**Lampiran 1.** Sampel (jerami nangka)



Gambar : Buah Nangka

**Lampiran 2.** Uji Kualitatif (Uji Warna)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sampel | Uji warna dengan KMnO4 | | | Uji warna dengan FeCl3 |
| Sari jerami  nangka |  |  |  |  |
| Ekstrak etanol jerami nangka |
| Vitamin C |

Gambar: Hasil uji warna pada sampel

**Lampiran 3.** Spektrofotometer



Spektrofotometri UV-Visible



Kuvet

**Lampiran 4** Bagan Alir Pembuatan Larutan Induk

Dilarutkan dalam labu tentukur dengan

aquadest hingga 50 ml

Dipipet 2,5 ml (aquadest ad 50 ml)

Ditimbang 50

mg Asam

Askorbat

LIB I

(

C=1000 µg/ml

)

LIB II

)

µg/ml

(100

Penentuan panjang

gelombang maksimum

(

5

µg/ml

)

Kurva Kalibrasi

Dipipet

1

,5 ml,

ad aq 25

ml (3

µg/ml

)

Dipipet 2

ml, ad aq

25

ml

(4

µg/ml

)

Dipipet

2

5

,

ml,

ad aq 25

ml

(5

µg/ml

)

Dipipet 3

ml, ad aq

25

ml

(6

µg/ml

)

Dipipet

,

3

5

ml,

ad aq 25

ml

(7

µg/ml

)

**Lampiran 5** Bagan Alir Penentuan Kadar Sampel

-

Ditimbang

5

gram

pelarut aquadest

-

Dipipet 10 ml

-

Di ukur serapannya

Sampel

(

Sari dan ekstrak etanol

jerami nangka

)

25

ml Sampel

Hasil Serapan

Dimasukkan ke dalam labu tentukur 100 ml Kemudian dicukupkan sampai batas tanda dengan

Disaring menggunakan kertas saring

Dimasukkan kedalam labu tentukur 25 ml, cukupkan dengan aquadest hingga tanda batas

Perlakuan dilakukan sebanyak 6 kali pada setiap sampel

**Lampiran 6** Perhitungan Persamaan Regresi dan Koefisien Korelasi Vitamin C

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Konsentrasi  (µg/mL)  (X) | Serapan (Y) | XY | X | Y |
| 1 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| 2 | 3,00 | 0,294 | 0,882 | 9 | 0,0864 |
| 3 | 4,00 | 0,384 | 1,536 | 16 | 0,1475 |
| 4 | 5,00 | 0,481 | 2,405 | 25 | 0,2314 |
| 5 | 6,00 | 0,584 | 3,504 | 36 | 0,3411 |
| 6 | 7,00 | 0,699 | 4,893 | 49 | 0,4886 |
| ƩX= 25 | | ƩY= 2,442 | ƩXY= 13,220 | ƩX2= 135 | ƩY2=1,2949 |
| X rata-rata = 4,167 | | Y rata-rata= 0,407 | XY rata-rata= 2,2033 | X  ratarata=22,5 | Yrata-rata =0,2158 |

**1. Persamaan Regresi**

Y=aX+b

a=



=



=



= 0,0988

b = (Yrata-rata)-(a)(Xrata-rata)

= 0,407-0,0988(4,167)

= 0,0047

Persamaan Regresi

Y=aX+b

Y=0,0988X+0,0047

#### 2. Koefisien Korelasi

r =



r =



r =



r =



r = 1

**Lampiran 7.** Data perhitungan Konsentrasi dan Kadar dan kadar sebenarnya sari jerami nangka

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Berat  Sampel  (g) | Serapan (Y) | Konsentrasi (X) | Volume Labu (ml) | FP | Kadar yang diperoleh (mg/1000 g) |
| 1 | 5 | 1,157 | 11,6629 | 25 | 2,5 | 583,145 |
| 2 | 5 | 1,134 | 11,4301 | 25 | 2,5 | 571,505 |
| 3 | 5 | 1,174 | 11,8350 | 25 | 2,5 | 591,75 |
| 4 | 5 | 1,140 | 11,4908 | 25 | 2,5 | 574,54 |
| 5 | 5 | 1,133 | 11,4200 | 25 | 2,5 | 571 |
| 6 | 5 | 1,179 | 11,8856 | 25 | 2,5 | 594,28 |

#### Perhitungan

#### A. Konsentrasi Terukur Y=0,0988X+0,0047

1. Y=0,0988X+0,0047

1.157 =0,0988X+0,0047

X= 

X= 11,6629

1. Y=0,0988X+0,0047

1.134 =0,0988X+0,0047

X= 

X= 11,4301

1. Y=0,0988X+0,0047

1.174 =0,0988X+0,0047

X= 

X=11,8350

1. Y=0,0988X+0,0047

1.140 =0,0988X+0,0047

X= 

X= 11,4908

Lampiran 7. (**Lanjutan)**

1. Y=0,0988X+0,0047

1.133 =0,0988X+0,0047

X= 

X=11,4200

1. Y=0,0988X+0,0047

1.179 =0,0988X+0,0047

X= 

X=11,8856

#### B. Kadar

1.



Kadar =



=

2332.58

µg/mg=

2.3325

mg/g =

233.25

mg/1000 g

Kadar =



=



=

2286.02

µg/mg=

2.2860

mg/g =

228.60

mg/1000 g

Kadar =



=



=

2367

µg/mg=

2.367

mg/g =

236.7

mg/1000 g

Kadar =



=



=

2

298.16

µg/mg=

2.2981

mg/g =

229.81

mg/1000 g

Kadar =



=



2.

3.

4.

=2284 µg/mg=2.284 mg/g = 228.4 mg/1000 g

5.

