

Appendix C: P-value tables for the statistical analysis of the insect data

SUMMER PITFALL Multiple comparisons P-values

1. Abundance

| Depend.: Abundance | Multiple Comparisons p values (2-tailed); Abundance (Summer Pitfall Traps Data) Independent (grouping) variable: Garden Type Kruskal-Wallis test: H (5, N= 42) =36,57295 p = 0,0001 | | | | | |
|------------------------------|--|----------------------|------------------------|------------------------|---------------------|-----------------------------|
| | Grassland R: 32,286 | Monocot R: 38,714 | FA Control R: 8,000 | FA Native R: 25,000 | Javett R: 9,6429 | Javett Control R: 15,357 |
| Grassland | | 1,000000 | 0,003189 | 1,000000 | 0,008316 | 0,147523 |
| Monocot | 1,000000 | | 0,000042 | 0,547371 | 0,000139 | 0,005522 |
| FA Control | 0,003189 | 0,000042 | | 0,142932 | 1,000000 | 1,000000 |
| FA Native | 1,000000 | 0,547371 | 0,142932 | | 0,287755 | 1,000000 |
| Javett | 0,008316 | 0,000139 | 1,000000 | 0,287755 | | 1,000000 |
| Javett Control | 0,147523 | 0,005522 | 1,000000 | 1,000000 | 1,000000 | |

2. Richness

| Depend.: Richness | Multiple Comparisons p values (2-tailed); Richness (Summer Pitfall Traps Data) Independent (grouping) variable: Garden Type Kruskal-Wallis test: H (5, N= 42) =27,78177 p = 0,0001 | | | | | |
|-----------------------------|---|----------------------|-------------------------|------------------------|---------------------|-----------------------------|
| | Grassland R: 32,071 | Monocot R: 28,643 | FA Control R: 8,2857 | FA Native R: 31,429 | Javett R: 9,2143 | Javett Control R: 19,357 |
| Grassland | | 1,000000 | 0,004296 | 1,000000 | 0,007363 | 0,787684 |
| Monocot | 1,000000 | | 0,028596 | 0,547371 | 0,045724 | 1,000000 |
| FA Control | 0,004296 | 0,028596 | | 0,006251 | 1,000000 | 1,000000 |
| FA Native | 1,000000 | 1,000000 | 0,006251 | | 0,010574 | 0,984597 |
| Javett | 0,007363 | 0,045724 | 1,000000 | 0,010574 | | 1,000000 |
| Javett Control | 0,787684 | 1,000000 | 1,000000 | 0,984597 | 1,000000 | |

3. Shannon Diversity

| Depend.: Shannon Diversity | Multiple Comparisons p values (2-tailed); Shannon diversity (Summer Pitfall Traps Data) Independent (grouping) variable: Garden Type Kruskal-Wallis test: H (5, N= 42) =29,96326 p = 0,0001 | | | | | |
|--------------------------------------|--|---------------------|-------------------------|------------------------|---------------------|-----------------------------|
| | Grassland R: 12,143 | Monocot R: 5,000 | FA Control R: 21,714 | FA Native R: 34,286 | Javett R: 23,571 | Javett Control R: 32,386 |
| Grassland | | 1,000000 | 1,000000 | 0,011002 | 1,000000 | 0,031920 |
| Monocot | 1,000000 | | 0,162093 | 0,000120 | 0,069362 | 0,000475 |
| FA Control | 1,000000 | 0,162093 | | 0,828331 | 1,000000 | 1,000000 |
| FA Native | 0,011002 | 0,000120 | 0,828331 | | 1,000000 | 1,000000 |
| Javett | 1,000000 | 0,069362 | 1,000000 | 1,000000 | | 1,000000 |
| Javett Control | 0,031920 | 0,000475 | 1,000000 | 1,000000 | 1,000000 | |

