

Supplementary figures

- Figure S1. Equivalency between all Caribbean clade vs *Papiamenta*.
Figure S2. Equivalency between all Caribbean clade vs *Tolteca*.
Figure S3. Equivalency between all Mexican *Pholcophora* vs Caribbean clade.
Figure S4. Equivalency between all Mexican *Pholcophora* vs *Papiamenta*.
Figure S5. Equivalency between all Mexican *Pholcophora* vs *Tolteca*.
Figure S6. Equivalency between all Non-Caribbean *Pholcophora* vs Caribbean clade.
Figure S7. Equivalency between all Non-Caribbean *Pholcophora* vs Mexican *Pholcophora*.
Figure S8. Equivalency between all Non-Caribbean *Pholcophora* vs *Papiamenta*.
Figure S9. Equivalency between all Non-Caribbean *Pholcophora* vs *Tolteca*.
Figure S10. Equivalency between all *P. americana* vs Caribbean clade.
Figure S11. Equivalency between all *P. americana* vs Mexican *Pholcophora*.
Figure S12. Equivalency between all *P. americana* vs Non-Caribbean *Pholcophora*.
Figure S13. Equivalency between all *P. americana* vs *Papiamenta*.
Figure S14. Equivalency between all *P. americana* vs *Tolteca*.
Figure S15. Equivalency between all *Papiamenta* vs *Tolteca*.
Figure S16. Niche Overlap between Caribbean clade vs *Papiamenta*.
Figure S17. Niche Overlap between Caribbean clade vs *Tolteca*.
Figure S18. Niche Overlap between Mexican *Pholcophora* vs Caribbean clade.
Figure S19. Niche Overlap between Mexican *Pholcophora* vs *Papiamenta*.
Figure S20. Niche Overlap between Mexican *Pholcophora* vs *Tolteca*.
Figure S21. Niche Overlap between Non-Caribbean *Pholcophora* vs Caribbean clade.
Figure S22. Niche Overlap between Non-Caribbean *Pholcophora* vs Mexican *Pholcophora*.
Figure S23. Niche Overlap between Non-Caribbean *Pholcophora* vs *Papiamenta*.
Figure S24. Niche Overlap between Non-Caribbean *Pholcophora* vs *Tolteca*.
Figure S25. Niche Overlap between *P. americana* vs Caribbean clade.
Figure S26. Niche Overlap between *P. americana* vs Mexican *Pholcophora*.
Figure S27. Niche Overlap between *P. americana* vs Non-Caribbean *Pholcophora*.
Figure S28. Niche Overlap between *P. americana* vs *Papiamenta*.
Figure S29. Niche Overlap between *P. americana* vs *Tolteca*.
Figure S30. Niche Overlap between *Papiamenta* vs *Tolteca*.
Figure S31. PCA correlation circle for Caribbean clade vs *Papiamenta*.
Figure S32. PCA correlation circle for Caribbean clade vs *Tolteca*.
Figure S33. PCA correlation circle for Mexican *Pholcophora* vs Caribbean clade.
Figure S34. PCA correlation circle for Mexican *Pholcophora* vs *Papiamenta*.
Figure S35. PCA correlation circle for Mexican *Pholcophora* vs *Tolteca*.
Figure S36. PCA correlation circle for Non-Caribbean *Pholcophora* vs Caribbean clade.
Figure S37. PCA correlation circle for Non-Caribbean *Pholcophora* vs Mexican *Pholcophora*.
Figure S38. PCA correlation circle for Non-Caribbean *Pholcophora* vs *Papiamenta*.
Figure S39. PCA correlation circle for Non-Caribbean *Pholcophora* vs *Tolteca*.
Figure S40. PCA correlation circle for *P. americana* vs Caribbean clade.
Figure S41. PCA correlation circle for *P. americana* vs Mexican *Pholcophora*.
Figure S42. PCA correlation circle for *P. americana* vs Non-Caribbean *Pholcophora*.
Figure S43. PCA correlation circle for *P. americana* vs *Papiamenta*.
Figure S44. PCA correlation circle for *P. americana* vs *Tolteca*.
Figure S45. PCA correlation circle for *Papiamenta* vs *Tolteca*.

- Figure S46. Similarity between Caribbean clade vs *Papiamenta*.
Figure S47. Similarity between Caribbean clade vs *Tolteca*.
Figure S48. Similarity between Mexican *Pholcophora* vs Caribbean clade.
Figure S49. Similarity between Mexican *Pholcophora* vs *Papiamenta*.
Figure S50. Similarity between Mexican *Pholcophora* vs *Tolteca*.
Figure S51. Similarity between Non-Caribbean *Pholcophora* vs Caribbean clade.
Figure S52. Similarity between Non-Caribbean *Pholcophora* vs Mexican *Pholcophora*.
Figure S53. Similarity between Non-Caribbean *Pholcophora* vs *Papiamenta*.
Figure S54. Similarity between Non-Caribbean *Pholcophora* vs *Tolteca*.
Figure S55. Similarity between *P. americana* vs Caribbean clade.
Figure S56. Similarity between *P. americana* vs Mexican *Pholcophora*.
Figure S57. Similarity between *P. americana* vs Non-Caribbean *Pholcophora*.
Figure S58. Similarity between *P. americana* vs *Papiamenta*.
Figure S59. Similarity between *P. americana* vs *Tolteca*.
Figure S60. Similarity between *Papiamenta* vs *Tolteca*.
Figure S61. Similarity between *Papiamenta* vs Caribbean clade.
Figure S62. Similarity between *Tolteca* vs Caribbean clade.
Figure S63. Similarity between Caribbean clade vs Mexican *Pholcophora*.
Figure S64. Similarity between *Papiamenta* vs Mexican *Pholcophora*.
Figure S65. Similarity between *Tolteca* vs Mexican *Pholcophora*.
Figure S66. Similarity between Caribbean clade vs Non-Caribbean *Pholcophora*.
Figure S67. Similarity between Mexican *Pholcophora* vs Non-Caribbean *Pholcophora*.
Figure S68. Similarity between *Papiamenta* vs Non-Caribbean *Pholcophora*.
Figure S69. Similarity between *Tolteca* vs Non-Caribbean *Pholcophora*.
Figure S70. Similarity between Caribbean clade vs *P. americana*.
Figure S71. Similarity between Mexican *Pholcophora* vs *P. americana*.
Figure S72. Similarity between Non-Caribbean *Pholcophora* vs *P. americana*.
Figure S73. Similarity between *Papiamenta* vs *P. americana*.
Figure S74. Similarity between *Tolteca* vs *P. americana*.
Figure S75. Similarity between *Tolteca* vs *Papiamenta*.
Figure S76. Summary tree of all trees using unpartitioned analysis.
Figure S77. Summary tree of all trees using partitioned analysis.