#### Lampiran 7

**Lampiran 7.** (Lanjutan)

6.

Kadar =



=2377.12 µg/mg=2.3771 mg/g = 237.71 mg/1000 g

#### C. Kadar Sebenarnya Vitamin C

|  |  |  |  |
| --- | --- | --- | --- |
| No | Kadar (X) | X-Xrata-rata | (X-Xrata-rata)2 |
| 1 | 2332.58 | 8.4334 | 71.1222 |
| 2 | 2286.02 | 38.1266 | 1453.6376 |
| 3 | 2367 | 42.8534 | 1836.4138 |
| 4 | 2298.16 | 25.9866 | 675.3033 |
| 5 | 2284 | 40.1466 | 1611.7494 |
| 6 | 2377.12 | 52.9734 | 2806.1811 |
| ƩX=13944.88 | |  | Ʃ(X-Xrata-rata)2=8454.4074 |
| Xrata-rata = 2324.1466 | |  | (X-Xrata-rata)2=1409.0679 |

SD= = 41.1195



=



=



Pada interval kepercayaan 99% dengan nilai α=0,01, dk=6-1 = 5, dan

diperoleh nilai



=

4,

032

.

t

er

hitung =



|

1.

t

er

hitung

=



|

=



|

=

0.5023

2.

t

er

hitung

=



|

=



|

=

2.2711

**Lampiran 7**. (Lanjutan)

3. terhitung



|

= 2.5526

1. terhitung



=



|

=

1.5479



=



|

=

2.3914



=



|

=

3.1555

1. terhitung
2. terhitung

Semua data diterima karena terhitung < t tabel, maka kadar sebenarnya adalah:

µ= Xrata-rata ± |tα/2 ()|

2324.1466± |4,032 (16.7875)|

2324.1466± 67.6872 mg/1000 gram sampel

**Lampiran 8.** Data perhitungan konsentrasi dan kadar dan kadar sebenarnya ekstrak jerami nangka

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Berat  Sampel (g) | Serapan (Y) | Konsentrasi (X) | Volume Labu (ml) | FP | Kadar yang diperoleh (mg/1000 g) |
| 1 | 5 | 4.095 | 41.3997 | 100 | 10 | 8279.9 |
| 2 | 5 | 4.017 | 40.6103 | 100 | 10 | 8122.06 |
| 3 | 5 | 4.054 | 40.9848 | 100 | 10 | 8196.96 |
| 4 | 5 | 3.970 | 40.1346 | 100 | 10 | 8026.92 |
| 5 | 5 | 4.035 | 40.7925 | 100 | 10 | 8158.5 |
| 6 | 5 | 3.959 | 40.0232 | 100 | 10 | 8004.64 |

#### Perhitungan

#### A. Konsentrasi Terukur

Y=0,0988X+0,0047

1. Y=0,0988X+0,0047

4.095=0,0988X+0,0047

X= 

X=41.3997

1. Y=0,0988X+0,0047

4.017 =0,0988X+0,0047

X= 

X=40.6103

1. Y=0,0988X+0,0047

4.054 =0,0988X+0,0047

X= 

X=40.9848

#### Lampiran 8. (Lanjutan)

**B.**

**Kadar**

Kadar =



1.

Kadar

=



=



=

8279.8

µg/mg=

8.2798

mg/g =

827.98

mg/1000 g

2.

Kadar

=



=



=

8122.06

µg/mg=

8.1220

mg/g =

812.20

mg/1000 g

3.

Kadar

=



=



=

8196.96

µg/mg=

8.1969

mg/g =

819.69

mg/1000 g

#### 

1. Kadar



=



=

8026.92

µg/mg=

8.0269

mg/g =

802.692

mg/1000 g



=



=

8158.5

µg/mg=

8.1585

mg/g =

815.85

mg/1000 g



=



=

8004.64

µg/mg=

8.0046

mg/g =

800.46

mg/1000 g

1. Kadar
2. Kadar

#### Lampiran 8. (Lanjutan)

#### C. Kadar Sebenarnya Vitamin C

|  |  |  |  |
| --- | --- | --- | --- |
| No | Kadar (X) | X-Xrata-rata | (X-Xrata-rata)2 |
| 1 | 8279.8 | 147.52 | 21762.1504 |
| 2 | 8122.06 | 9.42 | 88.7364 |
| 3 | 8196.96 | 65.48 | 4287.6304 |
| 4 | 8026.92 | 104.56 | 10932.7936 |
| 5 | 8158.5 | 27.02 | 730.0804 |
| 6 | 8004.64 | 126.84 | 16088.3856 |
| ƩX= 48788.88 | |  | Ʃ(X-Xrata-rata)2= 53889.7768 |
| Xrata-rata = 8131.48 | |  | (X-Xrata-rata)2= 8981.6294 |

#### Lampiran 8. (Lanjutan)

SD=



=



=



=

103.8169

Pada interval kepercayaan 99% dengan nilai α=0,01, dk=6

-

1

= 5, dan

diperoleh

nilai



=

4,032.

terer

hitung =



|

1.

t

er

hitung

=



|

=



|

=

3.4805

2.

t

er

hitung

=



|

=



|

=

0.2222

3.

t

er

hitung

=



|

=



|

=

1.5449

4.

t

er

hitung

=



|

=



|

=

2.4669

5.

t

er

hitung

=



|

=



|

=

0

.6374

6

.

t

er

hitung

=



|

=



|

=

2.9925

#### Lampiran 8. (Lanjutan)

Semua data dapat iterima karena terhitung < t tabel, maka kadar sebenarnya adalah:

µ= Xrata-rata ± |tα/2 ()|

48788.88± |4,6041(42.3846)|

48788.88± 170.8947mg/1000 gram sampel

**Lampiran 9.** Data Distribusi t

