**Lampiran 1. Data pengamatan waktu muncul kalus (HST)**

|  |  |  |  |
| --- | --- | --- | --- |
| Perlakuan | Ulangan (HST) | Total | Rerata |
| **I** | **II** | **III** | **1V** | **V** |
| B0 P0 | 7 | 12 | 0 | 0 | 21 | **33** | **13,33** |
| B0 P1 | 6 | 6 | 6 | 6 | 6 | **30** | **6** |
| B0 P2 | 6 | 6 | 6 | 6 | 6 | **30** | **6** |
| B0 P3 | 6 | 6 | 6 | 6 | 6 | **30** | **6** |
| B1 P0 | 7 | 12 | 0 | 0 | 12 | **31** | **10,33** |
| B1 P1 | 7 | 7 | 7 | 7 | 6 | **34** | **6,8** |
| B1 P2 | 7 | 7 | 7 | 7 | 6 | **34** | **6,8** |
| B1 P3 | 7 | 7 | 7 | 7 | 7 | **35** | **7** |
| B2 P0 | 7 | 12 | 12 | 0 | 7 | **38** | **9,5** |
| B2 P1 | 7 | 7 | 7 | 7 | 6 | **34** | **6,8** |
| B2 P2 | 7 | 7 | 7 | 7 | 7 | **35** | **7** |
| B2 P3 | 7 | 7 | 7 | 7 | 6 | **34** | **6,8** |
| B3 P0 | 7 | 7 | 8 | 8 | 0 | **30** | **7,5** |
| B3 P1 | 7 | 7 | 7 | 6 | 6 | **33** | **6,6** |
| B3 P2 | 7 | 7 | 7 | 7 | 6 | **34** | **6,8** |
| B3 P3 | 7 | 7 | 6 | 6 | 7 | **33** | **6,6** |
| Total | **114** | **112** | **100** | **87** | **115** | **528** | **123,03** |

Keterangan:

|  |  |
| --- | --- |
| B0 : BAP 0 ppm | P0 : Pikloram 0 ppm |
| B1 : BAP 1 ppm | P1 : Pikloram 1 ppm |
| B2 : BAP 2 ppm | P2 : Pikloram 2 ppm |
| B3 : BAP 3 ppm | P3 : Pikloram 3 ppm |

**Lampiran 2. Data pengamatan persentase eksplan berkalus (%)**

|  |  |  |  |
| --- | --- | --- | --- |
| Perlakuan | Ulangan (%) | Rerata | Persentase |
| **I** | **II** | **III** | **1V** | **V** |
| B0 P0 | 1 | 1 | 0 | 0 | 1 | 0.6 | 30 |
| B0 P1 | 2 | 2 | 2 | 2 | 2 | 2 | 100 |
| B0 P2 | 2 | 2 | 2 | 2 | 2 | 2 | 100 |
| B0 P3 | 2 | 2 | 2 | 2 | 2 | 2 | 100 |
| B1 P0 | 2 | 2 | 0 | 0 | 2 | 1.2 | 60 |
| B1 P1 | 2 | 2 | 2 | 2 | 2 | 2 | 100 |
| B1 P2 | 2 | 2 | 2 | 2 | 2 | 2 | 100 |
| B1 P3 | 2 | 2 | 2 | 2 | 2 | 2 | 100 |
| B2 P0 | 2 | 2 | 1 | 0 | 1 | 1.6 | 80 |
| B2 P1 | 2 | 2 | 2 | 2 | 2 | 2 | 100 |
| B2 P2 | 2 | 2 | 2 | 2 | 2 | 2 | 100 |
| B2 P3 | 2 | 2 | 2 | 2 | 2 | 2 | 100 |
| B3 P0 | 2 | 2 | 2 | 2 | 0 | 1.6 | 80 |
| B3 P1 | 2 | 2 | 2 | 2 | 2 | 2 | 100 |
| B3 P2 | 2 | 2 | 2 | 2 | 2 | 2 | 100 |
| B3 P3 | 2 | 2 | 2 | 2 | 2 | 2 | 100 |

Keterangan:

|  |  |
| --- | --- |
| B0 : BAP 0 ppm | P0 : Pikloram 0 ppm |
| B1 : BAP 1 ppm | P1 : Pikloram 1 ppm |
| B2 : BAP 2 ppm | P2 : Pikloram 2 ppm |
| B3 : BAP 3 ppm | P3 : Pikloram 3 ppm |

