## Lampiran 1. Hasil Identifikasi Tanaman Temulawak

##  *(Curcuma zanthorrhiza Roxb )*



## Lampiran 2. Hasil Identifikasi Tanaman Kunyit *(Curcuma longa L)*



## Lampiran 3. Bagan Alir Pembuatan Ekstrak

150 gram induk kunyit dan induk temulawak

Dimasukkan kedalam beaker gelas di dekok selama 30 menit

Disaringmenggunakan kain flannel dan didekantasi

Ekstrak

Dipipet0,05 ml diditambahkan etanol absolute sampai tanda

Spektrofotometri

## Lampiran 4 Perhitungan Kadar Kurkumin Perhitungan Kadar Kurkumin

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NO.  | x (mcg/ml) | y (serapan) | x.y | x2 | y2 |
| 1 | 0 | 0 | 0 | 0 | 0 |
| 2 | 1 | 0,136 | 0,136 | 1 | 0, 018496 |
| 3 | 2 | 0,274 | 0, 548 | 2 | 0,075076 |
| 4 | 3 | 0,420 | 1, 126 | 3 | 0,1764 |
| 5 | 4 | 0,549 | 2,196 | 4 | 0,301401 |
| 6 | 5 | 0,771 | 3, 555 | 5 | 0,505521 |
|  | ∑x = 15 | ∑y = 2,09 | ∑xy = 7,695 | ∑ = 55 | ∑ = $1,076894$ |
|  | $\overbar{X}$ = 2,5 | $\overbar{Y}$ = 0,34833 | $\overbar{Xy }$=1,2825 | X2 = 9,1666 | $\overbar{Y}$2 = 0, 1420145 |

a = $\frac{\sum\_{}^{}xy –(\sum\_{}^{}x. \sum\_{}^{}y)/n}{\sum\_{}^{}x2-(\sum\_{}^{}x)2/n }$ y = a$\overbar{x}$ + b

= $\frac{7,695-(15.2,09)/6}{55-\left(15\right)2/6}$ b = $\overbar{y}$ - a$\overbar{x}$

= $\frac{7,695-5,225}{55-37,5}$ b = 0,34833 – 0,1414 (2,5)

= $\frac{2,47}{17,5}$ = 0,34833 – 0,35285

= $0,14114$ = 0,00452

 Y = ax + b

 Y = 0,14114 x + 0,0045

r = $\frac{\sum\_{}^{}xy – (\sum\_{}^{}x. \sum\_{}^{}y)/n}{\sqrt{(}\sum\_{}^{}x2-(\sum\_{}^{}x)2/n).(\sum\_{}^{}y2-(\sum\_{}^{}y)2/n)}$

 = $\frac{7,695-(15.2,09)/6}{\sqrt{(}55-\left(15\right)2/6. (0,852087-\left(1,891\right)2/6)}$

 = $\frac{6,84-4,7275}{\sqrt{(}55-37,5).(1,076894-0,728016)}$

 = $\frac{2,47}{√6,105312}$

= $\frac{2,47}{2,47089}$

 = 0,99963

## Lampiran 5 Absorbansi Intensitas Warna Dan Stabilitas Warna

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 0

Suhu Ruang

|  |  |
| --- | --- |
| No | Absorbansi |
| 1 | 0,518 |
| 2 | 0,510 |
| 3 | 0,510 |
| 4 | 0,517 |
| 5 | 0,505 |
| 6 | 0,513 |
| Rata- rata | 0,512 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 1

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,442 |
| 2 | 0,443 |
| 3 | 0,442 |
| 4 | 0,444 |
| 5 | 0,443 |
| 6 | 0,443 |
| Rata Rata | 0,442 |

Hasil Intensitas Dan Stabilitas Warna Pada EkstrakTemulawak Hari 1

Suhu lemari pendingin

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,463 |
| 2 | 0,464 |
| 3 | 0,464 |
| 4 | 0,463 |
| 5 | 0,463 |
| 6 | 0,463 |
| Rata Rata | 0,463 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 1

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,414 |
| 2 | 0,414 |
| 3 | 0,414 |
| 4 | 0,414 |
| 5 | 0,414 |
| 6 | 0,414 |
| Rata Rata | 0,414 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 2

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,438 |
| 2 | 0,437 |
| 3 | 0,437 |
| 4 | 0,437 |
| 5 | 0,437 |
| 6 | 0,437 |
| Rata Rata | 0,437 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 2

Suhu Kulkas

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,463 |
| 2 | 0,463 |
| 3 | 0,464 |
| 4 | 0,463 |
| 5 | 0,463 |
| 6 | 0,464 |
| Rata Rata | 0,463 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 2

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,408 |
| 2 | 0,409 |
| 3 | 0,409 |
| 4 | 0,408 |
| 5 | 0,408 |
| 6 | 0,408 |
| Rata Rata | 0,408 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 3

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,427 |
| 2 | 0,425 |
| 3 | 0,426 |
| 4 | 0,426 |
| 5 | 0,425 |
| 6 | 0,426 |
| Rata Rata | 0,425 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 3

Suhu lemari pendingin

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,45 |
| 2 | 0,45 |
| 3 | 0,45 |
| 4 | 0,45 |
| 5 | 0,45 |
| 6 | 0,449 |
| Rata Rata | 0,449 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 3

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,386 |
| 2 | 0,386 |
| 3 | 0,386 |
| 4 | 0,386 |
| 5 | 0,386 |
| 6 | 0,386 |
| Rata Rata | 0,386 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 4

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,419 |
| 2 | 0,419 |
| 3 | 0,419 |
| 4 | 0,419 |
| 5 | 0,419 |
| 6 | 0,419 |
| Rata Rata | 0,419 |

Hasil Intensitas Dan Stabilitas Warna Pada EkstrakTemulawak Hari 4

Suhu lemari pendingin

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,443 |
| 2 | 0,442 |
| 3 | 0,442 |
| 4 | 0,442 |
| 5 | 0,442 |
| 6 | 0,442 |
| Rata Rata | 0,442 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 4

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,371 |
| 2 | 0,371 |
| 3 | 0,371 |
| 4 | 0,372 |
| 5 | 0,371 |
| 6 | 0,371 |
| Rata Rata | 0,371 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 5

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,409 |
| 2 | 0,41 |
| 3 | 0,409 |
| 4 | 0,408 |
| 5 | 0,408 |
| 6 | 0,409 |
| Rata Rata | 0,408 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 5

Suhu lemari pendingin

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,43 |
| 2 | 0,43 |
| 3 | 0,43 |
| 4 | 0,43 |
| 5 | 0,43 |
| 6 | 0,43 |
| Rata Rata | 0,43 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 5

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,335 |
| 2 | 0,335 |
| 3 | 0,335 |
| 4 | 0,335 |
| 5 | 0,336 |
| 6 | 0,335 |
| Rata Rata | 0,335 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 6

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,401 |
| 2 | 0,401 |
| 3 | 0,401 |
| 4 | 0,401 |
| 5 | 0,401 |
| 6 | 0,401 |
| Rata Rata | 0,401 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 6

Suhu lemari pendingin

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,402 |
| 2 | 0,4 |
| 3 | 0,4 |
| 4 | 0,399 |
| 5 | 0,402 |
| 6 | 0,4 |
| Rata Rata | 0,4 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 6

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,303 |
| 2 | 0,303 |
| 3 | 0,303 |
| 4 | 0,304 |
| 5 | 0,304 |
| 6 | 0,303 |
| Rata Rata | 0,303 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 7

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,379 |
| 2 | 0,378 |
| 3 | 0,378 |
| 4 | 0,379 |
| 5 | 0,379 |
| 6 | 0,378 |
| Rata Rata | 0,378 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 7

Suhu lemari pendingin

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,39 |
| 2 | 0,391 |
| 3 | 0,391 |
| 4 | 0,393 |
| 5 | 0,391 |
| 6 | 0,391 |
| Rata Rata | 0,391 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Temulawak Hari 7

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,287 |
| 2 | 0,287 |
| 3 | 0,287 |
| 4 | 0,287 |
| 5 | 0,287 |
| 6 | 0,287 |
| Rata Rata | 0,287 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 0

Suhu Ruang

|  |  |
| --- | --- |
| No | Absorbansi |
| 1 | 0,696 |
| 2 | 0,678 |
| 3 | 0,678 |
| 4 | 0,667 |
| 5 | 0,681 |
| 6 | 0,684 |
| Rata rata | 0,680 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 1

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,522 |
| 2 | 0,523 |
| 3 | 0,523 |
| 4 | 0,523 |
| 5 | 0,522 |
| 6 | 0,522 |
| Rata Rata | 0,522 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 1

Suhu lemari pendingin

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,582 |
| 2 | 0,582 |
| 3 | 0,582 |
| 4 | 0,582 |
| 5 | 0,582 |
| 6 | 0,585 |
| Rata Rata | 0,582 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 1

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,482 |
| 2 | 0,483 |
| 3 | 0,482 |
| 4 | 0,482 |
| 5 | 0,482 |
| 6 | 0,482 |
| Rata Rata | 0,482 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 2

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,468 |
| 2 | 0,468 |
| 3 | 0,468 |
| 4 | 0,468 |
| 5 | 0,468 |
| 6 | 0,468 |
| Rata Rata | 0,468 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 2

Suhu Kulkas

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,546 |
| 2 | 0,545 |
| 3 | 0,545 |
| 4 | 0,545 |
| 5 | 0,545 |
| 6 | 0,545 |
| Rata Rata | 0,545 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 2

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,425 |
| 2 | 0,425 |
| 3 | 0,425 |
| 4 | 0,424 |
| 5 | 0,424 |
| 6 | 0,424 |
| Rata Rata | 0,424 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 3

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,422 |
| 2 | 0,421 |
| 3 | 0,421 |
| 4 | 0,421 |
| 5 | 0,422 |
| 6 | 0,422 |
| Rata Rata | 0,421 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 3

Suhu lemari pendingin

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,513 |
| 2 | 0,513 |
| 3 | 0,514 |
| 4 | 0,514 |
| 5 | 0,513 |
| 6 | 0,513 |
| Rata Rata | 0,513 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 3