Figure S1

**Equivalency
Caribbean taxa
*Papiamenta***

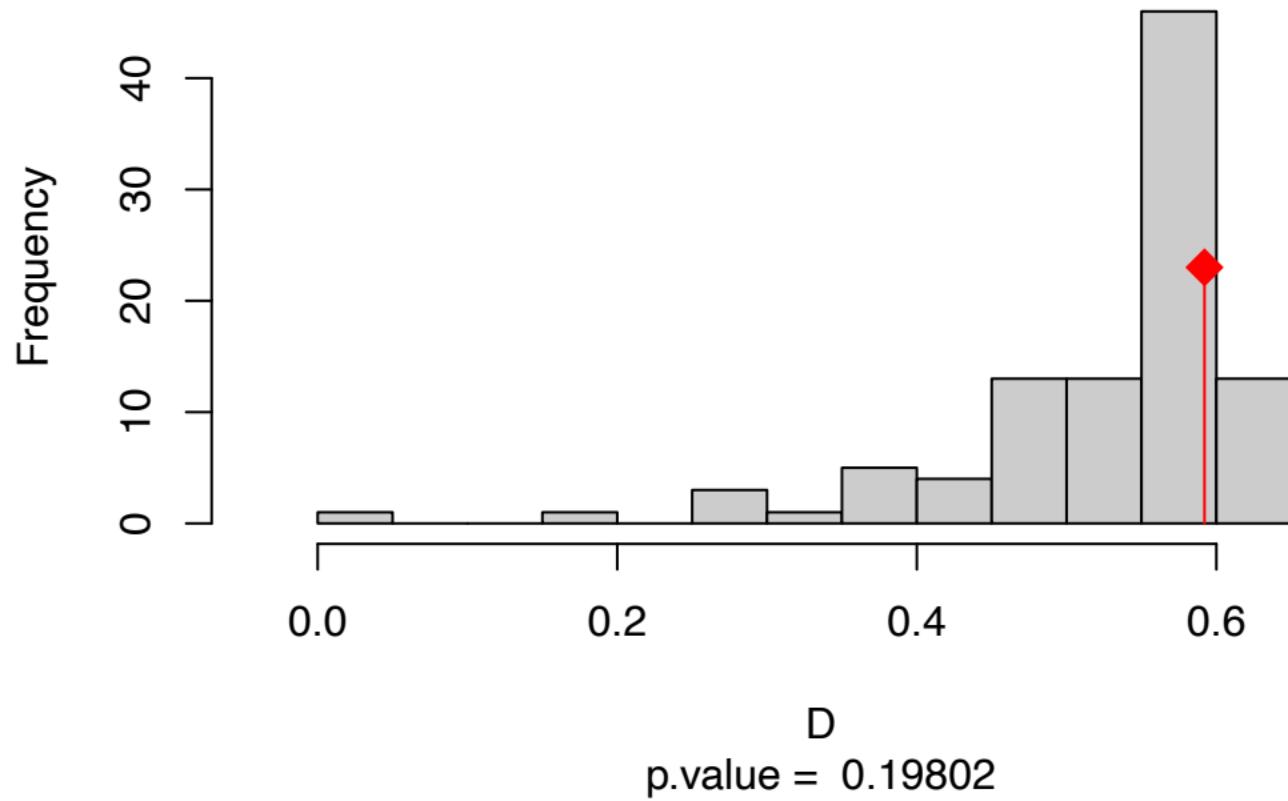


Figure S2

**Equivalency
Caribbean taxa
Tolteca**

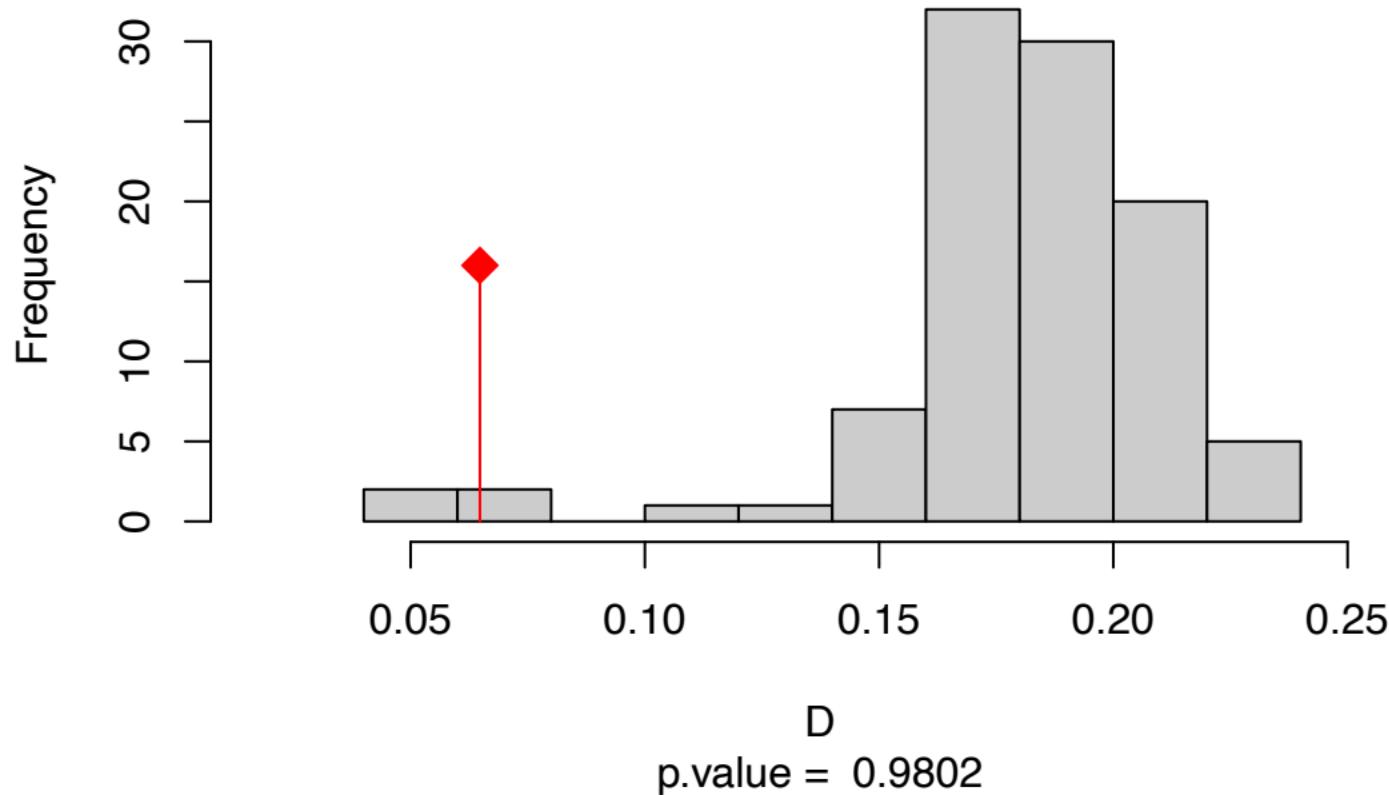


Figure S3