**Lampiran 3. Data pengamatan morfologi kalus (warna dan tekstur kalus)**

|  |  |  |  |
| --- | --- | --- | --- |
| No. | Perlakuan | Warna kalus | Tekstur kalus |
|  | B0 P0 (1) |  Hijau 5GY 8/4 | Kompak |
|  | B0 P0 (2) | Hijau 5GY 8/4 | Kompak |
|  | B0 P0 (3) | - | - |
|  | B0 P0 (4) | - | - |
|  | B0 P0 (5) | Hijau 5GY 8/4 | Kompak |
|  | B0 P1 (1) | Putih N9 | Kompak |
|  | B0 P1 (2) | Putih N9 | Kompak |
|  | B0 P1 (3) | Putih N9 | Kompak |
|  | B0 P1 (4) | Putih N9 | Kompak |
|  | B0 P1 (5) | Putih N9 | Kompak |
|  | B0 P2 (1) | Cokelat 10YR 7/4 | Kompak |
|  | B0 P2 (2) | Cokelat 10 YR 7/4 | Kompak |
|  | B0 P2 (3) | Cokelat 10YR 7/4 | Kompak |
|  | B0 P2 (4) | cokelat 7.5 YR 5/4 | Kompak |
|  | B0 P2 (5) | Putih N9 | Kompak |
|  | B0 P3 (1) | Putih N9 | Kompak |
|  | B0 P3 (2) | Putih N9 | Kompak |
|  | B0 P3 (3) | Putih N9 | Kompak |
|  | B0 P3 (4) | Putih N9 | Kompak |
|  | B0 P3 (5) | Putih N9 | Kompak |
|  | B1 P0 (1) | Hijau 7.5GY 9/6 | Kompak |
|  | B1 P0 (2) | Hijau7.5GY 9/6 | Kompak |
|  | B1 P0 (3) | - | Kompak |
|  | B1 P0 (4) | - | Kompak |
|  | B1 P0 (5) | Hijau7.5GY 9/6 | Kompak |
|  | B1 P1 (1) | Cokelat 5YR 4/3 | Kompak |
|  | B1 P1 (2) | Cokelat 5YR 4/3 | Kompak |
|  | B1 P1 (3) | Cokelat 5YR 4/3 | Kompak |
|  | B1 P1 (4) | Putih N9 | Kompak |
|  | B1 P1 (5) | Putih N9 | Kompak |
|  | B1 P2 (1) | Cokelat 5YR 7/2 | Kompak |
|  | B1 P2 (2) | Cokelat 5 YR 7/2 | Kompak |
|  | B1 P2 (3) | Cokelat 5 YR 7/2 | Kompak |
|  | B1 P2 (4) | Cokelat 2.5YR 3/6 | Kompak |
|  | B1 P2 (5) | Putih N9 | Kompak |
|  | B1 P3 (1) | Putih N9 | Kompak |
|  | B1 P3 (2) | Cokelat 2.5YR 5/6 | Kompak |
|  | B1 P3 (3) | Putih N9 | Kompak |
|  | B1 P3 (4) | Putih N9 | Kompak |
|  | B1 P3 (5) | Putih N9 | Kompak |
|  | B2 P0 (1) | Hijau 5GY 9/2 | Kompak |
|  | B2 P0 (2) | Putih N9 | Kompak |
|  | B2 P0 (3) | Hijau 5GY 9/2 | Kompak |
|  | B2 P0 (4) | - | - |
|  | B2 P0 (5) | Hijau 5GY 9/2 | Kompak |
|  | B2 P1 (1) | Putih N9 | Kompak |
|  | B2 P1 (2) | Putih N9 | Kompak |
|  | B2 P1 (3) | Putih N9 | Kompak |
|  | B2 P1 (4) | Putih N9 | Kompak |
|  | B2 P1 (5) | Putih N9 | Kompak |
|  | B2 P2 (1) | Cokelat 7.5YR 6/3 | Kompak |
|  | B2 P2 (2) | Cokelat 7.5YR 6/3 | Kompak |
|  | B2 P2 (3) | Putih N9 | Kompak |
|  | B2 P2 (4) | Putih N9 | Kompak |
|  | B2 P2 (5) | Putih N9 | Kompak |
|  | B2 P3 (1) | Putih N9 | Kompak |
|  | B2 P3 (2) | Putih N9 | Kompak |
|  | B2 P3 (3) | Putih N9 | Kompak |
|  | B2 P3 (4) | Putih N9 | Kompak |
|  | B2 P3 (5) | Putih N9 | Kompak |
|  | B3 P0 (1) | Putih N9 | Kompak |
|  | B3 P0 (2) | Hijau 5GY 9/6 | Kompak |
|  | B3 P0 (3) | Hijau 5GY 9/6 | Kompak |
|  | B3 P0 (4) | Hijau 5GY 9/6 | Kompak |
|  | B3 P0 (5) | - | - |
|  | B3 P1 (1) | Putih N9 | Kompak |
|  | B3 P1 (2) | Putih N9 | Kompak |
|  | B3 P1 (3) | Putih N9 | Kompak |
|  | B3 P1 (4) | Putih N9 | Kompak |
|  | B3 P1 (5) | Putih N9 | Kompak |
|  | B3 P2 (1) | Putih N9 | Kompak |
|  | B3 P2 (2) | Cokelat 7.5YR 6/3 | Kompak |
|  | B3 P2 (3) | Cokelat 7.5YR 6/3 | Kompak |
|  | B3 P2 (4) | Cokelat 7.5YR 6/3 | Kompak |
|  | B3 P2 (5) | Putih N9 | Kompak |
|  | B3 P3 (1) | Cokelat 2.5YR 6/3 | Kompak |
|  | B3 P3 (2) | Putih N9 | Kompak |
|  | B3 P3 (3) | Putih N9 | Kompak |
|  | B3 P3 (4) | Putih N9 | Kompak |
|  | B3 P3 (5) | Cokelat 2.5YR 6/3 | Kompak |

Keterangan:

|  |  |
| --- | --- |
| B0 : BAP 0 ppm | P0 : Pikloram 0 ppm |
| B1 : BAP 1 ppm | P1 : Pikloram 1 ppm |
| B2 : BAP 2 ppm | P2 : Pikloram 2 ppm |
| B3 : BAP 3 ppm | P3 : Pikloram 3 ppm |