4. Simpson Diversity

| Depend.: Simpson Diversity | Multiple Comparisons p values (2-tailed); Simpson diversity (Summer Pitfall Traps Data) Independent (grouping) variable: Garden Type Kruskal-Wallis test: H (5, N= 42) =29,21499 p = 0,0001 | | | | | |
|--------------------------------------|--|---------------------|-------------------------|------------------------|---------------------|-----------------------------|
| | Grassland R: 10,714 | Monocot R: 4,714 | FA Control R: 27,214 | FA Native R: 23,857 | Javett R: 30,357 | Javett Control R: 32,143 |
| Grassland | | 1,000000 | 0,177928 | 0,675622 | 0,041098 | 0,016257 |
| Monocot | 1,000000 | | 0,009013 | 0,052630 | 0,001382 | 0,000432 |
| FA Control | 0,177928 | 0,009013 | | 1,000000 | 1,000000 | 1,000000 |
| FA Native | 0,675622 | 0,052630 | 1,000000 | | 1,000000 | 1,000000 |
| Javett | 0,041098 | 0,001382 | 1,000000 | 1,000000 | | 1,000000 |
| Javett Control | 0,016257 | 0,000432 | 1,000000 | 1,000000 | 1,000000 | |

WINTER PITFALL Multiple Comparisons p-values

1. Abundance

| Depend.: Abundance | Multiple Comparisons p values (2-tailed); Abundance (Winter Pitfall Traps Data) Independent (grouping) variable: Garden Type Kruskal-Wallis test: H (5, N= 42) =37,00053 p = 0,0001 | | | | | |
|------------------------------|--|----------------------|-------------------------|------------------------|---------------------|-----------------------------|
| | Grassland R: 30,571 | Monocot R: 39,000 | FA Control R: 9,7143 | FA Native R: 20,929 | Javett R: 23,500 | Javett Control R: 5,2857 |
| Grassland | | 1,000000 | 0,022039 | 1,000000 | 1,000000 | 0,001729 |
| Monocot | 1,000000 | | 0,000120 | 0,087805 | 0,271381 | 0,000004 |
| FA Control | 0,022039 | 0,000120 | | 1,000000 | 0,532903 | 1,000000 |
| FA Native | 1,000000 | 0,087805 | 1,000000 | | 1,000000 | 0,255830 |
| Javett | 1,000000 | 0,271381 | 0,532903 | 1,000000 | | 0,082130 |
| Javett Control | 0,001729 | 0,000004 | 1,000000 | 0,255830 | 0,082130 | |

2. Richness

| Depend.: Richness | Multiple Comparisons p values (2-tailed); Richness (Winter Pitfall Traps Data) Independent (grouping) variable: Garden Type Kruskal-Wallis test: H (5, N= 42) =32,10927 p = 0,0001 | | | | | |
|-----------------------------|---|----------------------|-------------------------|------------------------|---------------------|-----------------------------|
| | Grassland R: 20,500 | Monocot R: 35,786 | FA Control R: 11,429 | FA Native R: 33,500 | Javett R: 21,643 | Javett Control R: 6,1429 |
| Grassland | | 0,296261 | 1,000000 | 0,711381 | 1,000000 | 0,428469 |
| Monocot | 0,296261 | | 0,003055 | 1,000000 | 0,465359 | 0,000093 |
| FA Control | 1,000000 | 0,003055 | | 0,011446 | 1,000000 | 1,000000 |
| FA Native | 0,711381 | 1,000000 | 0,011446 | | 1,000000 | 0,000453 |
| Javett | 1,000000 | 0,465359 | 1,000000 | 1,000000 | | 0,271381 |
| Javett Control | 0,428469 | 0,000093 | 1,000000 | 0,000453 | 0,271381 | |

3. Shannon Diversity

| Depend.: Shannon Diversity | Multiple Comparisons p values (2-tailed); Shannon Diversity (Winter Pitfall Traps Data) Independent (grouping) variable: Garden Type Kruskal-Wallis test: H (5, N= 42) =30,93382 p = 0,0001 | | | | | |
|--------------------------------------|--|----------------------|-------------------------|------------------------|---------------------|-----------------------------|
| | Grassland R: 16,571 | Monocot R: 6,1429 | FA Control R: 23,571 | FA Native R: 39,000 | Javett R: 28,714 | Javett Control R: 15,000 |
| Grassland | | 1,000000 | 1,000000 | 0,009382 | 0,960886 | 1,000000 |
| Monocot | 1,000000 | | 0,117968 | 0,000008 | 0,008658 | 1,000000 |
| FA Control | 1,000000 | 0,117968 | | 0,279463 | 1,000000 | 1,000000 |
| FA Native | 0,009382 | 0,000008 | 0,279463 | | 1,000000 | 0,003784 |
| Javett | 0,960886 | 0,008658 | 1,000000 | 1,000000 | | 0,547371 |
| Javett Control | 1,000000 | 1,000000 | 1,000000 | 0,003784 | 0,547371 | |