Equivalency
Mexican Pholcophora
Caribbean taxa

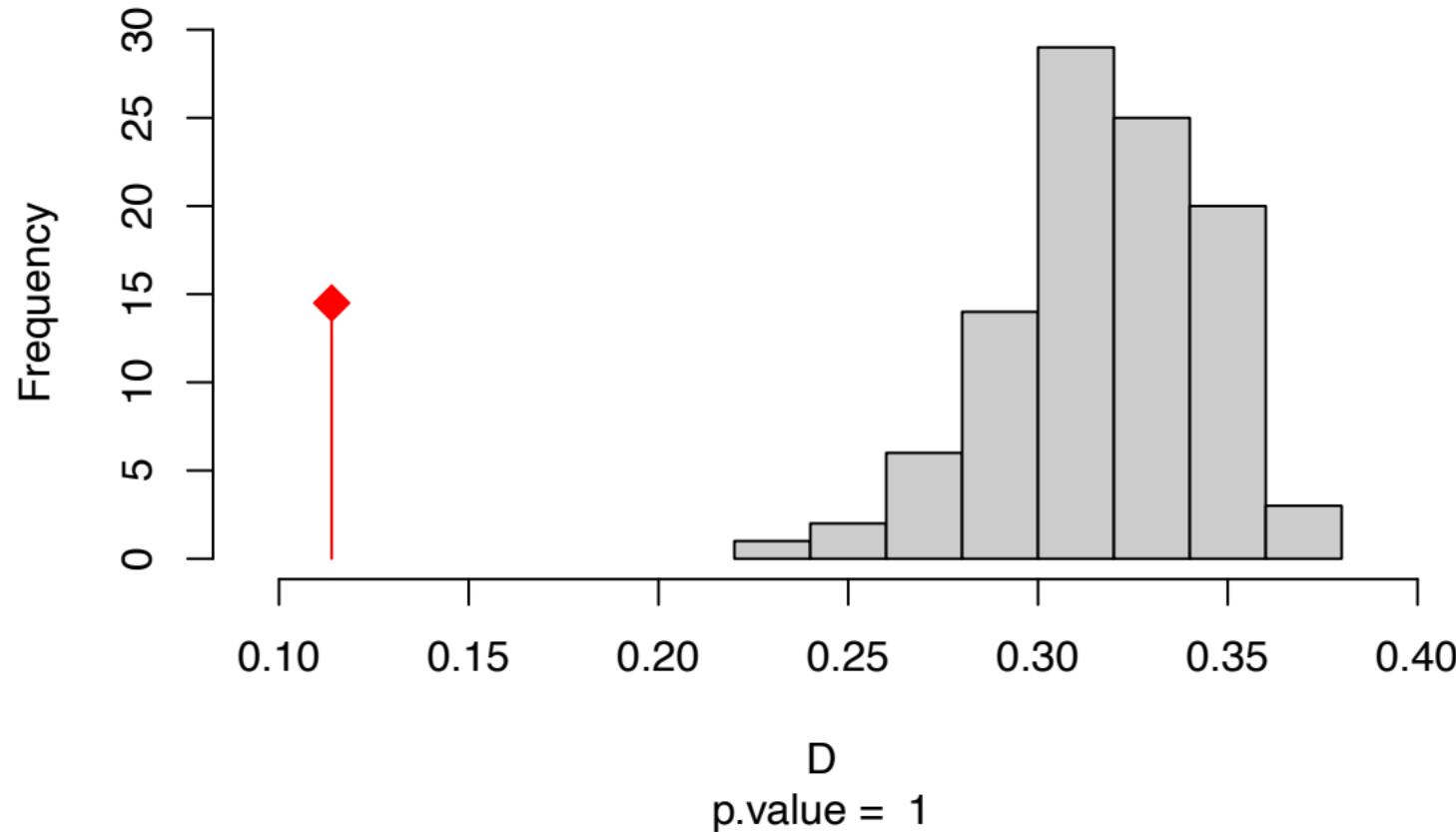


Figure S4

**Equivalency
Mexican Pholcophora
Papiamenta**

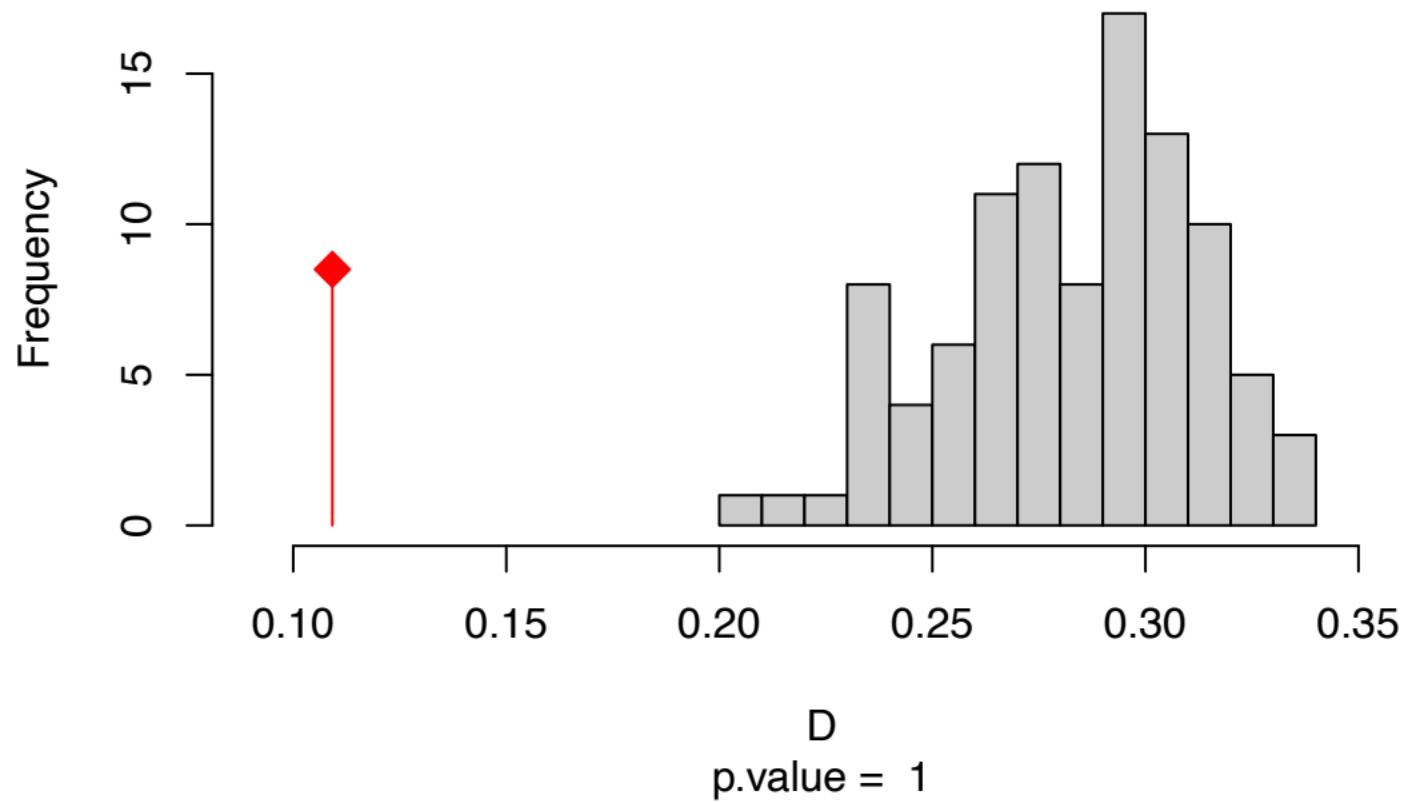


Figure S5