**Lampiran 4. Data pengamatan pertumbuhan kalus**

|  |  |
| --- | --- |
| **Perlakuan** | **Ulangan** |
| **I** | **II** | **III** | **1V** | **V** |
| **B0 P0** | **+** | **+** | **-** | **-** | **+** |
| **B0 P1** | **++++** | **+++** | **++++** | **++++** | **++++** |
| **B0 P2** | **+++** | **++++** | **++++** | **+++** | **+++** |
| **B0 P3** | **++++** | **++** | **+++** | **++++** | **+++** |
| **B1 P0** | **+** | **+** | **-** | **-** | **+** |
| **B1 P1** | **+++** | **++++** | **+++** | **++++** | **++++** |
| **B1 P2** | **+++** | **++** | **++** | **+++** | **++++** |
| **B1 P3** | **++++** | **+++** | **++++** | **+++** | **++++** |
| **B2 P0** | **+** | **+** | **+** | **-** | **+** |
| **B2 P1** | **+++** | **++++** | **+++** | **+++** | **++++** |
| **B2 P2** | **++++** | **+++** | **++++** | **++++** | **++++** |
| **B2 P3** | **++++** | **+++** | **+++** | **+++** | **++++** |
| **B3 P0** | **+** | **+** | **+** | **+** | **-** |
| **B3 P1** | **+++** | **+++** | **++++** | **++++** | **++++** |
| **B3 P2** | **+++** | **+++** | **++++** | **+++** | **+++** |
| **B3 P3** | **+++** | **+++** | **+++** | **++++** | **++++** |

Keterangan:

++++ : Kalus dengan diameter 1,6 – 2,0 cm

+++ : Diameter kalus 1,1 – 1,5 cm

++ : Kalus berdiameter 0,6 – 1,0 cm

+ : Diameter kalus 0,1 – 0,5 cm

**Lampiran 5. Indikator Warna Kalus**

Penilaian warna kalus binahong berdasarkan aplikasi *Munsell Color Chart*

 

  





**Lampiran 6. Dokumentasi kegiatan**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| Memasak media | Sterilisasi media | Sterilisasi eksplan menggunakan detergen | Sterilisasi eksplan menggunakan fungisida merck velimek |
|  |  |  |  |
| Sterilisasi eksplan menggunakan Natrium hipoklorit merck Bayclin | Penanaman eksplan batang binahong | Inkubasi selama 40 hari | Pemanenenan kalus setelah 40 HST |

**Lampiran 7. Hasil Uji nonparametrik waktu muncul kalus** **menggunakan SPSS versi 26**

* Rerata persentase eksplan berkalus dan standar deviasinya

|  |
| --- |
| **Descriptive Statistics** |
| Dependent Variable: WAKTU MUNCUL KALUS  |
| KOMBINASI ZPT BAP & PIKLORAM | Mean | Std. Deviation | N |
| B0P0 | 13.33 | 7.095 | 3 |
| B0P1 | 6.00 | .000 | 5 |
| B0P2 | 6.00 | .000 | 5 |
| B0P3 | 6.00 | .000 | 5 |
| B1P0 | 7.75 | 5.679 | 4 |
| B1P1 | 6.80 | .447 | 5 |
| B1P2 | 6.80 | .447 | 5 |
| B1P3 | 7.00 | .000 | 5 |
| B2P0 | 9.50 | 2.887 | 4 |
| B2P1 | 6.80 | .447 | 5 |
| B2P2 | 7.00 | .000 | 5 |
| B2P3 | 6.80 | .447 | 5 |
| B3P0 | 7.50 | .577 | 4 |
| B3P1 | 6.60 | .548 | 5 |
| B3P2 | 6.80 | .447 | 5 |
| B3P3 | 6.60 | .548 | 5 |
| Total | 7.13 | 2.309 | 75 |

* Uji normalitas *Kolmogrov-Smirnov*

|  |
| --- |
| **Tests of Normality** |
|  | Kolmogorov-Smirnova | Shapiro-Wilk |
| Statistic | df | Sig. | Statistic | df | Sig. |
| Standardized Residual for Waktu | .296 | 74 | .000 | .632 | 74 | .000 |
| a. Lilliefors Significance Correction |

Hasil uji normalitas menunjukkan signifikansi 0,00 < 0,05, sehingga data tidak berdistribusi normal.

* Uji homogenitas

|  |
| --- |
| **Levene's Test of Equality of Error Variancesa,b** |
|  | Levene Statistic | df1 | df2 | Sig. |
| WAKTU MUNCUL KALUS | Based on Mean | 11.227 | 15 | 59 | .000 |
| Based on Median | 6.107 | 15 | 59 | .000 |
| Based on Median and with adjusted df | 6.107 | 15 | 5.494 | .022 |
| Based on trimmed mean | 10.923 | 15 | 59 | .000 |
| Tests the null hypothesis that the error variance of the dependent variable is equal across groups. |
| a. Dependent variable: WAKTU MUNCUL KALUS |
| b. Design: Intercept + Perlakuan |

Pada uji homogenitas menunjukkan data tidak berdistribusi homogen, karena signifikansi menunjukkan 0,00 < 0,05; sehingga data tidak diuji secara nonparametric yaitu *Kruskal-Wallis.*

* Uji non-parametrik *Kruskal-Wallis* pada ZPT BAP

|  |
| --- |
| **Test Statisticsa,b** |
|  | WAKTU MUNCUL KALUS |
| Kruskal-Wallis H | 23.985 |
| df | 3 |
| Asymp. Sig. | .000 |
| a. Kruskal Wallis Test |
| b. Grouping Variable: BAP |

