The following Mann-Whitney test was performed based on the number of different alleles present within my data and Dylan’s, and thus based on the genetic diversity. It was two-tailed.

The *U*-value is 25. The critical value of *U* at *p* < .05 is 36. Therefore, the result is significant at *p* < .05.

The *z*-score is 2.58333. The *p*-value is .00988. The result is significant at *p* < .05.

*Note: The approximation to the form of the normal distribution becomes less robust at sample sizes smaller than 10, so caution is appropriate here in making use the*Z*-value calculation*.

*Important Note*

If you want full details about how the U-value was calculated, including rank order data, descriptive statistics and an explanation of the result, please click the "Calculation Details" button below.

Comparison between my data and Dylan’s data where loci with (what I saw as) huge difference (more than .3) between Ho and He are thrown out. I want to do a Mann Whitney comparison between the differences within expected vs observed heterozygosity between my and Dylan’s loci:

|  |  |
| --- | --- |
| 5A  8A  6B  6C  LOCUS13 |  |

And their respective Ho and He:

|  |  |
| --- | --- |
| 0.4 | 0.633 |
| 0 | 0.133 |
| 0 | 0.133 |
| 0.067 | 0.067 |
| 0.133 | 0.129 |
| The *U*-value is 7.5. The critical value of *U* at *p* < .05 is 2. Therefore, the result is *not* significant at *p* < .05.  The *z*-score is -0.94002. The *p*-value is .34722. The result is *not* significant at *p* < .05.  *Note: The approximation to the form of the normal distribution becomes less robust at sample sizes smaller than 10, so caution is appropriate here in making use the*Z*-value calculation*. |  |

The loci of Dylan’s I chose:

11

18

24

107

112

132

333

330

294

255

222

214

150

167

And their genetic diversity:

|  |  |
| --- | --- |
| 0.6 | 0.702 |
| 0.8 | 0.819 |
| 0.4 | 0.66 |
| 0.867 | 0.852 |
| 0.8 | 0.81 |
| 0.667 | 0.743 |
| 0.733 | 0.829 |
| 0.6 | 0.721 |
| 1 | 0.814 |
| 0.667 | 0.771 |
| 0.667 | 0.719 |
| 0.2 | 0.476 |
| 0.933 | 0.798 |
| 0.133 | 0.129 |
| 0.403 | 0.598 |
| The *U*-value is 94. The critical value of *U* at *p* < .05 is 64. Therefore, the result is *not* significant at *p* < .05.  The *z*-score is -0.74661. The *p*-value is .45326. The result is *not* significant at *p* < .05. |  |