4. Simpson Diversity

| Depend.: Simpson Diversity | Multiple Comparisons p values (2-tailed); Simpson Diversity (Winter Pitfall Traps Data) Independent (grouping) variable: Garden Type Kruskal-Wallis test: H (5, N= 42) =26,21970 p = 0,0001 | | | | | |
|--------------------------------------|--|---------------------|-------------------------|------------------------|---------------------|-----------------------------|
| | Grassland R: 13,286 | Monocot R: 6,000 | FA Control R: 28,143 | FA Native R: 35,571 | Javett R: 25,143 | Javett Control R: 20,857 |
| Grassland | | 1,000000 | 0,352053 | 0,010162 | 1,000000 | 1,000000 |
| Monocot | 1,000000 | | 0,011002 | 0,000097 | 0,052630 | 0,352053 |
| FA Control | 0,352053 | 0,011002 | | 1,000000 | 1,000000 | 1,000000 |
| FA Native | 0,010162 | 0,000097 | 1,000000 | | 1,000000 | 0,372575 |
| Javett | 1,000000 | 0,052630 | 1,000000 | 1,000000 | | 1,000000 |
| Javett Control | 1,000000 | 0,352053 | 1,000000 | 0,372575 | 1,000000 | |

SPRING PITFALL Multiple comparisons p-values

1. Abundance

| Depend.: Abundance | Multiple Comparisons p values (2-tailed); Abundance (Spring Pitfall Data) Independent (grouping) variable: Garden Type Kruskal-Wallis test: H (5, N= 42) =31,37138 p = 0,0001 | | | | | |
|------------------------------|--|-----------------------|-----------------------|--------------------|----------------------------|---------------------|
| | FA Control R:7,6429 | FA Native R:21,143 | Grassland R:21,643 | Javett R:29,000 | Javett Control R:10,571 | Monocot R:39,000 |
| FA Control | | 0,592801 | 0,491440 | 0,016893 | 1,000000 | 0,000026 |
| FA Native | 0,592801 | | 1,000000 | 1,000000 | 1,000000 | 0,096983 |
| Grassland | 0,491440 | 1,000000 | | 1,000000 | 1,000000 | 0,121836 |
| Javett | 0,016893 | 1,000000 | 1,000000 | | 0,074236 | 1,000000 |
| Javett Control | 1,000000 | 1,000000 | 1,000000 | 0,074236 | | 0,000218 |
| Monocot | 0,000026 | 0,096983 | 0,121836 | 1,000000 | 0,000218 | |

2. Richness

| Depend.: Richness | Multiple Comparisons p values (2-tailed); Richness (Spring Pitfall Data) Independent (grouping) variable: Garden Type Kruskal-Wallis test: H (5, N= 42) =18,08343 p =0,0028 | | | | | |
|-----------------------------|--|-----------------------|-----------------------|--------------------|----------------------------|---------------------|
| | FA Control R:13,571 | FA Native R:35,929 | Grassland R:25,214 | Javett R:23,643 | Javett Control R:12,143 | Monocot R:18,500 |
| FA Control | | 0,009765 | 1,000000 | 1,000000 | 1,000000 | 1,000000 |
| FA Native | 0,009765 | | 1,000000 | 0,914879 | 0,004296 | 0,117968 |
| Grassland | 1,000000 | 1,000000 | | 1,000000 | 0,693307 | 1,000000 |
| Javett | 1,000000 | 0,914879 | 1,000000 | | 1,000000 | 1,000000 |
| Javett Control | 1,000000 | 0,004296 | 0,693307 | 1,000000 | | 1,000000 |
| Monocot | 1,000000 | 0,117968 | 1,000000 | 1,000000 | 1,000000 | |

3. Shannon Diversity

| Depend.: Shannon Diversity | Multiple Comparisons p values (2-tailed); Shannon Diversity (Spring Pitfall Data) Independent (grouping) variable: Garden Type Kruskal-Wallis test: H (5, N= 42) =27,91979 p = 0,0001 | | | | | |
|--------------------------------------|--|-----------------------|-----------------------|--------------------|----------------------------|---------------------|
| | FA Control R:22,429 | FA Native R:37,571 | Grassland R:23,857 | Javett R:16,857 | Javett Control R:24,286 | Monocot R:4,0000 |
| FA Control | | 0,313934 | 1,000000 | 1,000000 | 1,000000 | 0,074236 |
| FA Native | 0,313934 | | 0,547371 | 0,023755 | 0,641391 | 0,000005 |
| Grassland | 1,000000 | 0,547371 | | 1,000000 | 1,000000 | 0,036904 |
| Javett | 1,000000 | 0,023755 | 1,000000 | | 1,000000 | 0,748718 |
| Javett Control | 1,000000 | 0,641391 | 1,000000 | 1,000000 | | 0,029667 |
| Monocot | 0,074236 | 0,000005 | 0,036904 | 0,748718 | 0,029667 | |