Hasil uji *Kruskal-Wallis* terhadap ZPT BAP terhadap waktu muncul kalus menunjukkan bahwa, ZPT BAP tidak berpengaruh signifikan terhadap waktu muncul kalus. Hal ini dikarenakan signifikansi menunjukkan 0,00 < 0,05, sehingga perlu diuji *Dunn.*

* Uji *Dunn* dari ZPT BAP

|  |
| --- |
| **Pairwise Comparisons of BAP** |
| Sample 1-Sample 2 | Test Statistic | Std. Error | Std. Test Statistic | Sig. | Adj. Sig.a |
| 1 ppm-3 ppm | -1.650 | 6.017 | -.274 | .784 | 1.000 |
| 1 ppm-2 ppm | -3.300 | 6.017 | -.548 | .583 | 1.000 |
| 1 ppm-0 ppm | 29.136 | 6.631 | 4.394 | .000 | .000 |
| 3 ppm-2 ppm | 1.650 | 6.017 | .274 | .784 | 1.000 |
| 3 ppm-0 ppm | 27.486 | 6.631 | 4.145 | .000 | .000 |
| 2 ppm-0 ppm | 25.836 | 6.631 | 3.896 | .000 | .001 |
| Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is ,05. |
| a. Significance values have been adjusted by the Bonferroni correction for multiple tests. |

* Uji non-parametrik *Kruskal-Wallis* pada ZPT pikloram

|  |
| --- |
| **Test Statisticsa,b** |
|  | WAKTU MUNCUL KALUS |
| Kruskal-Wallis H | 18.956 |
| df | 3 |
| Asymp. Sig. | .000 |
| a. Kruskal Wallis Test |
| b. Grouping Variable: Pikloram |

Hasil uji *Kruskal-Wallis* pada ZPT pikloram menunjukkan bahwa pikloram berpengaruh signifikan (0,00 < 0,05) terhadap waktu muncul kalus sehingga dapat diuji lanjut *Dunn*.

* Uji *Dunn* pada ZPT pikloram

|  |
| --- |
| **Pairwise Comparisons of Pikloram** |
| Sample 1-Sample 2 | Test Statistic | Std. Error | Std. Test Statistic | Sig. | Adj. Sig.a |
| 0 ppm-3 ppm | -18.132 | 6.259 | -2.897 | .004 | .023 |
| 0 ppm-1 ppm | -23.667 | 6.343 | -3.731 | .000 | .001 |
| 0 ppm-2 ppm | -23.711 | 6.259 | -3.788 | .000 | .001 |
| 3 ppm-1 ppm | 5.535 | 6.259 | .884 | .376 | 1.000 |
| 3 ppm-2 ppm | 5.579 | 6.174 | .904 | .366 | 1.000 |
| 1 ppm-2 ppm | -.044 | 6.259 | -.007 | .994 | 1.000 |
| Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is ,05. |
| a. Significance values have been adjusted by the Bonferroni correction for multiple tests. |

* Uji *Kruskal-Wallis* kombinasi dari ZPT BAP dan pikloram

|  |
| --- |
| **Test Statisticsa,b** |
|  | WAKTU MUNCUL KALUS |
| Kruskal-Wallis H | 48.066 |
| df | 15 |
| Asymp. Sig. | .000 |
| a. Kruskal Wallis Test |
| b. Grouping Variable: KOMBINASI ZPT BAP & PIKLORAM |

Hasil uji *Kruskal-Wallis* pada kombinasi BAP dan pikloram menunjukkan hasil yang signifikan karena 0,00 < 0,05; sehingga dapat diuji lanjut *Dunn*.