**Equivalency
Mexican Pholcophora
Tolteca**

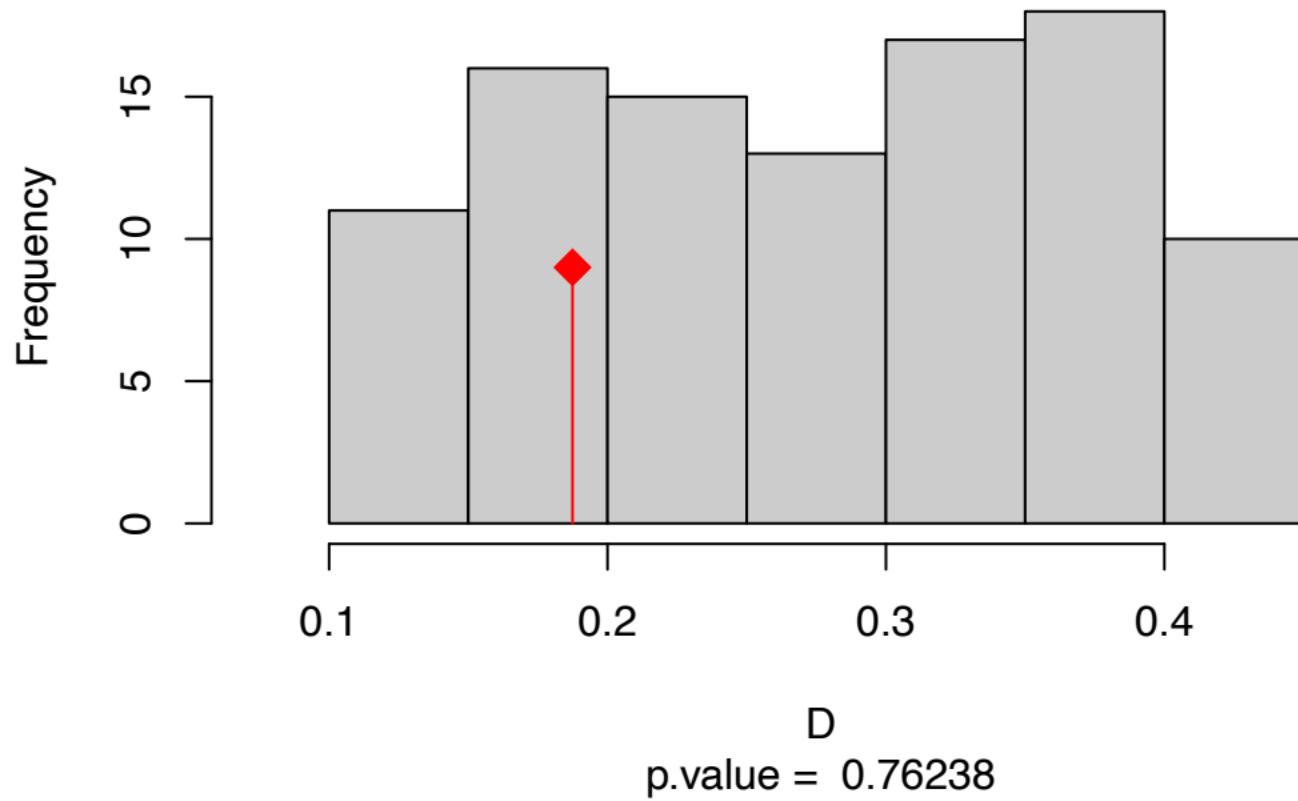


Figure S6

Equivalency
Non-Caribbean Pholcophora
Caribbean taxa

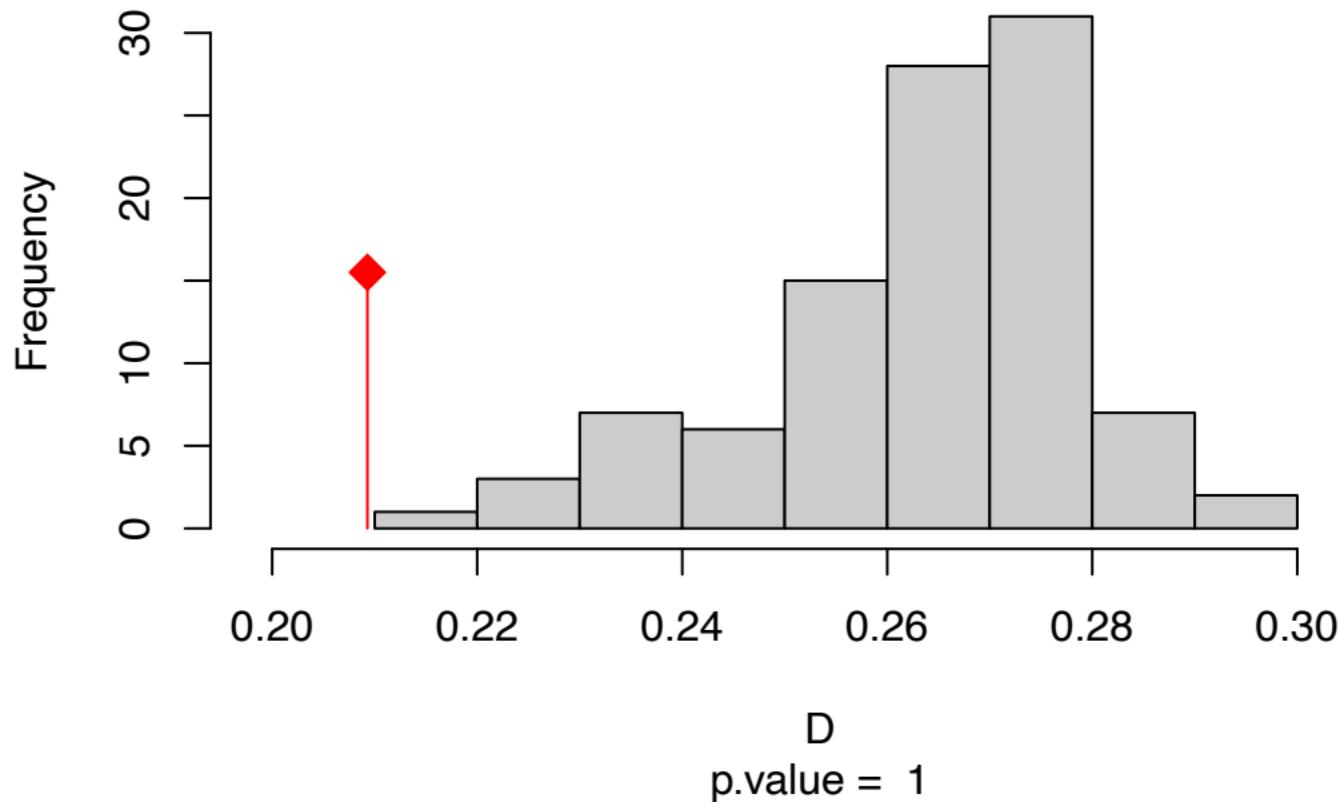


Figure S7

Equivalency