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,406 |
| 2 | 0,405 |
| 3 | 0,405 |
| 4 | 0,405 |
| 5 | 0,405 |
| 6 | 0,405 |
| Rata Rata | 0,405 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 4

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,392 |
| 2 | 0,392 |
| 3 | 0,39 |
| 4 | 0,391 |
| 5 | 0,391 |
| 6 | 0,392 |
| Rata Rata | 0,391 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 4

Suhu lemari pendingin

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,498 |
| 2 | 0,497 |
| 3 | 0,498 |
| 4 | 0,498 |
| 5 | 0,499 |
| 6 | 0,499 |
| Rata Rata | 0,498 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 4

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,391 |
| 2 | 0,391 |
| 3 | 0,39 |
| 4 | 0,39 |
| 5 | 0,39 |
| 6 | 0,39 |
| Rata Rata | 0,39 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 5

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,376 |
| 2 | 0,376 |
| 3 | 0,375 |
| 4 | 0,375 |
| 5 | 0,375 |
| 6 | 0,375 |
| Rata Rata | 0,375 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 5

Suhu lemari pendingin

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,491 |
| 2 | 0,49 |
| 3 | 0,49 |
| 4 | 0,491 |
| 5 | 0,491 |
| 6 | 0,491 |
| Rata Rata | 0,49 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 5

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,344 |
| 2 | 0,344 |
| 3 | 0,345 |
| 4 | 0,345 |
| 5 | 0,345 |
| 6 | 0,345 |
| Rata Rata | 0,344 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 6

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,356 |
| 2 | 0,357 |
| 3 | 0,356 |
| 4 | 0,356 |
| 5 | 0,356 |
| 6 | 0,357 |
| Rata Rata | 0,356 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 6

Suhu lemari pendingin

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,467 |
| 2 | 0,467 |
| 3 | 0,466 |
| 4 | 0,466 |
| 5 | 0,467 |
| 6 | 0,467 |
| Rata Rata | 0,466 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 6

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,323 |
| 2 | 0,321 |
| 3 | 0,321 |
| 4 | 0,322 |
| 5 | 0,321 |
| 6 | 0,321 |
| Rata Rata | 0,321 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 7

Suhu Ruang

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,337 |
| 2 | 0,336 |
| 3 | 0,335 |
| 4 | 0,335 |
| 5 | 0,335 |
| 6 | 0,336 |
| Rata Rata | 0,335 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 7

Suhu lemari pendingin

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,428 |
| 2 | 0,428 |
| 3 | 0,428 |
| 4 | 0,428 |
| 5 | 0,428 |
| 6 | 0,429 |
| Rata Rata | 0,428 |

Hasil Intensitas Dan Stabilitas Warna Pada Ekstrak Kunyit Hari 7

Suhu Lemari Pengering

|  |  |
| --- | --- |
| Pengulangan | Absorbansi |
| 1 | 0,304 |
| 2 | 0,305 |
| 3 | 0,303 |
| 4 | 0,304 |
| 5 | 0,301 |
| 6 | 0,305 |
| Rata Rata | 0,303 |

## Lampiran 6 Rentang Kadar Temulawak Pada Hari 0 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| No.  | Kadar (x) | X -$\overbar{X}$ | (X-$\overbar{X ́}$)2 |
| 1. | 61,69983 | 0,6891 | 0,474859 |
| 2. | 60,75483 | - 0,2559 | 0,065485 |
| 3 | 60,75483 | - 0,2559 | 0,065485 |
| 4. | 61,58144 | 0,57071 | 0,32571 |
| 5. | 60,16442 | - 0,84631 | 0,716241 |
| 6. | 61,109 | 0,09827 | 0,009657 |
| ∑X = 366,0644 $ X$ = 61,01073 |  | ∑(X-$\overbar{X ́}$)2 = 1,657436 |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-X\right) 2}}{n-1} $= $\frac{\sqrt{1,657436}}{6-1} $= $\frac{\sqrt{1,657436 }}{5} $= $\sqrt{0,3314872 }$ = 0,57574

Dasar penolakan data adalah apabila Ttabel ≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel = 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,6891}{0,2350}$ = 2,93234

Thitung 2 = $ \frac{ 0,2559}{0,2350}$ = 1,08893

Thitung 3 = $ \frac{ 0,2559}{0,2350}$ = 1,08893

Thitung 4 = $ \frac{0,57071}{0,2350}$ = 2,42855

Thitung 5 = $ \frac{0,84631}{0,2350}$ = 3,60131

Thitung 6 = $ \frac{0,09827}{0,2350}$ = 0,41817

Semua data diterima Karena Ttabel ≥ T hitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 61,01073± [4,0321 x $\frac{0,57574}{√6}$ ]

= 61,01073 ± [4,0321 x $0,2350$]

= 61,01073 ± 0,94754 mg/g

## Lampiran 7 Rentang Kadar Ekstrak temulawak Pada Hari 1 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| No.  | Kadar (x) | X -$\overbar{X}$ | (X-$\overbar{X ́}$)2 |
| 1. | 52,72505 | - 0,0984 | 0,009683 |
| 2. | 52,84313 | 0,01968 | 0,000387 |
| 3 | 52,72505 | - 0,0984 | 0,009683 |
| 4. | 52,96122 | 0,13777 | 0,018981 |
| 5. | 52,84313 | 0,01968 | 0,000387 |
| 6. | 52,84313 | 0,01968 | 0,000387 |
| ∑X = 316,9407 $ \overbar{X}$ = 52,82345 |  | ∑(X-$\overbar{X ́}$)2 = 0,039508 |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-X\right) 2}}{n-1} $= $\frac{\sqrt{0,039508}}{6-1} $= $\frac{\sqrt{0,039508 }}{5} $= $\sqrt{0,0079016 }$ = 0,08889

Dasar penolakan data adalah apabila Ttabel ≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel = 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,0984}{0,0362}$ = 2,71823

Thitung 2 = $ \frac{ 0,01968}{0,0362}$ = 0,54364

Thitung 3 = $ \frac{0,0984}{0,0362}$ = 2,71823

Thitung 4 = $ \frac{0,13777}{0,0362}$ = 3,80580

Thitung 5 = $ \frac{0,01968}{0,0362}$ = 0,54364

Thitung 6 = $ \frac{0,01968}{0,0362}$ = 0,54364

Semua data diterima Karena Ttabel ≥ T hitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 52,82345± [4,0321 x $\frac{0,08889}{√6}$ ]

= 52,82345± [4,0321 x $0,0362$]

= 52,82345± 0,14596 mg/g

## Lampiran 8 Rentang Kadar Ekstrak temulawak Pada Hari 2 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| No.  | Kadar (x) | X -$\overbar{X}$ | (X-$\overbar{X ́}$)2 |
| 1. | 52,25271 | 0,09841 | 0,009685 |
| 2. | 52,13462 | - 0,01968 | 0,000387 |
| 3 | 52,13462 | - 0,01968 | 0,000387 |
| 4. | 52,13462 | - 0,01968 | 0,000387 |
| 5. | 52,13462 | - 0,01968 | 0,000387 |
| 6. | 52,13462 | - 0,01968 | 0,000387 |
| ∑X = 312,9258 $\overbar{X }= $52,1543 |  | ∑(X-$\overbar{X ́}$)2 = 0,011621 |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-X\right) 2}}{n-1} $= $\frac{\sqrt{0,011621}}{6-1} $= $\frac{\sqrt{0,011621 }}{5} $= $\sqrt{0,0023242 }$ = 0,04820

Dasar penolakan data adalah apabila Ttabel ≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel = 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,09841}{0,0196}$ = 5,02091

Thitung 2 = $ \frac{ 0,01968}{0,0196}$ = 1,00408

Thitung 3 = $ \frac{0,01968}{0,0196}$ = 1,00408

Thitung 4 = $ \frac{0,01968}{0,0196}$ = 1,00408

Thitung 5 = $ \frac{0,01968}{0,0196}$ = 1,00408

Thitung 6 = $ \frac{0,01968}{0,0196}$ = 1,00408

 data no 1 tidak diterima Karena Thitung ≥ Ttabel

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 52,1543± [4,0321 x $\frac{0,04820}{√6}$ ]

= 52,1543± [4,0321 x $0,0196$]

= 52,1543± 0,07902 mg/g

## Lampiran 9 Rentang Kadar Ekstrak temulawak Pada Hari 3 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| No.  | Kadar (x) | X -$\overbar{X}$ | (X-$\overbar{X ́}$)2 |
| 1. | 50,95377 | 0,13777 | 0,018981 |
| 2. | 50,7176 | -0,0984 | 0,009683 |
| 3 | 50,83568 | 0,01968 | 0,000387 |
| 4. | 50,83568 | 0,01968 | 0,000387 |
| 5. | 50,7176 | -0,0984 | 0,009683 |
| 6. | 50,83568 | 0,01968 | 0,000387 |
| ∑X = 304,896 $ \overbar{X}$ = 50,816 |  | ∑(X-$\overbar{X ́}$)2 = 0,039508 |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-X\right) 2}}{n-1} $= $\frac{\sqrt{0,039508}}{6-1} $= $\frac{\sqrt{0,039508 }}{5} $= $\sqrt{0,0079016 }$ = 0,08889

Dasar penolakan data adalah apabila Ttabel ≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel = 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,13777}{0,0362}$ = 3,80580

Thitung 2 = $ \frac{ 0,0984}{0,0362}$ = 2,71823

Thitung 3 = $ \frac{0,01968}{0,0362}$ = 0,54364

Thitung 4 = $ \frac{0,01968}{0,0362}$ = 0,54364

Thitung 5 = $ \frac{0,0984}{0,0362}$ = 2,71823

Thitung 6 = $ \frac{0,01968}{0,0362}$ = 0,54364

Semua data diterima Karena Ttabel ≥ T hitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 50,816 ± [4,0321 x $\frac{0,08889}{√6}$ ]

= 50,816 ± [4,0321 x $0,0362$]