* Uji *Dunn* dari kombinasi ZPT BAP dan pikloram

|  |
| --- |
| **Pairwise Comparisons of KOMBINASI ZPT BAP & PIKLORAM** |
| Sample 1-Sample 2 | Test Statistic | Std. Error | Std. Test Statistic | Sig. | Adj. Sig.a |
| B0P1-B0P0 | 51.000 | 13.896 | 3.670 | .000 | .029 |
| B0P2-B0P0 | 51.000 | 13.896 | 3.670 | .000 | .029 |
| B0P3-B3P1 | -19.800 | 12.035 | -1.645 | .100 | 1.000 |
| B0P3-B3P3 | -19.800 | 12.035 | -1.645 | .100 | 1.000 |
| B0P3-B1P1 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P3-B1P2 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P3-B2P1 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P3-B2P3 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P3-B3P2 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P3-B1P3 | -33.000 | 12.035 | -2.742 | .006 | .733 |
| B0P3-B2P2 | -33.000 | 12.035 | -2.742 | .006 | .733 |
| B0P3-B3P0 | -44.000 | 12.765 | -3.447 | .001 | .068 |
| B0P3-B2P0 | -45.750 | 12.765 | -3.584 | .000 | .041 |
| B0P3-B1P0 | -50.000 | 13.896 | -3.598 | .000 | .038 |
| B0P3-B0P0 | 51.000 | 13.896 | 3.670 | .000 | .029 |
| B0P1-B0P2 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B0P1-B0P3 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B0P1-B3P1 | -19.800 | 12.035 | -1.645 | .100 | 1.000 |
| B0P1-B3P3 | -19.800 | 12.035 | -1.645 | .100 | 1.000 |
| B0P1-B1P1 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P1-B1P2 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P1-B2P1 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P1-B2P3 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P1-B3P2 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P1-B1P3 | -33.000 | 12.035 | -2.742 | .006 | .733 |
| B0P1-B2P2 | -33.000 | 12.035 | -2.742 | .006 | .733 |
| B0P1-B3P0 | -44.000 | 12.765 | -3.447 | .001 | .068 |
| B0P1-B2P0 | -45.750 | 12.765 | -3.584 | .000 | .041 |
| B0P1-B1P0 | -50.000 | 13.896 | -3.598 | .000 | .038 |
| B0P2-B0P3 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B0P2-B3P1 | -19.800 | 12.035 | -1.645 | .100 | 1.000 |
| B0P2-B3P3 | -19.800 | 12.035 | -1.645 | .100 | 1.000 |
| B0P2-B1P1 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P2-B1P2 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P2-B2P1 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P2-B2P3 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P2-B3P2 | -26.400 | 12.035 | -2.194 | .028 | 1.000 |
| B0P2-B1P3 | -33.000 | 12.035 | -2.742 | .006 | .733 |
| B0P2-B2P2 | -33.000 | 12.035 | -2.742 | .006 | .733 |
| B0P2-B3P0 | -44.000 | 12.765 | -3.447 | .001 | .068 |
| B0P2-B2P0 | -45.750 | 12.765 | -3.584 | .000 | .041 |
| B0P2-B1P0 | -50.000 | 13.896 | -3.598 | .000 | .038 |
| B3P1-B1P2 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B3P3-B1P2 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B3P1-B1P3 | 13.200 | 12.035 | 1.097 | .273 | 1.000 |
| B3P3-B1P3 | 13.200 | 12.035 | 1.097 | .273 | 1.000 |
| B3P1-B2P0 | 25.950 | 12.765 | 2.033 | .042 | 1.000 |
| B3P3-B2P0 | 25.950 | 12.765 | 2.033 | .042 | 1.000 |
| B3P1-B2P1 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B3P1-B2P2 | 13.200 | 12.035 | 1.097 | .273 | 1.000 |
| B3P3-B2P2 | 13.200 | 12.035 | 1.097 | .273 | 1.000 |
| B3P1-B2P3 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B3P1-B0P0 | 31.200 | 13.896 | 2.245 | .025 | 1.000 |
| B3P3-B2P3 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B3P3-B0P0 | 31.200 | 13.896 | 2.245 | .025 | 1.000 |
| B3P1-B3P0 | 24.200 | 12.765 | 1.896 | .058 | 1.000 |
| B3P3-B3P0 | 24.200 | 12.765 | 1.896 | .058 | 1.000 |
| B3P1-B3P3 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B3P1-B3P2 | -6.600 | 12.035 | -.548 | .583 | 1.000 |
| B3P3-B3P2 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B3P3-B2P1 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B3P1-B1P0 | 30.200 | 13.896 | 2.173 | .030 | 1.000 |
| B3P3-B1P0 | 30.200 | 13.896 | 2.173 | .030 | 1.000 |
| B3P1-B1P1 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B3P3-B1P1 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B1P1-B3P2 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B1P1-B0P0 | 24.600 | 13.896 | 1.770 | .077 | 1.000 |
| B1P2-B0P0 | 24.600 | 13.896 | 1.770 | .077 | 1.000 |
| B2P3-B3P2 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B2P3-B3P0 | -17.600 | 12.765 | -1.379 | .168 | 1.000 |
| B2P1-B0P0 | 24.600 | 13.896 | 1.770 | .077 | 1.000 |
| B1P1-B2P3 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B2P3-B0P0 | 24.600 | 13.896 | 1.770 | .077 | 1.000 |
| B1P2-B2P0 | -19.350 | 12.765 | -1.516 | .130 | 1.000 |
| B3P2-B0P0 | 24.600 | 13.896 | 1.770 | .077 | 1.000 |
| B1P1-B1P0 | 23.600 | 13.896 | 1.698 | .089 | 1.000 |
| B1P2-B1P0 | 23.600 | 13.896 | 1.698 | .089 | 1.000 |
| B3P2-B3P0 | 17.600 | 12.765 | 1.379 | .168 | 1.000 |
| B1P2-B2P1 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B2P1-B1P0 | 23.600 | 13.896 | 1.698 | .089 | 1.000 |
| B1P2-B2P2 | -6.600 | 12.035 | -.548 | .583 | 1.000 |
| B1P1-B1P2 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B1P2-B3P2 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B1P1-B1P3 | -6.600 | 12.035 | -.548 | .583 | 1.000 |
| B1P2-B2P3 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B2P1-B1P3 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B2P1-B2P0 | 19.350 | 12.765 | 1.516 | .130 | 1.000 |
| B2P3-B1P3 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B1P2-B3P0 | -17.600 | 12.765 | -1.379 | .168 | 1.000 |
| B1P1-B2P0 | -19.350 | 12.765 | -1.516 | .130 | 1.000 |
| B3P2-B1P3 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B1P1-B2P1 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B1P2-B1P3 | -6.600 | 12.035 | -.548 | .583 | 1.000 |
| B2P3-B2P0 | 19.350 | 12.765 | 1.516 | .130 | 1.000 |
| B1P1-B2P2 | -6.600 | 12.035 | -.548 | .583 | 1.000 |
| B3P2-B2P0 | 19.350 | 12.765 | 1.516 | .130 | 1.000 |
| B2P1-B2P3 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B2P1-B2P2 | -6.600 | 12.035 | -.548 | .583 | 1.000 |
| B2P1-B3P0 | -17.600 | 12.765 | -1.379 | .168 | 1.000 |
| B1P1-B3P0 | -17.600 | 12.765 | -1.379 | .168 | 1.000 |
| B2P1-B3P2 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B2P3-B2P2 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B2P3-B1P0 | 23.600 | 13.896 | 1.698 | .089 | 1.000 |
| B3P2-B2P2 | 6.600 | 12.035 | .548 | .583 | 1.000 |
| B3P2-B1P0 | 23.600 | 13.896 | 1.698 | .089 | 1.000 |
| B2P2-B0P0 | 18.000 | 13.896 | 1.295 | .195 | 1.000 |
| B1P3-B0P0 | 18.000 | 13.896 | 1.295 | .195 | 1.000 |
| B2P2-B1P0 | 17.000 | 13.896 | 1.223 | .221 | 1.000 |
| B1P3-B2P2 | .000 | 12.035 | .000 | 1.000 | 1.000 |
| B1P3-B3P0 | -11.000 | 12.765 | -.862 | .389 | 1.000 |
| B1P3-B2P0 | -12.750 | 12.765 | -.999 | .318 | 1.000 |
| B2P2-B3P0 | -11.000 | 12.765 | -.862 | .389 | 1.000 |
| B2P2-B2P0 | 12.750 | 12.765 | .999 | .318 | 1.000 |
| B1P3-B1P0 | 17.000 | 13.896 | 1.223 | .221 | 1.000 |
| B3P0-B2P0 | 1.750 | 13.455 | .130 | .897 | 1.000 |
| B3P0-B1P0 | 6.000 | 14.533 | .413 | .680 | 1.000 |
| B3P0-B0P0 | 7.000 | 14.533 | .482 | .630 | 1.000 |
| B2P0-B1P0 | 4.250 | 14.533 | .292 | .770 | 1.000 |
| B2P0-B0P0 | 5.250 | 14.533 | .361 | .718 | 1.000 |
| B1P0-B0P0 | 1.000 | 15.537 | .064 | .949 | 1.000 |
| Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is .05. |
| a. Significance values have been adjusted by the Bonferroni correction for multiple tests. |