4. Simpson Diversity

| Depend.: Simpson Diversity | Multiple Comparisons p values (2-tailed); Simpson Diversity (Spring Pitfall Data) Independent (grouping) variable: Garden Type Kruskal-Wallis test: H (5, N= 42) =31,17576 p = 0,0001 | | | | | |
|--------------------------------------|--|-----------------------|-----------------------|--------------------|----------------------------|---------------------|
| | FA Control R:31,500 | FA Native R:33,429 | Grassland R:19,000 | Javett R:13,000 | Javett Control R:28,071 | Monocot R:4,0000 |
| FA Control | | 1,000000 | 0,849301 | 0,071761 | 1,000000 | 0,000412 |
| FA Native | 1,000000 | | 0,416745 | 0,027561 | 1,000000 | 0,000108 |
| Grassland | 0,849301 | 0,416745 | | 1,000000 | 1,000000 | 0,332519 |
| Javett | 0,071761 | 0,027561 | 1,000000 | | 0,323110 | 1,000000 |
| Javett Control | 1,000000 | 1,000000 | 1,000000 | 0,323110 | | 0,003626 |
| Monocot | 0,000412 | 0,000108 | 0,332519 | 1,000000 | 0,003626 | |

SUMMER PITFALL EFFECT of AGE

1. Abundance

| Multiple Comparisons p values (2-tailed); Abundance (Summer Pitfall Data) Independent (grouping) variable: Age Kruskal-Wallis test: $H(2, N=42) = 28,12265$ $p = 0,0001$ | | | |
|---|-------------------|-----------------|----------------------|
| Depend.: Abundance | Young R:16,500 | Old R:35,500 | Youngest R:12,500 |
| Young | | 0,000125 | 1,000000 |
| Old | 0,000125 | | 0,000002 |
| Youngest | 1,000000 | 0,000002 | |

2. Richness

| Multiple Comparisons p values (2-tailed); Richness (Summer Pitfall Data) Independent (grouping) variable: Age Kruskal-Wallis test: $H(2, N=42) = 12,51179$ $p = 0,0019$ | | | |
|--|-------------------|-----------------|----------------------|
| Depend.: Richness | Young R:19,857 | Old R:30,357 | Youngest R:14,286 |
| Young | | 0,070632 | 0,688596 |
| Old | 0,070632 | | 0,001584 |
| Youngest | 0,688596 | 0,001584 | |

3. Shannon Diversity

| Multiple Comparisons p values (2-tailed); Shannon Diversity (Summer Pitfall Data) Independent (grouping) variable: Age Kruskal-Wallis test: $H(2, N=42) = 23,33266$ $p = 0,0001$ | | | |
|---|-------------------|----------------|----------------------|
| Depend.: Shannon Diversity | Young R:28,000 | Old R:8,571 | Youngest R:27,929 |
| Young | | 0,000084 | 1,000000 |
| Old | 0,000084 | | 0,000090 |
| Youngest | 1,000000 | 0,000090 | |

4. Simpson Diversity

| Multiple Comparisons p values (2-tailed); Simpson Diversity (Summer Pitfall Data) Independent (grouping) variable: Age Kruskal-Wallis test: $H(2, N=42) = 28,04133$ $p = 0,0001$ | | | |
|---|-------------------|-----------------|----------------------|
| Depend.: Simpson Diversity | Young R:25,536 | Old R:7,7143 | Youngest R:31,250 |
| Young | | 0,000364 | 0,653428 |
| Old | 0,000364 | | 0,000001 |
| Youngest | 0,653428 | 0,000001 | |