= 50,816 ± 0,14596 mg/g

## Lampiran 10 Rentang Kadar Ekstrak temulawak Pada Hari 4 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| No.  | Kadar (x) | X -$\overbar{X}$ | (X-$\overbar{X ́}$)2 |
| 1. | 50,009 | 0 | 0 |
| 2. | 50,009 | 0 | 0 |
| 3 | 50,009 | 0 | 0 |
| 4. | 50,009 | 0 | 0 |
| 5. | 50,009 | 0 | 0 |
| 6. | 50,009 | 0 | 0 |
| ∑X = 300,054 $ \overbar{X}$ = 50,009 |  | ∑(X-$\overbar{X ́}$)2 = 0 |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-X\right) 2}}{n-1} $= $\frac{\sqrt{0}}{6-1} $= $\frac{\sqrt{0 }}{5} $= $\sqrt{0}$ = 0

Dasar penolakan data adalah apabila Ttabel ≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel = 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0}{0}$ = 0

Thitung 2 = $ \frac{ 0}{0}$ = 0

Thitung 3 = $ \frac{0}{0}$ = 0

Thitung 4 = $ \frac{0}{0}$ = 0

Thitung 5 = $ \frac{0}{0}$ = 0

Thitung 6 = $ \frac{0}{0}$ = 0

Semua data diterima Karena Ttabel ≥ T hitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 50,009± [4,0321 x $\frac{0}{√6}$ ]

= 50,009± [4,0321 x $0$]

 = 50,009± 0 mg/g

## Lampiran 11 Rentang Kadar Ekstrak Temulawak Pada Hari 5 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| No.  | Kadar (x) | X -$\overbar{X}$ | (X-$\overbar{X ́}$)2 |
| 1. | 48,82824 | 0,01969 | 0,000388 |
| 2. | 48,94632 | 0,13777 | 0,018981 |
| 3 | 48,82824 | 0,01969 | 0,000388 |
| 4. | 48,71015 | -0,0984 | 0,009683 |
| 5. | 48,71015 | -0,0984 | 0,009683 |
| 6. | 48,82824 | 0,01969 | 0,000388 |
| ∑X = 292,85134 $ \overbar{X}$ = 48,80855 |  | ∑(X-$\overbar{X ́}$)2 = 0,039509 |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-X\right) 2}}{n-1} $= $\frac{\sqrt{0,039509}}{6-1} $= $\frac{\sqrt{0,039509 }}{5} $= $\sqrt{0,0079018}$ = 0,08889

Dasar penolakan data adalah apabila Ttabel ≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel = 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,01969}{0,0362}$ = 0,54392

Thitung 2 = $ \frac{ 0,13777}{0,0362}$ = 3,80580

Thitung 3 = $ \frac{0,01969}{0,0362}$ = 0,54392

Thitung 4 = $ \frac{0,0984}{0,0362}$ = 2,71823

Thitung 5 = $ \frac{0,0984}{0,0362}$ = 2,71823

Thitung 6 = $ \frac{0,01969}{0,0362}$ = 0,54392

Semua data diterima Karena Ttabel ≥ T hitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 48,80855± [4,0321 x $\frac{0,08889}{√6}$ ]

= 48,80855± [4,0321 x $0,0362$]

 = 48,80855± 0,14596 mg/g

## Lampiran 12 Rentang Kadar Ekstrak temulawak Pada Hari 6 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| No.  | Kadar (x) | X -$\overbar{X}$ | (X-$\overbar{X }$)2 |
| 1. | 47,88355 | 0 | 0 |
| 2. | 47,88355 | 0 | 0 |
| 3 | 47,88355 | 0 | 0 |
| 4. | 47,88355 | 0 | 0 |
| 5. | 47,88355 | 0 | 0 |
| 6. | 47,88355 | 0 | 0 |
|  ∑X = 287,3013  $ \overbar{X}$ = 47,88355 |  | ∑(X-$\overbar{X ́}$)2 = 0 |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-X\right) 2}}{n-1} $= $\frac{\sqrt{0}}{6-1} $= $\frac{\sqrt{0 }}{5} $= $\sqrt{0}$ = 0

Dasar penolakan data adalah apabila Ttabel ≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel = 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0}{0}$ = 0

Thitung 2 = $ \frac{ 0}{0}$ = 0

Thitung 3 = $ \frac{0}{0}$ = 0

Thitung 4 = $ \frac{0}{0}$ = 0

Thitung 5 = $ \frac{0}{0}$ = 0

Thitung 6 = $ \frac{0}{0}$ = 0

Semua data diterima Karena Ttabel ≥ T hitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 47,88355± [4,0321 x $\frac{0}{√6}$ ]

= 47,88355± [4,0321 x $0$]

 = 47,88355± 0 mg/g

## Lampiran 13 Rentang Kadar Ekstrak temulawak Pada Hari 7 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| No.  | Kadar (x) | X -$\overbar{X}$ | (X-$\overbar{X }$)2 |
| 1. | 45,28568 | 0,05905 | 0,003487 |
| 2. | 45,16759 | -0,05904 | 0,003486 |
| 3 | 45,16759 | -0,05904 | 0,003486 |
| 4. | 45,28568 | 0,05905 | 0,003487 |
| 5. | 45,28568 | 0,05905 | 0,003487 |
| 6. | 45,16759 | -0,05904 | 0,003486 |
|  ∑X = 271,35981 $ \overbar{X}$ = 45,22663 |  | ∑(X-$\overbar{X ́}$)2 = 0,020918 |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-X\right) 2}}{n-1} $= $\frac{\sqrt{0,020918}}{6-1} $= $\frac{\sqrt{0,020918}}{5} $= $\sqrt{0,0041836}$ = 0,06468

Dasar penolakan data adalah apabila Ttabel ≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel = 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,05905}{0,0264}$ = 2,23674

Thitung 2 = $ \frac{ 0,05904}{0,0264}$ = 2,23636

Thitung 3 = $ \frac{0,05904}{0,0264}$ = 2,23636

Thitung 4 = $ \frac{0,05905}{0,0264}$ = 2,23674

Thitung 5 = $ \frac{0,05905}{0,0264}$ = 2,23674

Thitung 6 = $ \frac{0,05904}{0,0264}$ = 2,23636

Semua data diterima Karena Ttabel ≥ T hitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 45,22663± [4,0321 x $\frac{0,06468}{√6}$]

= 45,22663± [4,0321 x $0,0264$]

 = 45,22663± 0,10644 mg/g

## Lampiran 14 Rentang Kadar Ekstrak temulawak Pada Hari 1 (Lemari pendingin)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 55,2048 | -0,03936 | 0,001549 |
| 2 | 55,32292 | 0,07876 | 0,006203 |
| 3 | 55,32292 | 0,07876 | 0,006203 |
| 4 | 55,2048 | -0,03936 | 0,001549 |
| 5 | 55,2048 | -0,03936 | 0,001549 |
| 6 | 55,2048 | -0,03936 | 0,001549 |
| ∑ | 331,465 |  | 0,0186031 |
| Xi | 55,24416 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0},0186031 }{6-1} $= $\frac{0,0186031}{5} $= $\sqrt{0,00372062}$ = 0,06099

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,03936}{0,0248}$ = 1,58709

Thitung 2 = $\frac{0,07876}{0,0248}$ = 3,17580

Thitung 3 = $\frac{0,07876}{0,0248}$ = 3,17580

Thitung 4= $\frac{0,03936}{0,0248}$ = 1,58709

Thitung 5 = $\frac{0,03936}{0,0248}$ = 1,58709

Thitung 6 = $\frac{0,03936}{0,0248}$ = 1,58709

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 55,24416 ± [4,0321 x $\frac{0,06099}{√6}$ ]

= 55,24416 ± [4,0321 x 0,0248]$ $

= 55,24416 ± 0,09999 mcg/g

## Lampiran 15 Rentang Kadar Ekstrak temulawak Pada Hari 2 (Lemari Pendingin)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 55,20484 | -0,03936 | 0,001549 |
| 2 | 55,20484 | -0,03936 | 0,001549 |
| 3 | 55,32292 | 0,07872 | 0,006197 |
| 4 | 55,20484 | -0,03936 | 0,001549 |
| 5 | 55,20484 | -0,03936 | 0,001549 |
| 6 | 55,32292 | 0,07872 | 0,006197 |
| ∑ | 331,4652 |  | 0,018591 |
| Xi | 55,2442 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0},018591}{6-1} $= $\frac{0,018591 }{5} $= $\sqrt{0,00123936}$ = 0, 03520

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,03936}{0,0143}$ = 2,75244

Thitung 2 = $\frac{0,03936}{0,0143}$ = 2,75244

Thitung 3 = $\frac{0,07872}{0,0143}$ = 5,50489

Thitung 4= $\frac{0,03936}{0,0143}$ = 2,75244

Thitung 5 = $\frac{0,03936}{0,0143}$ = 2,75244

Thitung 6 = $\frac{0,07872}{0,0143}$ = 5,50489

Data ditolak no 3 dan 6 Karena Thitung ≥ Ttabel

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 55,2442 ± [4,0321 x $\frac{0,03520}{√6}$ ]

= 55,2445 ± [4,0321 x 0,0143]$ $

= 55,2445 ± 0,05765] mg/g

## Lampiran 16 Rentang Kadar Ekstrak temulawak Pada Hari 3 (Lemari Pendingin)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 53,66973 | 0,01968 | 0,000387 |
| 2 | 53,66973 | 0,01968 | 0,000387 |
| 3 | 53,66973 | 0,01968 | 0,000387 |
| 4 | 53,66973 | 0,01968 | 0,000387 |
| 5 | 53,66973 | 0,01968 | 0,000387 |
| 6 | 53,55164 | -0,09841 | 0,009685 |
| ∑ | 321,9003 |  | 0,011621 |
| Xi | 53,65005 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0},011621}{6-1} $= $\frac{\sqrt{0,011621}}{5} $= $\sqrt{0,0023292}$ = 0, 04820

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,01968}{0,0196}$ = 1,00408

Thitung 2 = $\frac{0,01968}{0,0196}$ = 1,00408

Thitung 3 = $\frac{0,01968}{0,0196}$ = 1,00408

Thitung 4= $\frac{0,01968}{0,0196}$ = 1,00408

Thitung 5 = $\frac{0,01968}{0,0196}$ = 1,00408

Thitung 6 = $\frac{0,09841}{0,0196}$ = 5,02091

Data ditolak no 6 Karena Thitung ≥ Ttabel

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 0,643 ± [4,0321 x $\frac{0,04820}{√6}$ ]