* Hasil signifikansi parameter waktu muncul kalus berdasarkan uji *Dunn*

|  |  |  |
| --- | --- | --- |
| **Perlakuan** | **Subset** |  |
| **d** | **c** | **b** | **a** |
| **B0P0** | 13,33 |  |  |  |
| **B1P0** |  | 10,33 |  |  |
| **B2P0** |  | 9,50 | 9,50 |  |
| **B3P0** |  |  | 7,50 | 7,50 |
| **B2P2** |  |  |  | 7,00 |
| **B1P3** |  |  |  | 7,00 |
| **B3P2** |  |  |  | 6,80 |
| **B2P3** |  |  |  | 6,80 |
| **B2P1** |  |  |  | 6,80 |
| **B1P2** |  |  |  | 6,80 |
| **B1P1** |  |  |  | 6,80 |
| **B3P3** |  |  |  | 6,60 |
| **B3P1** |  |  |  | 6,60 |
| **B0P3** |  |  |  | 6,00 |
| **B0P2** |  |  |  | 6,00 |
| **B0P1** |  |  |  | 6,00 |

**Lampiran 8. Hasil Uji nonparametrik persentase eksplan berkalus** **menggunakan SPSS versi 26**

* Rerata dan standar deviasi data persentase eksplan kalus

|  |
| --- |
| **Descriptive Statistics** |
| Dependent Variable: PERSENTASE BERKALUS  |
| KOMBINASI ZPT BAP & PIKLORAM | Mean | Std. Deviation | N |
| B0P0 | 30.00 | 27.386 | 5 |
| B0P1 | 100.00 | .000 | 5 |
| B0P2 | 100.00 | .000 | 5 |
| B0P3 | 100.00 | .000 | 5 |
| B1P0 | 60.00 | 54.772 | 5 |
| B1P1 | 100.00 | .000 | 5 |
| B1P2 | 100.00 | .000 | 5 |
| B1P3 | 100.00 | .000 | 5 |
| B2P0 | 80.00 | 44.721 | 5 |
| B2P1 | 100.00 | .000 | 5 |
| B2P2 | 100.00 | .000 | 5 |
| B2P3 | 100.00 | .000 | 5 |
| B3P0 | 80.00 | 44.721 | 5 |
| B3P1 | 100.00 | .000 | 5 |
| B3P2 | 100.00 | .000 | 5 |
| B3P3 | 100.00 | .000 | 5 |
| Total | 90.62 | 27.666 | 80 |

* Uji normalitas *Kolmogrov-Smirnov*

|  |
| --- |
| **Tests of Normality** |
|  | Kolmogorov-Smirnova | Shapiro-Wilk |
| Statistic | df | Sig. | Statistic | df | Sig. |
| Standardized Residual for Kalus | .425 | 80 | .000 | .608 | 80 | .000 |
| a. Lilliefors Significance Correction |

Hasil uji normalitas menunjukkan signifikansi sebesar 0,000 < 0,005, sehingga data tidak berdistribusi normal.