Non-Caribbean Pholcophora
Mexican Pholcophora

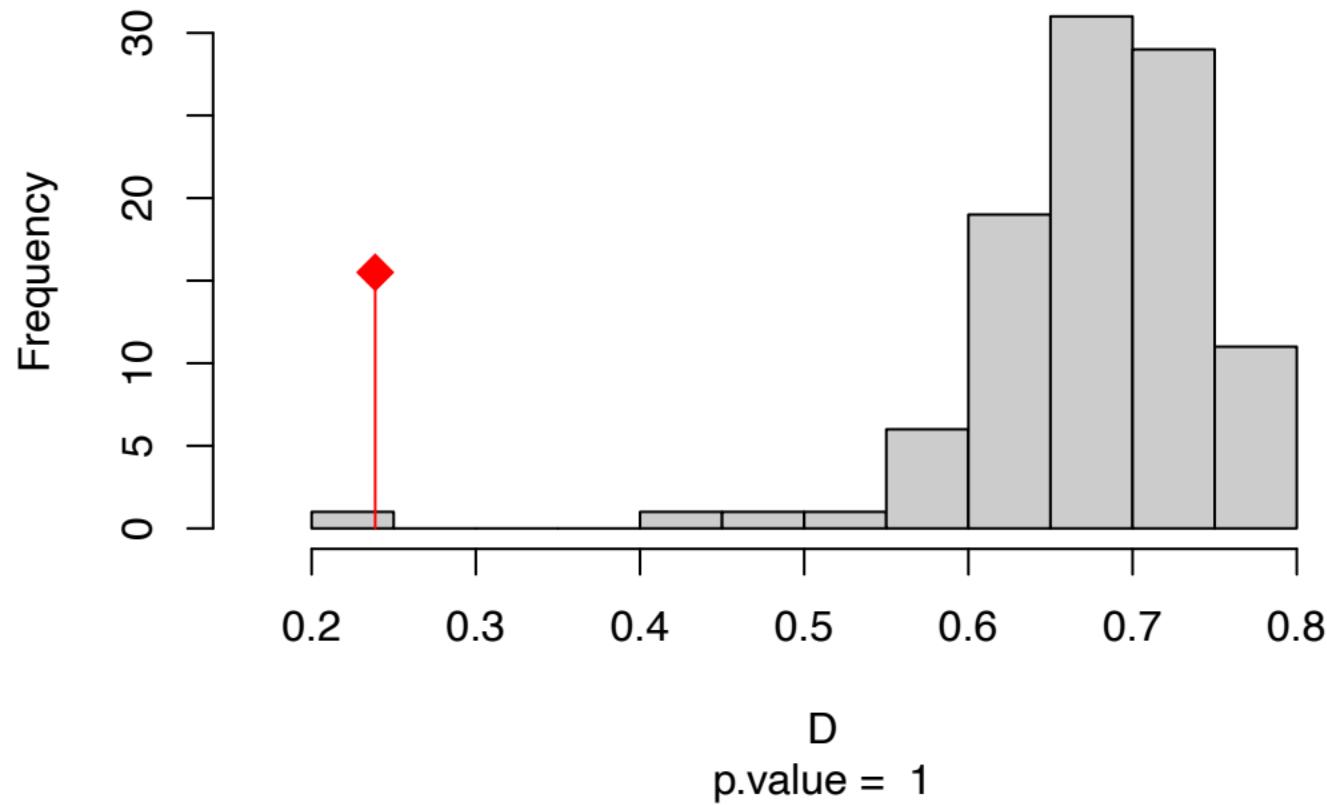


Figure S8

**Equivalency
Non-Caribbean Pholcophora
*Papiamenta***

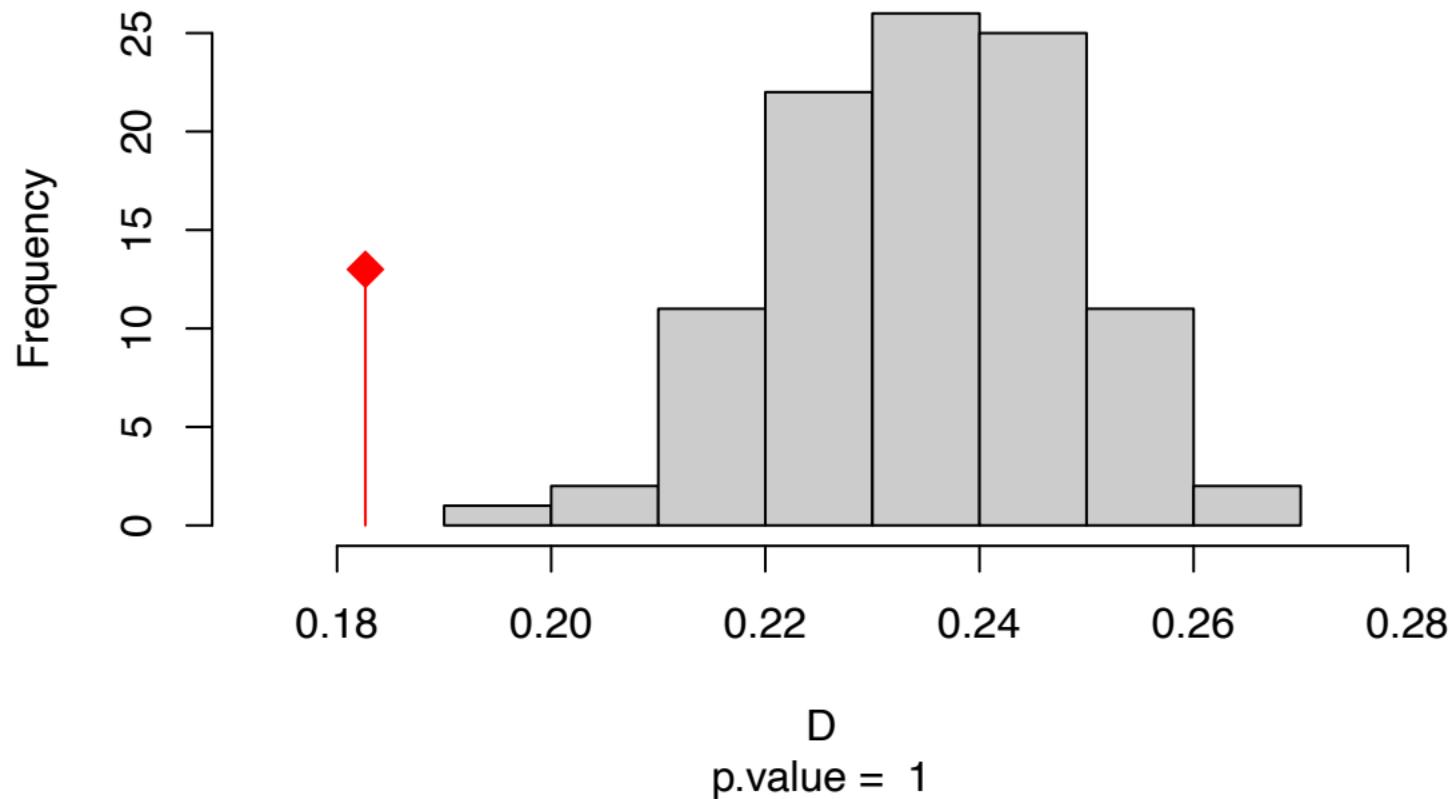


Figure S9