= 0,643 ± [4,0321 x 0,0196]$ $

= 0,643 ± 0,07902 ] mg/g

## Lampiran 17 Rentang Kadar Ekstrak temulawak Pada Hari 4 (Lemari Pendingin)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 52,84313 | 0,0984 | 0,009683 |
| 2 | 52,72505 | -0,01968 | 0,000387 |
| 3 | 52,72505 | -0,01968 | 0,000387 |
| 4 | 52,72505 | -0,01968 | 0,000387 |
| 5 | 52,72505 | -0,01968 | 0,000387 |
| 6 | 52,72505 | -0,01968 | 0,000387 |
| ∑ | 316,4684 |  | 0,011619 |
| Xi | 52,74473 |  |  |

SD = $\frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1}$ = $\frac{\sqrt{0,011619}}{6-1} $= $\frac{\sqrt{0,011619}}{5} $= $\sqrt{0,0023282}$ = 0,04820

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,0984}{0,0401}$ = 2,45386

Thitung 2 = $\frac{0,01968}{0,0401}$ = 1,00408

Thitung 3 = $\frac{0,01968}{0,0401}$ = 1,00408

Thitung 4= $\frac{0,01968}{0,0401}$ = 1,00408

Thitung 5 = $\frac{0,01968}{0,0401}$ = 1,00408

Thitung 6 = $\frac{0,01968}{0,0401}$ = 1,00408

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 52,74473 ± [4,0321 x $\frac{0,04820}{√6}$ ]

= 52,74473 ± [4,0321 x 0,0401]$ $

= 52,74473 ± 016168] mg/g

## Lampiran 18 Rentang Kadar Ekstrak temulawak Pada Hari 5 (Lemari Pendingin)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 51,30803 | 0 | 0 |
| 2 | 51,30803 | 0 | 0 |
| 3 | 51,30803 | 0 | 0 |
| 4 | 51,30803 | 0 | 0 |
| 5 | 51,30803 | 0 | 0 |
| 6 | 51,30803 | 0 | 0 |
| ∑ | 307,8482 |  | 0 |
| Xi | 51,30803 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0}}{0} $= $\frac{\sqrt{0}}{0} $= $\sqrt{0}$ = 0

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = = $\frac{0}{0}$ = 0

Thitung 2 = = $\frac{0}{0}$ = 0

Thitung 3 = = $\frac{0}{0}$ = 0

Thitung 4= = $\frac{0}{0}$ = 0

Thitung 5 = $\frac{0}{0}$ = 0

Thitung 6 = $\frac{0}{0}$ = 0

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 51,30803 ± [4,0321 x $\frac{0}{√6}$ ]

= 51,30803 ± [4,0321 x 0]$ $

= 51,30803 ± 0] mg/g

## Lampiran 19 Rentang Kadar Ekstrak temulawak Pada Hari 6 (Lemari Pendingin)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 48,00164 | 0,17713 | 0,031375 |
| 2 | 47,76547 | -0,05904 | 0,003486 |
| 3 | 47,76547 | -0,05904 | 0,003486 |
| 4 | 47,64738 | -0,17713 | 0,031375 |
| 5 | 48,00164 | 0,17713 | 0,031375 |
| 6 | 47,76547 | -0,05904 | 0,003486 |
| ∑ | 286,9471 |  | 0,104582 |
| Xi | 47,82451 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2} }{n-1} $= $\frac{\sqrt{0},104582}{6-1} $= $\frac{\sqrt{0,104582}}{5} $= $\sqrt{0,02091646}$ = 0, 14462

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,17713}{0,0590}$ = 0,30022

Thitung 2 = $\frac{0,05904}{0,0590}$ = 1,00067

Thitung 3 = $\frac{0,05904}{0,0590}$ = 1,00067

Thitung 4= $\frac{0,17713}{0,0590}$ = 0,30022

Thitung 5 =$\frac{0,17713}{0,0590}$ = 0,30022

Thitung 6 = $\frac{0,05904}{0,0590}$ = 1,00067

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 47,82451 ± [4,0321 x $\frac{0,14462}{√6}$ ]

= 47,82451 ± [4,0321 x 0,0590]$ $

= 47,82451 ± 0,023789] mg/g

## Lampiran 20 Rentang Kadar Ekstrak temulawak Pada Hari 7 (Lemari Pendingin)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 46,58462 | -0,13776 | 0,018978 |
| 2 | 46,7027 | -0,01968 | 0,000387 |
| 3 | 46,7027 | -0,01968 | 0,000387 |
| 4 | 46,93883 | 0,21645 | 0,046851 |
| 5 | 46,7027 | -0,01968 | 0,000387 |
| 6 | 46,7027 | -0,01968 | 0,000387 |
| ∑ | 280,3343 |  | 0,067378 |
| Xi | 46,72238 |  |  |

SD = $\frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0},067378}{6-1} $= $\frac{\sqrt{0,067378}}{5} $= $\sqrt{0,01347552}$ = 0, 11608

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,13776}{0,0473}$ = 2,91247

Thitung 2 = $\frac{0,01968}{0,0473}$ = 0,41606

Thitung 3 = $\frac{0,01968}{0,0473}$ = 0,41606

Thitung 4= = $\frac{0,21645}{0,0473}$ = 4,57610

Thitung 5 = $\frac{0,01968}{0,0473}$ = 0,41606

Thitung 6 = $\frac{0,01968}{0,0473}$ = 0,41606

data ditolak no 4 Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 46,72238 ± [4,0321 x $\frac{0,11608}{√6}$ ]

= 46,72238± [4,0321 x 0,0473]$ $

= 46,72238 ± 0,19071] mg/g

## Lampiran 21 Rentang Kadar Ekstrak temulawak Pada Hari 1 (Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 49,41866 | 0 | 0 |
| 2 | 49,41866 | 0 | 0 |
| 3 | 49,41866 | 0 | 0 |
| 4 | 49,41866 | 0 | 0 |
| 5 | 49,41866 | 0 | 0 |
| 6 | 49,41866 | 0 | 0 |
| ∑ | 296,512 |  | 0 |
| Xi | 49,41866 |  |  |

SD = $\frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2} }{n-1} $= $\frac{\sqrt{0}}{0} $= $\frac{\sqrt{0}}{0} $= $\sqrt{0}$ = 0

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = = $\frac{0}{0}$ = 0

Thitung 2 = = $\frac{0}{0}$ = 0

Thitung 3 = = $\frac{0}{0}$ = 0

Thitung 4= = $\frac{0}{0}$ = 0

Thitung 5 = $\frac{0}{0}$ = 0

Thitung 6 = $\frac{0}{0}$ = 0

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 49,41866 ± [4,0321 x $\frac{0}{√6}$ ]

= 49,41866 ± [4,0321 x 0]$ $

= 49,41866 ± 0] mg/g

##

## Lampiran 22 Rentang Kadar Ekstrak temulawak Pada Hari 2(Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 55,20484 | -0,03936 | 0,001549 |
| 2 | 55,20484 | -0,03936 | 0,001549 |
| 3 | 55,32292 | 0,07872 | 0,006197 |
| 4 | 55,20484 | -0,03936 | 0,001549 |
| 5 | 55,20484 | -0,03936 | 0,001549 |
| 6 | 55,32292 | 0,07872 | 0,006197 |
| ∑ | 331,4652 |  | 0,018591 |
| Xi | 55,2442 |  |  |

SD = $\frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,0185937}}{6-1} $= $\frac{\sqrt{0,0185937}}{5}$ = $\sqrt{0},003718$ = 0, 06097

 Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,03936}{0,02489}$ = 1,58135

Thitung 2 = $\frac{0,07873}{0,02489}$ = 3,16311

Thitung 3 = $\frac{0,07873}{0,02489}$ = 3,16311

Thitung 4= $\frac{0,03936}{0,02489}$ = 1,58135

Thitung 5 = $\frac{0,03936}{0,02489}$ = 1,58135

Thitung 6 = $\frac{0,03936}{0,02489}$ = 1,58135

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 55,2442 ± [4,0321 x $\frac{0,06097}{√6}$ ]

= 55,2442 ± [4,0321 x 0,02489]$ $

= 55,2442 ± 0,10035] mg/g

## Lampiran 23 Rentang Kadar Ekstrak temulawak Pada Hari 3 (Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 46,11228 | 0 | 0 |
| 2 | 46,11228 | 0 | 0 |
| 3 | 46,11228 | 0 | 0 |
| 4 | 46,11228 | 0 | 0 |
| 5 | 46,11228 | 0 | 0 |
| 6 | 46,11228 | 0 | 0 |
| ∑ | 276,6737 |  | 0 |
| Xi | 46,11228 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0}}{0} $= $\frac{\sqrt{0}}{0} $= $\sqrt{0}$ = 0

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = = $\frac{0}{0}$ = 0

Thitung 2 = = $\frac{0}{0}$ = 0

Thitung 3 = = $\frac{0}{0}$ = 0

Thitung 4= = $\frac{0}{0}$ = 0

Thitung 5 = $\frac{0}{0}$ = 0

Thitung 6 = $\frac{0}{0}$ = 0

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 46,11228 ± [4,0321 x $\frac{0}{√6}$ ]

= 46,11228 ± [4,0321 x 0]$ $

= 46,11228 ± 0] mcg/g

## Lampiran 24 Rentang Kadar Ekstrak temulawak Pada Hari 4(Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 44,341 | -0,01968 | 0,000387 |
| 2 | 44,341 | -0,01968 | 0,000387 |
| 3 | 44,341 | -0,01968 | 0,000387 |
| 4 | 44,45908 | 0,0984 | 0,009683 |
| 5 | 44,341 | -0,01968 | 0,000387 |
| 6 | 44,341 | -0,01968 | 0,000387 |
| ∑ | 266,1641 |  | 0,011619 |
| Xi | 44,36068 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,011619}}{6-1} $= $\frac{\sqrt{0,0116191}}{5} $= $\sqrt{0,00232382}$ = 0, 04820