* Uji homogenitas

|  |
| --- |
| **Levene's Test of Equality of Error Variancesa,b** |
|  | Levene Statistic | df1 | df2 | Sig. |
| PERSENTASE BERKALUS | Based on Mean | 12.652 | 15 | 64 | .000 |
| Based on Median | 1.497 | 15 | 64 | .133 |
| Based on Median and with adjusted df | 1.497 | 15 | 13.680 | .231 |
| Based on trimmed mean | 9.699 | 15 | 64 | .000 |
| Tests the null hypothesis that the error variance of the dependent variable is equal across groups. |
| a. Dependent variable: PERSENTASE BERKALUS |
| b. Design: Intercept + Perlakuan |

Hasil uji homogenitas juga menunujukkan data tidak homogen karena signifikansi 0,000 < 0,05. Karena data tidak berdistribusi normal dan tidak homogen, maka data diuji secara nonparametric menggunakan uji *Kruskal-Wallis.*

* Uji *Kruskal-Wallis* pada ZPT BAP

|  |
| --- |
| **Test Statisticsa,b** |
|  | PERSENTASE BERKALUS |
| Kruskal-Wallis H | 4.797 |
| df | 3 |
| Asymp. Sig. | .187 |
| a. Kruskal Wallis Test |
| b. Grouping Variable: BAP |

Hasil uji *Kruskal-Wallis* menunjukkan bahwa ZPT BAP tidak berpengaruh secara signifikan terhadap persentase eksplan berkalus, karena nilai signifikansi 0,187 > 0,05.

* Uji *Kruskal-Wallis* pada ZPT pikloram

|  |
| --- |
| **Test Statisticsa,b** |
|  | PERSENTASE BERKALUS |
| Kruskal-Wallis H | 29.947 |
| df | 3 |
| Asymp. Sig. | .000 |
| a. Kruskal Wallis Test |
| b. Grouping Variable: PIKLORAM |

Hasil uji *Kruskal-Wallis* menunjuukan hasil yang signifikan yaitu 0,00 < 0,05; sehingga dapat disimpulkan bahwa ZPT pikloram berpengaruh dalam parameter persentase eksplan berkalus.

* Uji *Dunn* dari ZPT pikloram

|  |
| --- |
| **Pairwise Comparisons of PIKLORAM** |
| Sample 1-Sample 2 | Test Statistic | Std. Error | Std. Test Statistic | Sig. | Adj. Sig.a |
| 0 ppm-1 ppm | -18.000 | 4.028 | -4.468 | .000 | .000 |
| 0 ppm-2 ppm | -18.000 | 4.028 | -4.468 | .000 | .000 |
| 0 ppm-3 ppm | -18.000 | 4.028 | -4.468 | .000 | .000 |
| 1 ppm-2 ppm | .000 | 4.028 | .000 | 1.000 | 1.000 |
| 1 ppm-3 ppm | .000 | 4.028 | .000 | 1.000 | 1.000 |
| 2 ppm-3 ppm | .000 | 4.028 | .000 | 1.000 | 1.000 |
| Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is ,05. |
| a. Significance values have been adjusted by the Bonferroni correction for multiple tests. |

* Uji *Kruskal-Wallis* dari ZPT kombinasi BAP dan pikloram

|  |
| --- |
| **Test Statisticsa,b** |
|  | PERSENTASE BERKALUS |
| Kruskal-Wallis H | 49.135 |
| df | 15 |
| Asymp. Sig. | .000 |
| a. Kruskal Wallis Test |
| b. Grouping Variable: KOMBINASI ZPT BAP & PIKLORAM |

Hasil Uji *Kruskal-Wallis* pada kombinasi ZPT BAP dan picloram menunjukkan pengaruh yang signifikan, karena nilai signifikansi sebesar 0,00 < 0,05; sehingga dapat diuji lanjut *Dunn*.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Uji *Dunn* pada kombinasi ZPT BAP dan pikloram