**Equivalency
Non-Caribbean Pholcophora
Tolteca**

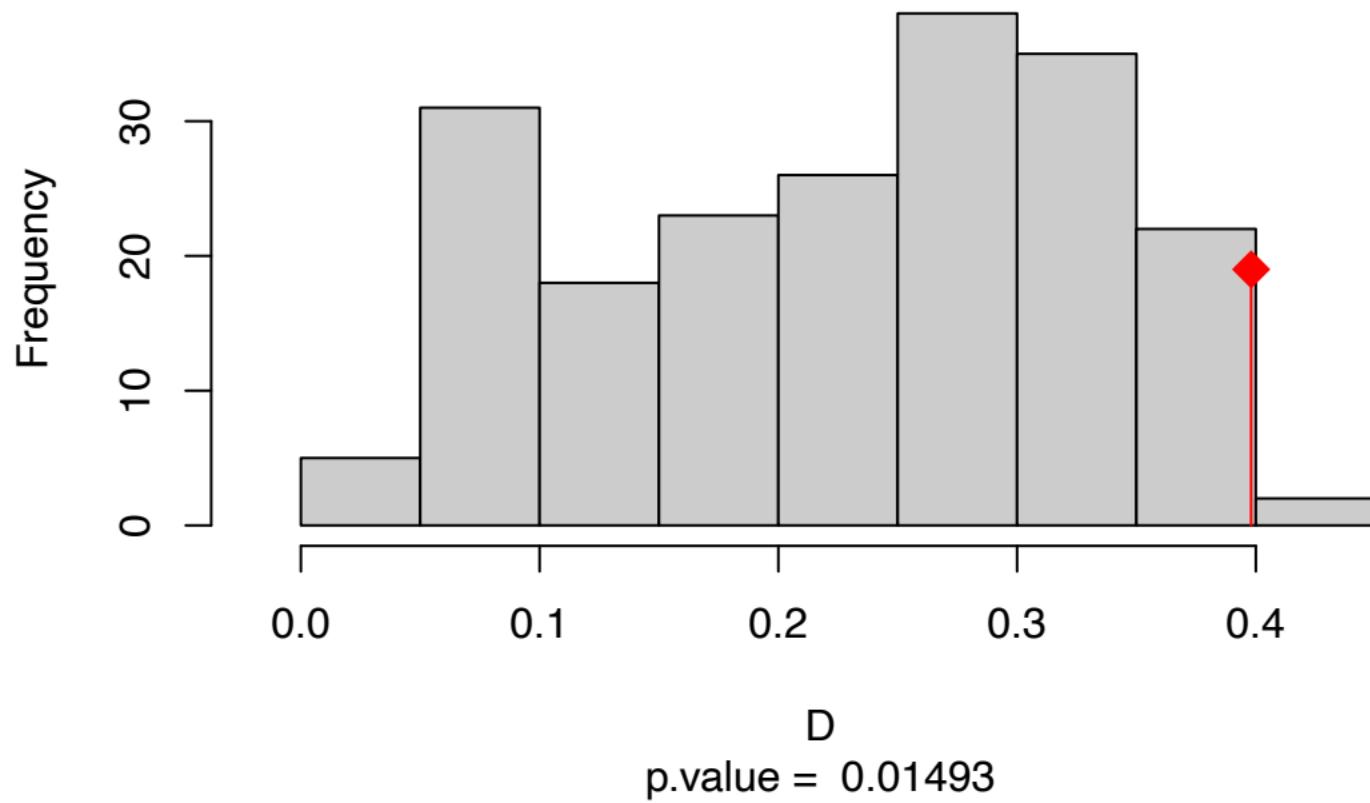


Figure S10

**Equivalency
P. americana
Caribbean taxa**

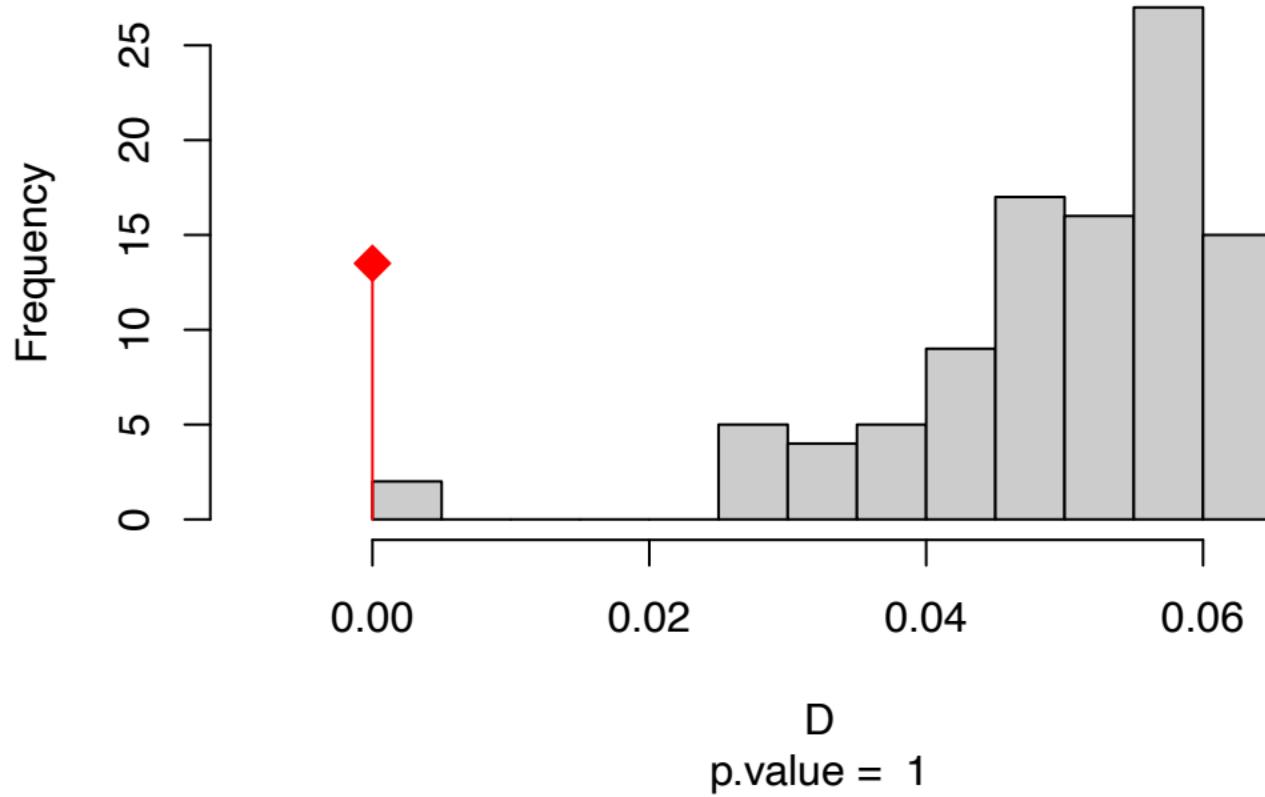


Figure S11