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,01968}{0,0401}$ = 1,00408

Thitung 2 = $\frac{0,01968}{0,0401}$ = 1,00408

Thitung 3 = $\frac{0,01968}{0,0401}$ = 1,00408

Thitung 4 = $\frac{0,0984}{0,0401}$ = 2,45386

Thitung 5 = $\frac{0,01968}{0,0401}$ = 1,00408

Thitung 6 = $\frac{0,01968}{0,0401}$ = 1,00408

data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 44,36068 ± [4,0321 x $\frac{0,04820}{√6}$ ]

= 44,36068 ± [4,0321 x 0, 0401]$ $

= 44,36068 ± 0, 016168] mcg/g

## Lampiran 25 Rentang Kadar Ekstrak temulawak Pada Hari 5(Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 40,08993 | -0,01968 | 0,000387 |
| 2 | 40,08993 | -0,01968 | 0,000387 |
| 3 | 40,08993 | -0,01968 | 0,000387 |
| 4 | 40,08993 | -0,01968 | 0,000387 |
| 5 | 40,20801 | 0,0984 | 0,009683 |
| 6 | 40,08993 | -0,01968 | 0,000387 |
| ∑ | 240,6577 |  | 0,011619 |
| Xi | 40,10961 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,011619}}{6-1} $= $\frac{\sqrt{0,011619}}{5} $= $\sqrt{00232382}$ = 0,04820

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,01968}{0,0401}$ = 1,00408

Thitung 2 = $\frac{0,01968}{0,0401}$ = 1,00408

Thitung 3 = $\frac{0,01968}{0,0401}$ = 1,00408

Thitung 4= $\frac{0,01968}{0,0401}$ = 1,00408

Thitung 5 = $\frac{0,0984}{0,0401}$ = 2,45386

Thitung 6 = $\frac{0,01968}{0,0401}$ = 1,00408

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 40,10961 ± [4,0321 x $\frac{0,04820}{√6}$ ]

= 40,10961 ± [4,0321 x 0,0401]$ $

= 40,10961 ± 0,16168] mg/g

## Lampiran 26 Rentang Kadar Ekstrak temulawak Pada Hari 6 (Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 36,3112 | -0,03936 | 0,001549 |
| 2 | 36,3112 | -0,03936 | 0,001549 |
| 3 | 36,3112 | -0,03936 | 0,001549 |
| 4 | 36,42929 | 0,07873 | 0,006198 |
| 5 | 36,42929 | 0,07873 | 0,006198 |
| 6 | 36,3112 | -0,03936 | 0,001549 |
| ∑ | 218,1034 |  | 0,018594 |
| Xi | 36,35056 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1}$ = $\frac{\sqrt{0,018594}}{6-1} $= $\frac{\sqrt{0,018594}}{5} $= $\sqrt{0},0037188$ = 0,060981

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,03936}{0,0248}$ = 1,58709

Thitung 2 = $\frac{0,03936}{0,0248}$ = 1,58709

Thitung 3 = $\frac{0,03936}{0,0248}$ = 1,58709

Thitung 4= $\frac{0,07873}{0,0248}$ = 3,17459

Thitung 5 = $\frac{0,07873}{0,0248}$ = 3,17459

Thitung 6 = $\frac{0,03936}{0,0248}$ = 1,58709

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 36,35056 ± [4,0321 x $\frac{0,06098}{√6}$ ]

= 36,35056 ± [4,0321 x 0,0248]$ $

= 36,35056 ± 0,09999] mg/g

## Lampiran 27 Rentang Kadar Ekstrak temulawak Pada Hari 7(Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 34,42183 | 0 | 0 |
| 2 | 34,42183 | 0 | 0 |
| 3 | 34,42183 | 0 | 0 |
| 4 | 34,42183 | 0 | 0 |
| 5 | 34,42183 | 0 | 0 |
| 6 | 34,42183 | 0 | 0 |
| ∑ | 206,531 |  | 0 |
| Xi | 34,42183 |  |  |

 SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0}}{0} $= $\frac{\sqrt{0}}{0} $= $\sqrt{0}$ = 0

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0}{0}$ = 0

Thitung 2 = $\frac{0}{0}$ = 0

Thitung 3 = $\frac{0}{0}$ = 0

Thitung 4 = $\frac{0}{0}$ = 0

Thitung 5 = $\frac{0}{0}$ = 0

Thitung 6 = $\frac{0}{0}$ = 0

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 34,42183 ± [4,0321 x $\frac{0}{√6}$ ]

= 34,42183 ± [4,0321 x 0]$ $

= 34,42183 ± 0] mg/g

## Lampiran 28 Retang Kadar Ekstrak Kunyit Pada Hari 0 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 66,17493 | 1,4485 | 2,098152 |
| 2 | 64,47453 | -0,2519 | 0,063454 |
| 3 | 64,47453 | -0,2519 | 0,063454 |
| 4 | 63,43538 | -1,29105 | 1,66681 |
| 5 | 64,75793 | 0,0315 | 0,000992 |
| 6 | 65,04134 | 0,31491 | 0,099168 |
| ∑ | 388,3586 |  | 3,99203 |
| Xi | 64,72643 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-X\right) 2}}{n-1} $= $\frac{\sqrt{3,99203}}{6-1} $= $\frac{\sqrt{3,99203 }}{5} $= $\sqrt{0,79840 }$ = 0,89353

Dasar penolakan data adalah apabila Ttabel ≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel = 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{1,4485}{0,50294}$ = 2,88006

Thitung 2 = $\frac{0,2519}{0,50294}$ = 0,50085

Thitung 3 = $\frac{0,2519}{0,50294}$ = 0,50085

Thitung 4 = $\frac{1,29105}{0,50294}$ = 2,56700

Thitung 5 = $\frac{0,0315}{0,50294}$ = 0,06263

Thitung 6 = $\frac{0,31491}{0,50294}$ = 0,62613

Semua data diterima Karena Ttabel ≥ T hitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 64,72643 ± [4,0321 x $\frac{0,89353}{√6}$ ]

= 64,72643 ± [4,0321 x $0,50294$]

= 64,72643 ± 2,02790] mg/g

##

## Lampiran 29 Rentang Kadar Ekstrak Kunyit Pada Hari 1 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| NO  | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 49,73749 | -0,04724 | 0,002232 |
| 2 | 49,83196 | 0,04723 | 0,002231 |
| 3 | 49,83196 | 0,04723 | 0,002231 |
| 4 | 49,83196 | 0,04723 | 0,002231 |
| 5 | 49,73749 | -0,04724 | 0,002232 |
| 6 | 49,73749 | -0,04724 | 0,002232 |
| ∑ | 298,7084 |  | 0,013387 |
| Xi | 49,78473 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,013387}}{6-1}$ = $\frac{\sqrt{0,013387}}{5}$= $\sqrt{0},00267$ = 0, 05167

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,04724}{0,02109}$ = 2,23992

Thitung 2 = $\frac{0,04723}{0,02109}$ = 2,23944

Thitung 3 = $\frac{0,04723}{0,02109}$ = 2,23944

Thitung 4 = $\frac{0,04723}{0,02109}$ = 2,23944

Thitung 5 = $\frac{0,04724}{0,02109}$ = 2,23992

Thitung 6 = $\frac{0,04724}{0,02109}$ = 2,23992

Semua Data Diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 49,78473 ± [4,0321 x $\frac{0,05167}{√6}$ ]

= 49,78473 ± [4,0321 x 0,012109]$ $

= 49,78473 ± 0,04882] mg/g

## Lampiran 30 Rentang Kadar Ekstrak Kunyit Pada Hari 2 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 44,63621 | 0 | 0 |
| 2 | 44,63621 | 0 | 0 |
| 3 | 44,63621 | 0 | 0 |
| 4 | 44,63621 | 0 | 0 |
| 5 | 44,63621 | 0 | 0 |
| 6 | 44,63621 | 0 | 0 |
| ∑ | 267,8173 |  | 0 |
| Xi | 44,63621 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0}}{0}$ = $\frac{\sqrt{0}}{0} $= $\sqrt{0}$ = 0

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0}{0}$ = 0

Thitung 2 = $\frac{0}{0}$ = 0

Thitung 3 = $\frac{0}{0}$ = 0

Thitung 4 = $\frac{0}{0}$ = 0

Thitung 5 = $\frac{0}{0}$ = 0

Thitung 6 = $\frac{0}{0}$ = 0

Semua Data Diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 44,63621± [4,0321 x $\frac{0}{√6}$ ]

= 44,63621 ± [4,0321 x 0]$ $

= 44,63621 ± 0] mg/g

## Lampiran 31 Rentang Kadar Ekstrak Kunyit Pada Hari 3 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 40,29067 | 0,04724 | 0,002232 |
| 2 | 40,19621 | -0,04722 | 0,00223 |
| 3 | 40,19621 | -0,04722 | 0,00223 |
| 4 | 40,19621 | -0,04722 | 0,00223 |
| 5 | 40,29067 | 0,04724 | 0,002232 |
| 6 | 40,29067 | 0,04724 | 0,002232 |
| ∑ | 241,4606 |  | 0,013384 |
| Xi | 40,24343 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,013384}}{6-1} $= $\frac{\sqrt{0,013384}}{5} $= $\sqrt{0,00267}$ = $0,05167$

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,04724}{0,02109}$ = 2,23992

Thitung 2 = $\frac{0,04722}{0,02109}$ = 2,23897

Thitung 3 = $\frac{0,04722}{0,02109}$ = 2,23897

Thitung 4 = $\frac{0,04722}{0,02109}$ = 2,23897

Thitung 5 = $\frac{0,04724}{0,02109}$ = 2,23992

Thitung 6 = $\frac{0,04724}{0,02109}$ = 2,23992

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 40,24343 ± [4,0321 x $\frac{0,05167}{√6}$ ]