|  |
| --- |
| **Pairwise Comparisons of KOMBINASI ZPT BAP & PIKLORAM** |
| Sample 1-Sample 2 | Test Statistic | Std. Error | Std. Test Statistic | Sig. | Adj. Sig.a |
| B0P0-B1P0 | -22.200 | 8.057 | -2.755 | .006 | .703 |
| B0P0-B2P0 | -30.500 | 8.057 | -3.786 | .000 | .018 |
| B0P0-B3P0 | -30.500 | 8.057 | -3.786 | .000 | .018 |
| B0P0-B0P1 | -38.800 | 8.057 | -4.816 | .000 | .000 |
| B0P0-B0P2 | -38.800 | 8.057 | -4.816 | .000 | .000 |
| B0P0-B0P3 | -38.800 | 8.057 | -4.816 | .000 | .000 |
| B0P0-B1P1 | -38.800 | 8.057 | -4.816 | .000 | .000 |
| B0P0-B1P2 | -38.800 | 8.057 | -4.816 | .000 | .000 |
| B0P0-B1P3 | -38.800 | 8.057 | -4.816 | .000 | .000 |
| B0P0-B2P1 | -38.800 | 8.057 | -4.816 | .000 | .000 |
| B0P0-B2P2 | -38.800 | 8.057 | -4.816 | .000 | .000 |
| B0P0-B2P3 | -38.800 | 8.057 | -4.816 | .000 | .000 |
| B0P0-B3P1 | -38.800 | 8.057 | -4.816 | .000 | .000 |
| B0P0-B3P2 | -38.800 | 8.057 | -4.816 | .000 | .000 |
| B0P0-B3P3 | -38.800 | 8.057 | -4.816 | .000 | .000 |
| B1P0-B3P0 | -8.300 | 8.057 | -1.030 | .303 | 1.000 |
| B1P0-B2P0 | -8.300 | 8.057 | -1.030 | .303 | 1.000 |
| B1P0-B0P2 | 16.600 | 8.057 | 2.060 | .039 | 1.000 |
| B1P0-B2P1 | -16.600 | 8.057 | -2.060 | .039 | 1.000 |
| B1P0-B0P1 | 16.600 | 8.057 | 2.060 | .039 | 1.000 |
| B1P0-B2P2 | -16.600 | 8.057 | -2.060 | .039 | 1.000 |
| B1P0-B2P3 | -16.600 | 8.057 | -2.060 | .039 | 1.000 |
| B1P0-B0P3 | 16.600 | 8.057 | 2.060 | .039 | 1.000 |
| B1P0-B1P3 | -16.600 | 8.057 | -2.060 | .039 | 1.000 |
| B1P0-B1P1 | -16.600 | 8.057 | -2.060 | .039 | 1.000 |
| B1P0-B1P2 | -16.600 | 8.057 | -2.060 | .039 | 1.000 |
| B1P0-B3P1 | -16.600 | 8.057 | -2.060 | .039 | 1.000 |
| B1P0-B3P3 | -16.600 | 8.057 | -2.060 | .039 | 1.000 |
| B1P0-B3P2 | -16.600 | 8.057 | -2.060 | .039 | 1.000 |
| B2P0-B0P2 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B2P0-B0P3 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B3P0-B0P1 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B3P0-B0P2 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B2P0-B0P1 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B3P0-B0P3 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B2P0-B1P1 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B3P0-B1P1 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B2P0-B1P2 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B3P0-B1P2 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B2P0-B1P3 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B3P0-B1P3 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B2P0-B3P0 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B2P0-B2P1 | -8.300 | 8.057 | -1.030 | .303 | 1.000 |
| B2P0-B2P2 | -8.300 | 8.057 | -1.030 | .303 | 1.000 |
| B2P0-B2P3 | -8.300 | 8.057 | -1.030 | .303 | 1.000 |
| B2P0-B3P1 | -8.300 | 8.057 | -1.030 | .303 | 1.000 |
| B2P0-B3P2 | -8.300 | 8.057 | -1.030 | .303 | 1.000 |
| B2P0-B3P3 | -8.300 | 8.057 | -1.030 | .303 | 1.000 |
| B3P0-B2P1 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B3P0-B2P2 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B3P0-B2P3 | 8.300 | 8.057 | 1.030 | .303 | 1.000 |
| B3P0-B3P1 | -8.300 | 8.057 | -1.030 | .303 | 1.000 |
| B3P0-B3P2 | -8.300 | 8.057 | -1.030 | .303 | 1.000 |
| B3P0-B3P3 | -8.300 | 8.057 | -1.030 | .303 | 1.000 |
| B0P3-B2P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P3-B2P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P3-B2P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P3-B3P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P3-B3P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P3-B3P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P3-B1P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P1-B0P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P1-B1P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P1-B1P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P1-B1P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P1-B1P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P1-B1P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P1-B2P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P1-B2P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P1-B2P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P1-B2P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P1-B2P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P1-B3P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P1-B3P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P1-B3P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P2-B1P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P1-B2P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P2-B2P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P2-B2P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P2-B2P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P1-B3P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P2-B3P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P2-B3P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P2-B3P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P1-B3P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P3-B2P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P3-B2P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P3-B2P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P1-B3P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P3-B3P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P3-B3P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B1P3-B3P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P2-B0P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P1-B0P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P2-B1P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P2-B1P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P2-B1P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P2-B2P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P2-B2P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B2P1-B2P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B2P1-B2P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P2-B2P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B2P1-B3P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B2P1-B3P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B2P1-B3P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B2P2-B2P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P2-B3P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B2P2-B3P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B2P2-B3P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B2P2-B3P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P2-B3P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B2P3-B3P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B2P3-B3P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B2P3-B3P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P2-B3P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P3-B1P1 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B0P3-B1P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B3P1-B3P2 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B3P1-B3P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| B3P2-B3P3 | .000 | 8.057 | .000 | 1.000 | 1.000 |
| Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is .05. |
| a. Significance values have been adjusted by the Bonferroni correction for multiple tests. |

 |

* Hasil signifkansi parameter persentase eksplan berkalus berdasarkan uji *Dunn*

|  |  |
| --- | --- |
| **Perlakuan** | **Subset** |
| **c** | **b** | **a** |
| **B0P0** | 30 |  |  |
| **B1P0** |  | 60 |  |
| **B2P0** |  | 80 | 80 |
| **B3P0** |  | 80 | 80 |
| **B0P1** |  |  | 100 |
| **B0P2** |  |  | 100 |
| **B0P3** |  |  | 100 |
| **B1P1** |  |  | 100 |
| **B1P2** |  |  | 100 |
| **B1P3** |  |  | 100 |
| **B2P1** |  |  | 100 |
| **B2P2** |  |  | 100 |
| **B2P3** |  |  | 100 |
| **B3P1** |  |  | 100 |
| **B3P2** |  |  | 100 |
| **B3P3** |  |  | 100 |