WINTER PITFALL EFFECT of AGE

1. Abundance

| Multiple Comparisons p values (2-tailed); Abundance (Winter Pitfall Data) Independent (grouping) variable: Age Kruskal-Wallis test: $H(2, N=24) = 14,57259$ $p = 0,0007$ | | | |
|---|-------------------|------------------|----------------------|
| Depend.: Abundance | Young R:9,3125 | Old R:20,2500 | Youngest R:7,9375 |
| Young | | 0,005932 | 1,000000 |
| Old | 0,005932 | | 0,001490 |
| Youngest | 1,000000 | 0,001490 | |

2. Richness

| Multiple Comparisons p values (2-tailed); Richness (Winter Pitfall Data) Independent (grouping) variable: Age Kruskal-Wallis test: $H(2, N=24) = 8,072357$ $p = 0,0177$ | | | |
|--|-------------------|------------------|-----------------------|
| Depend.: Richness | Young R:12,875 | Old R: 17,313 | Youngest R: 7,3125 |
| Young | | 0,628312 | 0,346939 |
| Old | 0,628312 | | 0,014033 |
| Youngest | 0,346939 | 0,014033 | |

3. Shannon Diversity

| Multiple Comparisons p values (2-tailed); Shannon Diversity (Winter Pitfall Data) Independent (grouping) variable: Age Kruskal-Wallis test: $H(2, N=24) = 11,28500$ $p = 0,0035$ | | | |
|---|--------------------|------------------|------------------------|
| Depend.: Shannon Diversity | Young R:18,3750 | Old R: 6,5000 | Youngest R: 12,6250 |
| Young | | 0,002349 | 0,311628 |
| Old | 0,002349 | | 0,249601 |
| Youngest | 0,311628 | 0,249601 | |

4. Simpson Index

| Multiple Comparisons p values (2-tailed); Simpson Diversity (Winter Pitfall Data) Independent (grouping) variable: Age Kruskal-Wallis test: $H(2, N=24) = 13,76000$ $p = 0,0010$ | | | |
|---|--------------------|------------------|------------------------|
| Depend.: Simpson Diversity | Young R:18,5000 | Old R: 5,5000 | Youngest R: 13,5000 |
| Young | | 0,000708 | 0,471898 |
| Old | 0,000708 | | 0,070955 |
| Youngest | 0,471898 | 0,070955 | |

SPRING PITFALL EFFECT of AGE

1. Abundance

| Multiple Comparisons p values (2-tailed); Abundance (Spring Pitfall Data) Independent (grouping) variable: Age Kruskal-Wallis test: $H(2, N=42) = 12,21789$ $p = 0,0022$ | | | |
|---|-------------------|-----------------|----------------------|
| Depend.: Abundance | Young R:14,393 | Old R:30,321 | Youngest R:19,786 |
| Young | | 0,001776 | 0,734423 |
| Old | 0,001776 | | 0,069225 |
| Youngest | 0,734423 | 0,069225 | |

2. Richness

| Multiple Comparisons p values (2-tailed); Richness (Spring Pitfall Data) Independent (grouping) variable: Age Kruskal-Wallis test: $H(2, N=42) = 2,220809$ $p = 0,3294$ | | | |
|--|-------------------|-----------------|----------------------|
| Depend.: Richness | Young R:24,750 | Old R:21,857 | Youngest R:17,893 |
| Young | | 1,000000 | 0,417542 |
| Old | 1,000000 | | 1,000000 |
| Youngest | 0,417542 | 1,000000 | |

3. Shannon Diversity

| Multiple Comparisons p values (2-tailed); Shannon Diversity (Spring Pitfall Data) Independent (grouping) variable: Age Kruskal-Wallis test: $H(2, N=42) = 12,13384$ $p = 0,0023$ | | | |
|---|-------------------|-----------------|----------------------|
| Depend.: Shannon Diversity | Young R:30,000 | Old R:13,929 | Youngest R:20,571 |
| Young | | 0,001584 | 0,126031 |
| Old | 0,001584 | | 0,455886 |
| Youngest | 0,126031 | 0,455886 | |

4. Simpson Diversity

| Multiple Comparisons p values (2-tailed); Simpson Diversity (Spring Pitfall Data) Independent (grouping) variable: Age Kruskal-Wallis test: $H(2, N=42) = 20,57333$ $p = 0,0001$ | | | |
|---|-------------------|-----------------|----------------------|
| Depend.: Simpson Diversity | Young R:32,464 | Old R:11,500 | Youngest R:20,536 |
| Young | | 0,000018 | 0,030283 |
| Old | 0,000018 | | 0,153997 |
| Youngest | 0,030283 | 0,153997 | |