Equivalency
P. americana
Mexican Pholcophora

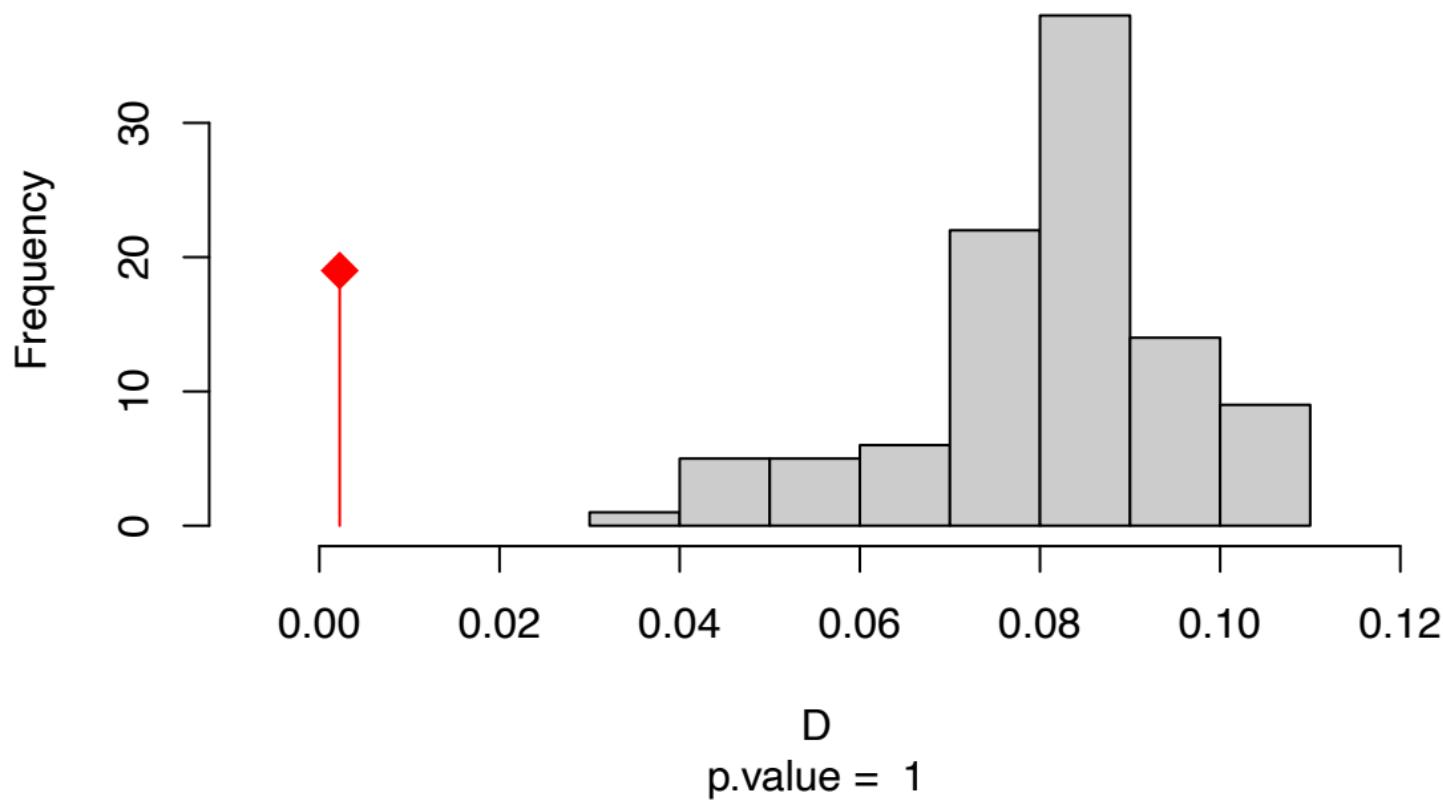


Figure S12

Equivalency
P. americana
Non-Caribbean Pholcophora

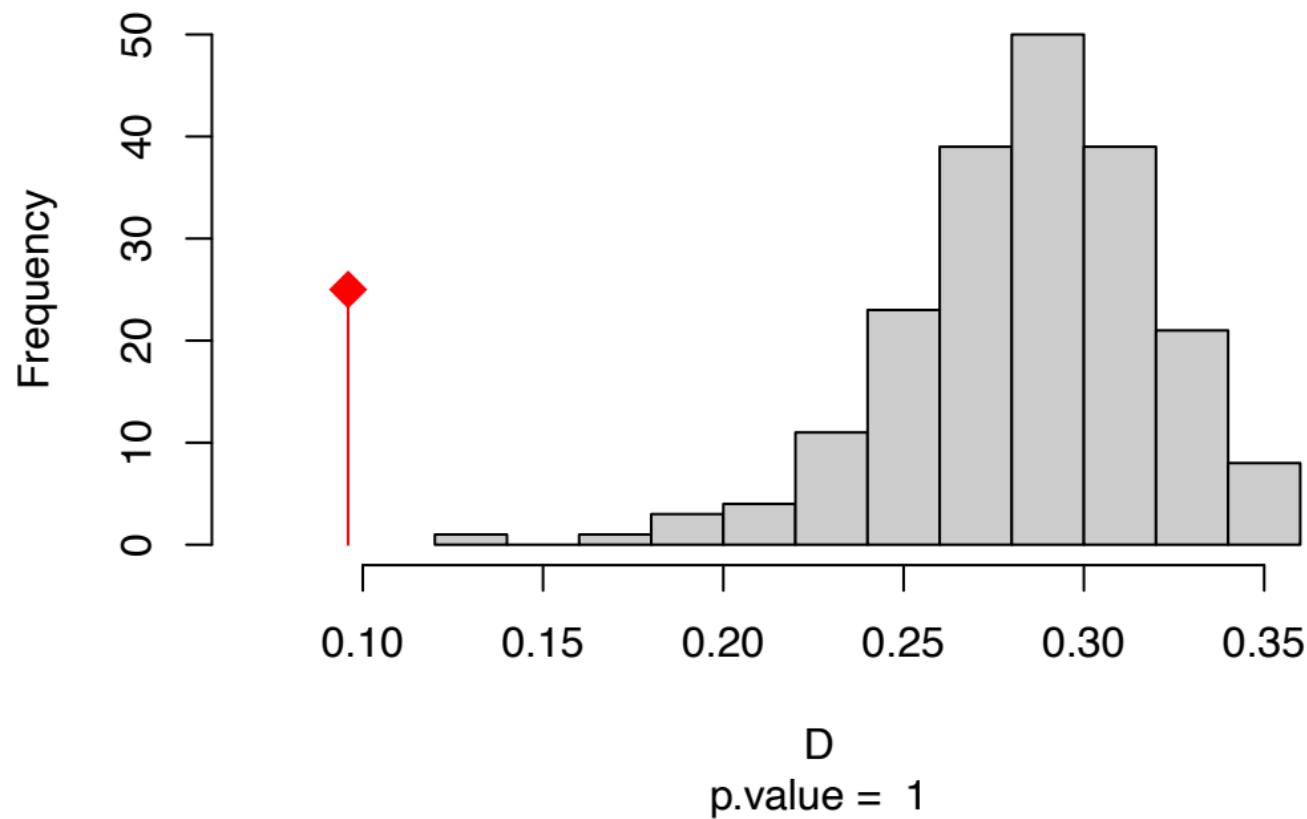


Figure S13

Equivalency