= 40,24343 ± [4,0321 x 0,02109]$ $

= 40,24343 ± 0,08503] mg/g

## Lampiran 32 Rentang Kadar Ekstrak Kunyit Pada Hari 4 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 37,45663 | 0,06298 | 0,003966 |
| 2 | 37,45663 | 0,06298 | 0,003966 |
| 3 | 37,26769 | -0,12596 | 0,015866 |
| 4 | 37,36216 | -0,03149 | 0,000992 |
| 5 | 37,36216 | -0,03149 | 0,000992 |
| 6 | 37,45663 | 0,06298 | 0,003966 |
| ∑ | 224,3619 |  | 0,029749 |
| Xi | 37,39365 |  |  |

SD =$ \frac{ \sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,029749}}{6-1} $= $\frac{\sqrt{0,029749}}{5} $= $\sqrt{0,00594}$ = 0, 07707

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,06298}{0,03146}$ = 2,00190

Thitung 2 = $\frac{0,06298}{0,03146}$ = 2,00190

Thitung 3 = $\frac{0,12596}{0,03146}$ = 4,00381

Thitung 4= $\frac{0,03149}{0,03146}$ = 1,00095

Thitung 5 = $\frac{0,03149}{0,03146}$ = 1,00095

Thitung 6 = $\frac{0,06298}{0,03146}$ = 2,00190

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 37,39365 ± [4,0321 x $\frac{0,07707}{√6}$ ]

= 37,39365 ± [4,0321 x 0,03146]$ $

= 37,39365 ± 0,12684] mg/g

##

## Lampiran 33 Rentang Kadar Ekstrak Kunyit Pada Hari 5 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 35,94514 | 0,06298 | 0,003966 |
| 2 | 35,94514 | 0,06298 | 0,003966 |
| 3 | 35,85067 | -0,03149 | 0,000992 |
| 4 | 35,85067 | -0,03149 | 0,000992 |
| 5 | 35,85067 | -0,03149 | 0,000992 |
| 6 | 35,85067 | -0,03149 | 0,000992 |
| ∑ | 215,293 |  | 0,011899 |
| Xi | 35,88216 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,011899}}{6-5} $= $\frac{\sqrt{0,011899}}{5} $= $\sqrt{0,00237}$ = 0,04868

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,06298}{0,01987}$ = 3,16960

Thitung 2 = $\frac{0,06298}{0,01987}$ = 3,16960

Thitung 3 = $\frac{0,03149}{0,01987}$ = 1,58480

Thitung 4= $\frac{0,03149}{0,01987}$ = 1,58480

Thitung 5 = $\frac{0,03149}{0,01987}$ = 1,58480

Thitung 6 = $\frac{0,03149}{0,01987}$ = 1,58480

Data ditolak no 1 dan 2 Karena Thitung ≥ Ttabel

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 35,88216 ± [4,0321 x $\frac{0,04868}{√6}$ ]

= 35,88216 ± [4,0321 x 0,01987]$ $

= 35,88216 ± 0,08011] mg/g

## Lampiran 34 Rentang Kadar Ekstrak Kunyit Pada Hari 6 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 34,05577 | -0,03149 | 0,000992 |
| 2 | 34,15024 | 0,06298 | 0,003966 |
| 3 | 34,05577 | -0,03149 | 0,000992 |
| 4 | 34,05577 | -0,03149 | 0,000992 |
| 5 | 34,05577 | -0,03149 | 0,000992 |
| 6 | 34,15024 | 0,06298 | 0,003966 |
| ∑ | 204,5236 |  | 0,011899 |
| Xi | 34,08726 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,011899}}{6-1} $= $\frac{\sqrt{0,011899}}{5}$ = $\sqrt{0,00237}$ = 0,04868

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,03149}{0,01987}$ = 1,58480

Thitung 2 = $\frac{0,06298}{0,01987}$ = 3,16960

Thitung 3 = $\frac{0,03149}{0,01987}$ = 1,58480

Thitung 4 = $\frac{0,03149}{0,01987}$ = 1,58480

Thitung 5 = $\frac{0,03149}{0,01987}$ = 1,58480

Thitung 6 = $\frac{0,06298}{0,01987}$ = 3,16960

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 34,08726 ± [4,0321 x $\frac{0,04868 }{√6}$ ]

= 34,08726 ± [4,0321 x 0,01987]$ $

= 34,08726 ± 0,08011] mg/g

## Lampiran 35 Rentang Kadar Ekstrak Kunyit Pada Hari 7 (Ruang)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 32,26088 | 0,12597 | 0,015868 |
| 2 | 32,1664 | 0,03149 | 0,000992 |
| 3 | 32,07194 | -0,06297 | 0,003965 |
| 4 | 32,07194 | -0,06297 | 0,003965 |
| 5 | 32,07194 | -0,06297 | 0,003965 |
| 6 | 32,1664 | 0,03149 | 0,000992 |
| ∑ | 192,8095 |  | 0,029747 |
| Xi | 32,13491 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,029747}}{6-1} $= $\frac{\sqrt{0,029747}}{5}$= $\sqrt{0,00594}$ = 0,07707

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,12597}{0,03146}$ = 4,00413

Thitung 2 = $\frac{0,03149}{0,03146}$ = 1,00095

Thitung 3 = $\frac{0,06297}{0,03146}$ = 2,00158

Thitung 4 = $\frac{0,06297}{0,03146}$ = 2,00158

Thitung 5 = $\frac{0,06297}{0,03146}$ = 2,00158

Thitung 6 = $\frac{0,03149}{0,03146}$ = 1,00095

data ditolak no 1 Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 32,13491 ± [4,0321 x $\frac{0,07707}{√6}$ ]

= 32,13491 ± [4,0321 x 0,03146]$ $

= 32,13491 ± 0, 12684] mg/g

##

## Lampiran 36 Rentang Kadar Ekstrak Kunyit Pada Hari 1(Lemari Pendingin)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 55,40558 | 0 | 0 |
| 2 | 55,40558 | 0 | 0 |
| 3 | 55,40558 | 0 | 0 |
| 4 | 55,40558 | 0 | 0 |
| 5 | 55,40558 | 0 | 0 |
| 6 | 55,40558 | 0 | 0 |
| ∑ | 332,4335 |  | 0 |
| Xi | 55,40558 |  |  |

SD =$ \frac{ \sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0}}{0}$ = $\frac{\sqrt{0} }{0}$= $\sqrt{0}$ = 0

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0}{0}$ = 0

Thitung 2 = $\frac{0}{0}$ = 0

Thitung 3 = $\frac{0}{0}$ = 0

Thitung 4= $\frac{0}{0}$ = 0

Thitung 5 = $\frac{0}{0}$ = 0

Thitung 6 = $\frac{0}{0}$ = 0

Semua Data diterima Karena Thitung ≥ Ttabel

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 55,40558 ± [4,0321 x $\frac{0}{√6}$ ]

= 55,40558 ± [4,0321 x 0]$ $

= 55,40558 ± 0] mg/g

## Lampiran 37 Rentang Kadar Ekstrak Kunyit Pada Hari 2 (kulkas )

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 52,00473 | 0,07873 | 0,006198 |
| 2 | 51,91026 | -0,01574 | 0,000248 |
| 3 | 51,91026 | -0,01574 | 0,000248 |
| 4 | 51,91026 | -0,01574 | 0,000248 |
| 5 | 51,91026 | -0,01574 | 0,000248 |
| 6 | 51,91026 | -0,01574 | 0,000248 |
| ∑ | 311,556 |  | 0,007437 |
| Xi | 51,926 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,007437}}{6-1 } $= $\frac{\sqrt{0,007437}}{5} $= $\sqrt{0},00148$ = 0,03847

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,07873}{0,01570}$ = 5,01464

Thitung 2 = $\frac{0,01574}{0,01570}$ = 1,00254

Thitung 3 = $\frac{0,01574}{0,01570}$ = 1,00254

Thitung 4 = $\frac{0,01574}{0,01570}$ = 1,00254

Thitung 5 = $\frac{0,01574}{0,01570}$ = 1,00254

Thitung 6 = $\frac{0,01574}{0,01570}$ = 1,00254

Data ditolak no 1 Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 51,926 ± [4,0321 x $\frac{0,03847}{√6}$ ]

= 51,926 ± [4,0321 x 0,01570]$ $

= 51,926 ± 0,06330] mg/g

## Lampiran 38 Rentang Kadar Ekstrak Kunyit Pada Hari 3 (kulkas )

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 48,88728 | -0,03148 | 0,000991 |
| 2 | 48,88728 | -0,03148 | 0,000991 |
| 3 | 48,98175 | 0,06299 | 0,003968 |
| 4 | 48,98175 | 0,06299 | 0,003968 |
| 5 | 48,88728 | -0,03148 | 0,000991 |
| 6 | 48,88728 | -0,03148 | 0,000991 |
| ∑ | 293,5126 |  | 0,011899 |
| Xi | 48,91876 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,011899}}{6-1} $= $\frac{\sqrt{0,011899}}{5} $= $\sqrt{0,00237}$ = 0,04868

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,03148}{0,01987}$ = 1,58429

Thitung 2 = $\frac{0,03148}{0,01987}$ = 1,58429

Thitung 3 = $\frac{0,06299}{0,01987}$ = 3,17010

Thitung 4= $\frac{0,06299}{0,01987}$ = 3,17010

Thitung 5 = $\frac{0,03148}{0,01987}$ = 1,58429

Thitung 6 = $\frac{0,03148}{0,01987}$ = 1,58429

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 48,91876 ± [4,0321 x $\frac{0,00126 }{√6}$ ]

= 48,91876 ± [4,0321 x 0,01987]$ $

= 48,91876 ± 0,08011] mg/g

## Lampiran 39 Rentang Kadar Ekstrak Kunyit Pada Hari 4 (kulkas )

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 47,47026 | 1,6532 | 2,73307 |
| 2 | 46,80898 | 0,99192 | 0,983905 |
| 3 | 47,47026 | 1,6532 | 2,73307 |
| 4 | 47,47026 | 1,6532 | 2,73307 |
| 5 | 42,84131 | -2,97575 | 8,855088 |
| 6 | 42,84131 | -2,97575 | 8,855088 |
| ∑ | 274,9024 |  | 26,89329 |
| Xi | 45,81706 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1}$= $\frac{\sqrt{26,89329}}{6-1} $= $\frac{\sqrt{26,89329}}{5}$ = $\sqrt{5,37865}$ = 2,31919

