

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Nilai slope (b)= | n(ΣXY)-(ΣX ΣY) | |  |  | |
|  | n(ΣX²)-(ΣX)² | |  |  | |
| b= | 8(139,2149974)-((26,19728056)(42,2234)) | | | | |
|  | 8(86,44041681)-(26,19728056)² | | | | |
| b= | 8(139,2149974)-(1106,138256) | | | |  |
|  | 691,5233345-686,2975086 | | | |  |
| b= | 1113,719979-1106,138256 | | | |  |
|  | 691,5233345-686,2975086 | | | |  |
| b= | 7,581723412 | |  | |  |
|  | 5,225825832 | |  | |  |
| b= | 1,450818 |  |  | |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Inter slop a= | ΣY-b ΣX | |  |  |
|  | n | |  |  |
| a= | 42,2234-1,450818(26,19728056) | | | |
|  | 8 | |  |  |
| a= | 42,2234-38,00748618 | | |  |
|  | 8 |  | |  |
| a= | 4,215913815 |  | |  |
|  | 8 |  | |  |
| a= | 0,526989227 |  | |  |

Nilai regresi :

|  |  |  |
| --- | --- | --- |
| Y = | 1,450818 x + 0,526989227 | |
| 5 = | 1,450818 x + 0,526989227 | |
| 1,450818x = | 5 – 0,526989227 | |
| 1,450818x = | 4,473010773 | |
| x = | 3,083096 |  |

|  |  |
| --- | --- |
| Nilai LC50 antilog 3,809568 = | 1210,86 µg/ml |

**Lampiran 11.** Kurva hubungan antara log konsentrasi dan nilai probit (y)

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables Entered/Removeda** | | | |
| Model | Variables Entered | Variables Removed | Method |
| 1 | Log Cb | . | Enter |
| a. Dependent Variable: Nilai Probit | | | |
| b. All requested variables entered. | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model Summary** | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .944a | .890 | .872 | .168 |

a. Predictors: (Constant), Log C

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ANOVAa** | | | | | | | | | | | | |
| Model | | | Sum of Squares | | df | Mean Square | | F | | Sig. | | |
| 1 | Regression | | 1.375 | | 1 | 1.375 | | 48.779 | | .000b | | |
| Residual | | .169 | | 6 | .028 | |  | |  | | |
| Total | | 1.544 | | 7 |  | |  | |  | | |
| a. Dependent Variable: Nilai Probit | | | | | | | | | | | | |
| b. Predictors: (Constant), Log C | | | | | | | | | | | | |
| **Coefficientsa** | | | | | | | | | | | |
| Model | | Unstandardized Coefficients | | | | | Standardized Coefficients | | t | | Sig. |
| B | | Std. Error | | | Beta | |
| 1 | (Constant) | .526 | | .683 | | |  | | .770 | | .470 |
| Log C | 1.451 | | .208 | | | .944 | | 6.984 | | .000 |

a. Dependent Variable: Nilai Probit

**Lampiran 12.** Tabel nilai probit