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{1,6532}{0,94684}$ = 1,74601

Thitung 2 = $\frac{0,99192}{0,94684}$ = 1,04761

Thitung 3 = $\frac{1,6532}{0,94684}$ = 1,74601

Thitung 4= $\frac{1,6532}{0,94684}$ = 1,74601

Thitung 5 = $\frac{2,97575}{0,94684}$ = 3,14282

Thitung 6 = $\frac{2,97575}{0,94684}$ = 3,14282

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 45,81706 ± [4,0321 x $\frac{2,31919}{√6}$ ]

= 45,81706 ± [4,0321 x 0,94684]$ $

= 45,81706 ± 3,81775] mg/g

## Lampiran 40 Rentang Kadar Ekstrak Kunyit Pada Hari 5 (kulkas )

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 46,80898 | 0,0315 | 0,000992 |
| 2 | 46,71451 | -0,06297 | 0,003965 |
| 3 | 46,71451 | -0,06297 | 0,003965 |
| 4 | 46,80898 | 0,0315 | 0,000992 |
| 5 | 46,80898 | 0,0315 | 0,000992 |
| 6 | 46,80898 | 0,0315 | 0,000992 |
| ∑ | 280,6649 |  | 0,011899 |
| Xi | 46,77748 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,011899}}{6-1} $= $\frac{\sqrt{0,011899}}{5}$ = $\sqrt{0,00237}$ = 0,04868

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,03315}{0,01987}$ = 1,58530

Thitung 2 = $\frac{0,06297}{0,01987}$ = 3,16909

Thitung 3 = $\frac{0,06297}{0,01987}$ = 3,16909

Thitung 4 = $\frac{0,03315}{0,01987}$ = 1,58530

Thitung 5 = $\frac{0,03315}{0,01987}$ = 1,58530

Thitung 6 = $\frac{0,03315}{0,01987}$ = 1,58530

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 46,77748 ± [4,0321 x $\frac{0,0486}{√6}$ ]

= 46,77748± [4,0321 x 0,01987]$ $

= 46,77748 ± 0,08011] mg/g

## Lampiran 41 Rentang Kadar Ekstrak Kunyit Pada Hari 6 (kulkas )

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 44,54174 | 0,03149 | 0,000992 |
| 2 | 44,54174 | 0,03149 | 0,000992 |
| 3 | 44,44727 | -0,06298 | 0,003966 |
| 4 | 44,44727 | -0,06298 | 0,003966 |
| 5 | 44,54174 | 0,03149 | 0,000992 |
| 6 | 44,54174 | 0,03149 | 0,000992 |
| ∑ | 267,0615 |  | 0,011899 |
| Xi | 44,51025 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,011899}}{6-1} $= $\frac{\sqrt{0,011899}}{5} $= $\sqrt{0}00237$ = 0,04868

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,03149}{0,01987}$ = 1,58480

Thitung 2 = $\frac{0,03149}{0,01987}$ = 1,58480

Thitung 3 = $\frac{0,06298}{0,01987}$ = 3,16960

Thitung 4 = $\frac{0,06298}{0,01987}$ = 3,16960

Thitung 5 = $\frac{0,03149}{0,01987}$ = 1,58480

Thitung 6 = $\frac{0,03149}{0,01987}$ = 1,58480

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 44,51025 ± [4,0321 x $\frac{0,04868}{√6}$ ]

= 44,51025 ± [4,0321 x 0,01987]$ $

= 44,51025 ± 0,08011] mg/g

## Lampiran 42 Rentang Kadar Ekstrak Kunyit Pada Hari 7 (kulkas )

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 40,85748 | -0,01575 | 0,000248 |
| 2 | 40,85748 | -0,01575 | 0,000248 |
| 3 | 40,85748 | -0,01575 | 0,000248 |
| 4 | 40,85748 | -0,01575 | 0,000248 |
| 5 | 40,85748 | -0,01575 | 0,000248 |
| 6 | 40,95195 | 0,07872 | 0,006197 |
| ∑ | 245,2394 |  | 0,007437 |
| Xi | 40,87323 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,007437}}{6-1}$ = $\frac{\sqrt{0,007437}}{5}$ = $\sqrt{0,00148}$ = 0,03847

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,01575}{0,01570}$ = 1,00318

Thitung 2 = $\frac{0,01575}{0,01570}$ = 1,00318

Thitung 3 = $\frac{0,01575}{0,01570}$ = 1,00318

Thitung 4 = $\frac{0,01575}{0,01570}$ = 1,00318

Thitung 5 = $\frac{0,01575}{0,01570}$ = 1,00318

Thitung 6 = $\frac{0,07872}{0,01570}$ = 5,01401

Data ditolak no 6 Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 40,87323 ± [4,0321 x $\frac{0,03847}{√6}$ ]

= 40,87323 ± [4,0321 x 0,01570]$ $

= 40,87323 ± 0,06330] mg/g

## Lampiran 43 Rentang Kadar Kunyit Pada Hari 1 (Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 45,95876 | -0,01574 | 0,000248 |
| 2 | 46,05323 | 0,07873 | 0,006198 |
| 3 | 45,95876 | -0,01574 | 0,000248 |
| 4 | 45,95876 | -0,01574 | 0,000248 |
| 5 | 45,95876 | -0,01574 | 0,000248 |
| 6 | 45,95876 | -0,01574 | 0,000248 |
| ∑ | 275,847 |  | 0,007437 |
| Xi | 45,9745 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2} }{n-1} $= $\frac{\sqrt{0,007437}}{6-1} $= $\frac{\sqrt{0,007437}}{5} $= $\sqrt{0,00148}$ = 0,03847

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,01574}{0,01570}$ = 1,00254

Thitung 2 = $\frac{0,07873}{0,01570}$ = 5,01464

Thitung 3 = $\frac{0,01574}{0,01570}$ = 1,00254

Thitung 4= $\frac{0,01574}{0,01570}$ = 1,00254

Thitung 5 = $\frac{0,01574}{0,01570}$ = 1,00254

Thitung 6 = $\frac{0,01574}{0,01570}$ = 1,00254

Data ditolak no 2 Karena Thitung ≥ Ttabel

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 45,9745 ± [4,0321 x $\frac{0,03847}{√6}$ ]

= 45,9745 ± [4,0321 x 0,01570]$ $

= 45,9745 ± 0,06330] mg/g

## Lampiran 44 Rentang Kadar Ekstrak Kunyit Pada Hari 2 (Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 40,57408 | 0,04723 | 0,002231 |
| 2 | 40,57408 | 0,04723 | 0,002231 |
| 3 | 40,57408 | 0,04723 | 0,002231 |
| 4 | 40,47961 | -0,04724 | 0,002232 |
| 5 | 40,47961 | -0,04724 | 0,002232 |
| 6 | 40,47961 | -0,04724 | 0,002232 |
| ∑ | 243,1611 |  | 0,013387 |
| Xi | 40,52685 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,013387}}{6-1} $= $\frac{\sqrt{0,013387}}{5} $= $\sqrt{0,00267}$ = 0,05167

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,04723}{0,02109}$ = 2,23944

Thitung 2 = $\frac{0,04723}{0,02109}$ = 2,23944

Thitung 3 = $\frac{0,04723}{0,02109}$ = 2,23944

Thitung 4 = $\frac{0,04724}{0,02109}$ = 2,23992

Thitung 5 = $\frac{0,04724}{0,02109}$ = 2,23992

Thitung 6 = $\frac{0,04724}{0,02109}$ = 2,23992

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 40,52685 ± [4,0321 x $\frac{0,05167}{√6}$ ]

= 40,52685 ± [4,0321 x 0,02109]$ $

= 40,52685 ± 0,08503] mg/g

## Lampiran 45 Rentang Kadar Ekstrak Kunyit Pada Hari 3 (Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 38,77918 | 0,07873 | 0,006198 |
| 2 | 38,68471 | -0,01574 | 0,000248 |
| 3 | 38,68471 | -0,01574 | 0,000248 |
| 4 | 38,68471 | -0,01574 | 0,000248 |
| 5 | 38,68471 | -0,01574 | 0,000248 |
| 6 | 38,68471 | -0,01574 | 0,000248 |
| ∑ | 232,2027 |  | 0,007437 |
| Xi | 38,70045 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1}$ = $\frac{\sqrt{0,007437}}{6-1} $= $\frac{\sqrt{0,007437}}{5}$ = $\sqrt{0,00148}$ = 0,03847

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,07873}{0,01570}$ = 5,01464

Thitung 2 = $\frac{0,01574}{0,01570}$ = 1,00254

Thitung 3 = $\frac{0,01574}{0,01570}$ = 1,00254

Thitung 4= $\frac{0,01574}{0,01570}$ = 1,00254

Thitung 5 =$\frac{0,01574}{0,01570}$ = 1,00254

Thitung 6 = $\frac{0,01574}{0,01570}$ = 1,00254

Data ditolak no 1 Karena Thitung ≥ Ttabel

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 38,70045 ± [4,0321 x $\frac{0,03847}{√6}$ ]

= 38,70045 ± [4,0321 x 0,01570]$ $

= 38,70045 ± 0,06330] mg/g

## Lampiran 46 Rentang Kadar Ekstrak Kunyit Pada Hari 4 (Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 37,36216 | 0,06298 | 0,003966 |
| 2 | 37,36216 | 0,06298 | 0,003966 |
| 3 | 37,26769 | -0,03149 | 0,000992 |
| 4 | 37,26769 | -0,03149 | 0,000992 |
| 5 | 37,26769 | -0,03149 | 0,000992 |
| 6 | 37,26769 | -0,03149 | 0,000992 |
| ∑ | 223,7951 |  | 0,011899 |
| Xi | 37,29918 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,011899}}{6-1} $= $\frac{\sqrt{0,011899}}{5} $= $\sqrt{0,00237}$ = 0,04868

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,06298}{0,01987}$ = 3,16960

Thitung 2 = $\frac{0,06298}{0,01987}$ = 3,16960

Thitung 3 = $\frac{0,03149}{0,01987}$ = 1,58480

Thitung 4= $\frac{0,03149}{0,01987}$ = 1,58480

Thitung 5 = $\frac{0,03149}{0,01987}$ = 1,58480

Thitung 6 = $\frac{0,03149}{0,01987}$ = 1,58480

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 37,29918 ± [4,0321 x $\frac{0,04868}{√6}$ ]

= 37,29918 ± [4,0321 x 0,01987]$ $

= 37,29918 ± 0,08011] mcg/g

## Lampiran 47 Rentang Kadar Ekstrak Kunyit Pada Hari 5 (Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 32,92216 | -0,06297 | 0,003965 |
| 2 | 32,92216 | -0,06297 | 0,003965 |
| 3 | 33,01662 | 0,03149 | 0,000992 |
| 4 | 33,01662 | 0,03149 | 0,000992 |
| 5 | 33,01662 | 0,03149 | 0,000992 |
| 6 | 33,01662 | 0,03149 | 0,000992 |
| ∑ | 197,9108 |  | 0,011897 |
| Xi | 32,98513 |  |  |

SD = $\frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,011897}}{6-1} $= $\frac{\sqrt{0,011897}}{5} $= $\sqrt{0,00237}$ = 0,04868

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,06297}{0,01987}$ = 3,16909

Thitung 2 = $\frac{0,06297}{0,01987}$ = 3,16909

Thitung 3 = $\frac{0,03149}{0,01987}$ = 1,54480

Thitung 4 = $\frac{0,03149}{0,01987}$ = 1,54480

Thitung 5 = $\frac{0,03149}{0,01987}$ = 1,54480

Thitung 6 = $\frac{0,03149}{0,01987}$ = 1,54480

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 32,98513 ± [4,0321 x $\frac{0,04868}{√6}$ ]

= 32,98513 ± [4,0321 x 0,01987]$ $

= 32,98513 ± 0,08011] mcg/g

## Lampiran 48 Rentang Kadar Ekstrak Kunyit Pada Hari 6 (Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 30,93832 | 0,14172 | 0,020085 |
| 2 | 30,74939 | -0,04721 | 0,002229 |
| 3 | 30,74939 | -0,04721 | 0,002229 |
| 4 | 30,84373 | 0,04713 | 0,002221 |
| 5 | 30,74939 | -0,04721 | 0,002229 |
| 6 | 30,74939 | -0,04721 | 0,002229 |
| ∑ | 184,7796 |  | 0,031221 |
| Xi | 30,7966 |  |  |

SD = $\frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,031221}}{6-1} $= $\frac{\sqrt{0,031221}}{5} $= $\sqrt{0,00624}$ = 0,07899

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,14172}{0,03224}$ = 4,3957

Thitung 2 = $\frac{0,04721}{0,03224}$ = 1,46433

Thitung 3 = $\frac{0,04721}{0,03224}$ = 1,46433

Thitung 4 = $\frac{0,04713}{0,03224}$ = 1,46184

Thitung 5 = $\frac{0,04721}{0,03224}$ = 1,46433

Thitung 6 = $\frac{0,04721}{0,03224}$ = 1,46433

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 30,7966 ± [4,0321 x $\frac{0,07899}{√6}$ ]

= 30,7966 ± [4,0321 x 0,03224]$ $

= 30,7966 ± 0,00103] mcg/g

## Lampiran 49 Rentang Kadar Ekstrak Kunyit Pada Hari 7 (Lemari Pengering)

|  |  |  |  |
| --- | --- | --- | --- |
| NO | Kadar (x) | X-Xi | (X-Xi)2 |
| 1 | 29,14343 | 0,0315 | 0,000992 |
| 2 | 29,2379 | 0,12597 | 0,015868 |
| 3 | 29,04896 | -0,06297 | 0,003965 |
| 4 | 29,14343 | 0,0315 | 0,000992 |
| 5 | 28,86002 | -0,25191 | 0,063459 |
| 6 | 29,2379 | 0,12597 | 0,015868 |
| ∑ | 174,6716 |  | 0,101145 |
| Xi | 29,11193 |  |  |

SD =$ \frac{\sqrt{\sum\_{}^{}\left(X-Xi\right)2}}{n-1} $= $\frac{\sqrt{0,101145}}{6-1} $= $\frac{\sqrt{0,101145}}{5} $= $\sqrt{0,02022}$ = 0,14219

Dasar penolakan data adalah apabila Ttabel≤ Thitung dengan tingkat kepercayaan 99% maka nilai α = 0,01 ; n = 6 (dk = 5) ; Ttabel= 4,0321

Thitung = $\frac{x-x}{SD /√n}$

Thitung 1 = $\frac{0,0315}{0,05805}$ = 0,54263

Thitung 2 = $\frac{0,12597}{0,05805}$ = 2,17002

Thitung 3 = $\frac{0,06297}{0,05805}$ = 1,08475

Thitung 4 = $\frac{0,0315}{0,05805}$ = 0,54263

Thitung 5 = $\frac{0,06297}{0,05805}$ = 1,08475

Thitung 6 = $\frac{0,12597}{0,05805}$ = 2,17002

semua data diterima Karena Ttabel ≥ Thitung

µ = x ± [t (x/2) dk X ($\frac{SD}{√n}$ )]

= 29,11193 ± [4,0321 x $\frac{0,14219}{√6}$ ]

= 29,11193 ± [4,0321 x 0,05805]$ $

= 29,11193 ± 0,23406] mcg/g

## Lampiran 50 Perthitungan Kadar Air Kunyit

Perhitungan Hasil Penetapan Kadar Air Kunyit

Kadar Air = $\frac{Berat Cawan Basah-Berat Cawan Kering}{Berat Sampel} $x 100%

Sampel I

Berat sampel : 2 g

Berat Cawan Basah :$ 51,3141$ g

Berat Cawan Kering :$ 51,3415$ g

.kadar air =$ \frac{51,3141 g - 51,3415 g}{2 g}X 100 \%$

 = .$\frac{1,9726}{2 g} $x 100 % = 98,63 %

Sampel II

Berat sampel : 2 g

Berat Cawan Basah :$ 70,1856 $g

Berat Cawan Kering :$ 68,2012 $g

kadar air =$ \frac{70,1856 g - 68,2012 g}{2 g}X 100 \%$

 = .$\frac{1,9844}{2 g} $x 100 % = 99, 22 %

**Lampiran** **50** (lanjutan)

Sampel III

Berat sampel : 2 g

Berat Cawan Basah :$ 64,5576 $g

Berat Cawan Kering :$ 62,5681 $g

kadar air =$ \frac{ 64,5576 g- 62,5681 g}{2 g}X 100 \%$

 = .$\frac{1,9895}{2 g}$ x 100 % = 99,47 %

Kadar Air rata-rata = $\frac{98,63 \% + 99,22 \% + 99,47 \% }{3}$ = 99,10 %

## Lampiran 51 Perthitungan Kadar Air Temulawak

Perhitungan Hasil Penetapan Kadar Air Temulawak

Kadar Air = $\frac{Berat Cawan Basah -Berat Cawan Kering }{berat sampel}$x 100%

 Sampel I

Berat sampel : 2 g

Berat Cawan Basah :$ 62,9545 $g

Berat Cawan Kering :$ 60,9617 $g

kadar air =$ \frac{62,9545 g - 60,9617 g}{2 g}X 100 \%$

 = .$\frac{1,9928}{2 g} $x 100 % = 99,64 %

Sampel II

Berat sampel : 2 g

Berat Cawan Basah :$ 68,4640 $g

Berat Cawan Kering :$ 66,4701 $g

kadar air = $\frac{68,4640 g - 66,4701 g}{2 g}X 100 \%$

= .$\frac{1,9939}{2 g} $x 100 % = 99,69 %

**Lampiran 51** (lanjutan)

Sampel III

Berat sampel : 2 g

Berat Cawan Basah :$ 58,7466 $g

Berat Cawan Kering :$ 56,7469 $g

kadar air =$ \frac{58,7466 g - 56,7469 g}{2 g}X 100 \%$

 = .$\frac{1,9997}{2 g} $x 100 % = 99,98 %

Kadar Air rata-rata = $\frac{ 99,64 \% + 99,69 \% + 99,98 \% }{3}$ = 99,77 %

## Lampiran 52. Tabel hasil Skrining Fitokimia Ekstrak Kunyit dan Temulawak

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Nama Uji Tabung** | **Gambar Uji** | **Hasil****Penelitian** | **Hasil Menurut Literatur** |
| 1 | Uji Flavonoid(Ekstrak) | C:\Users\ACER\Downloads\WhatsApp Image 2022-04-11 at 11.22.48(1).jpeg | Positif(+) | Terbentuk 2 cincin  |
| 2.  | Uji Tanin(Ekstrak) | C:\Users\ACER\Downloads\WhatsApp Image 2022-04-12 at 04.40.55(1).jpeg | Positif(+) | Hijau  |
| 3 | Uji steroid/Triterpenoid (Ekstrak) | C:\Users\ACER\Downloads\WhatsApp Image 2022-04-11 at 11.22.48(18).jpeg | Positif (+) | Ungu kehitaman  |
|  | Uji Alkaloid(Ekstrak) | C:\Users\ACER\Downloads\WhatsApp Image 2022-04-11 at 11.22.48(10).jpeg   | Positif (+) | Mayer =warna kuningDragendof =merah/jinggaBauchardat =Coklat kehitaman |
| 5. | Uji Saponin(Ekstrak) | C:\Users\ACER\Downloads\WhatsApp Image 2022-04-11 at 11.22.48(3).jpeg | Positif (+) | Busa |

## Lampiran 53. Tabel Uji Karakteristik

|  |  |  |
| --- | --- | --- |
| **No** | **Uji Karakteristik** | **Hasil Pengamatan** |
| 1. | Penetapan kadar air temulawak | C:\Users\user\AppData\Local\Microsoft\Windows\INetCache\Content.Word\IMG-20220405-WA0000.jpeg  |
| 2. | Penetapan kadar air kunyit  | C:\Users\user\AppData\Local\Microsoft\Windows\INetCache\Content.Word\IMG-20220405-WA0000.jpeg  |