P. americana
Papiamenta

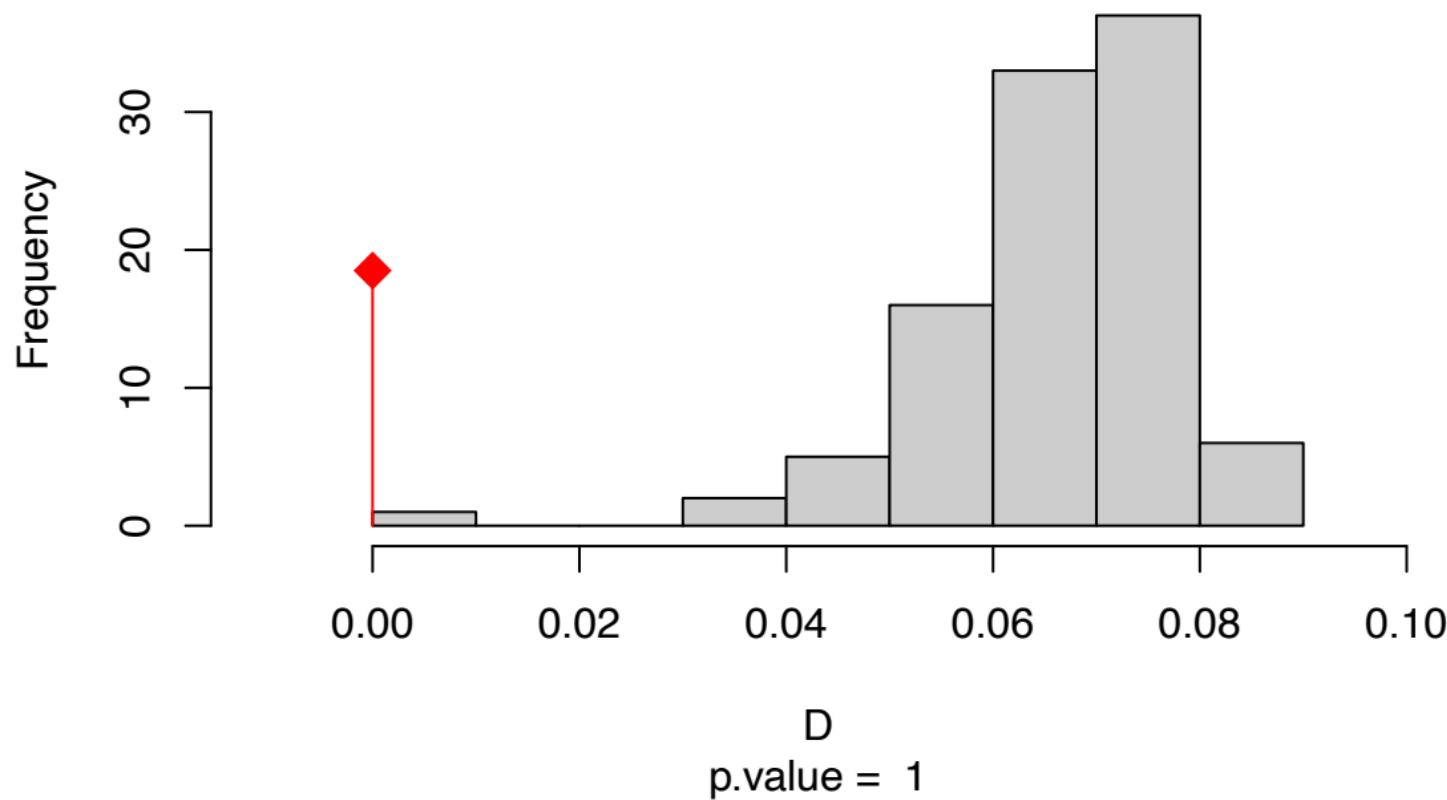


Figure S14

**Equivalency
P. americana
Tolteca**

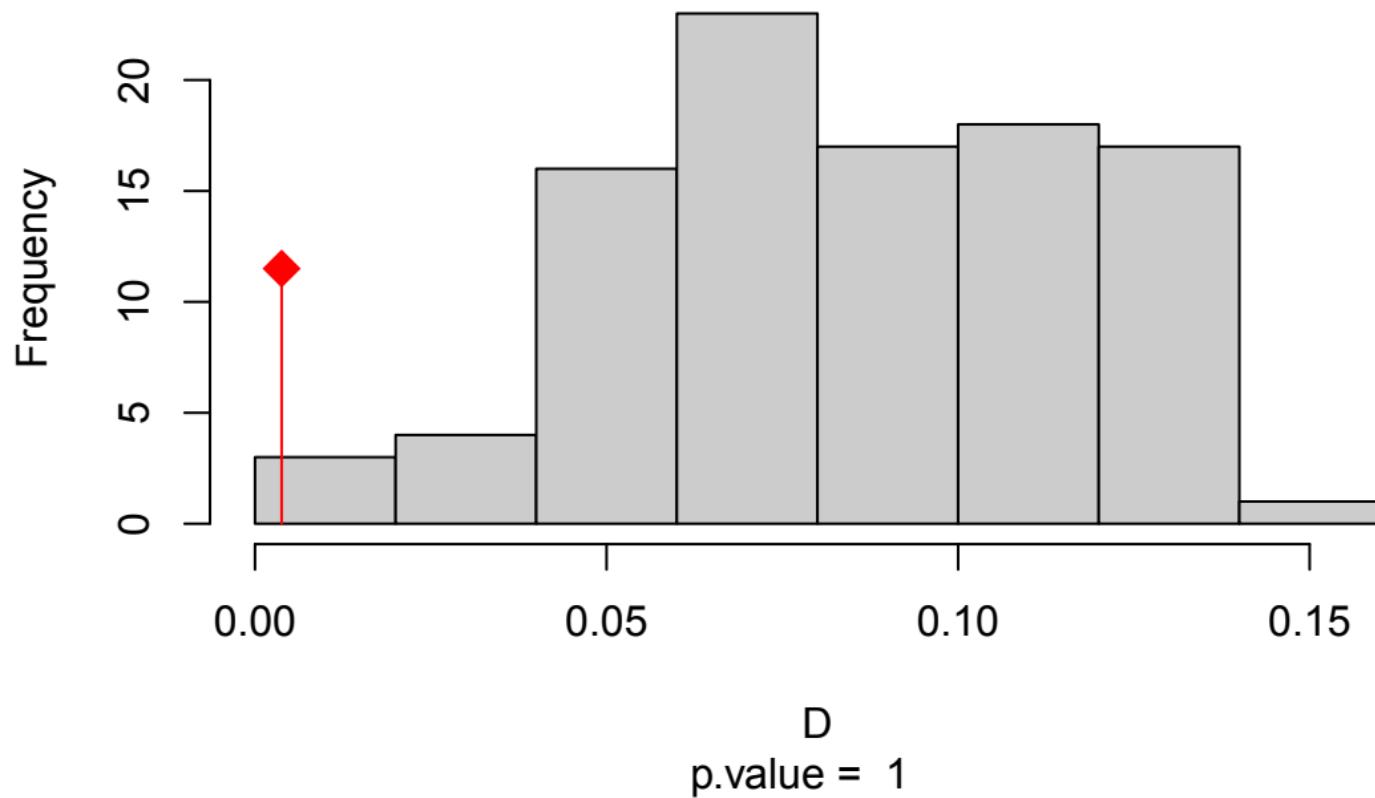


Figure S15

Equivalency
Papiamenta
Tolteca

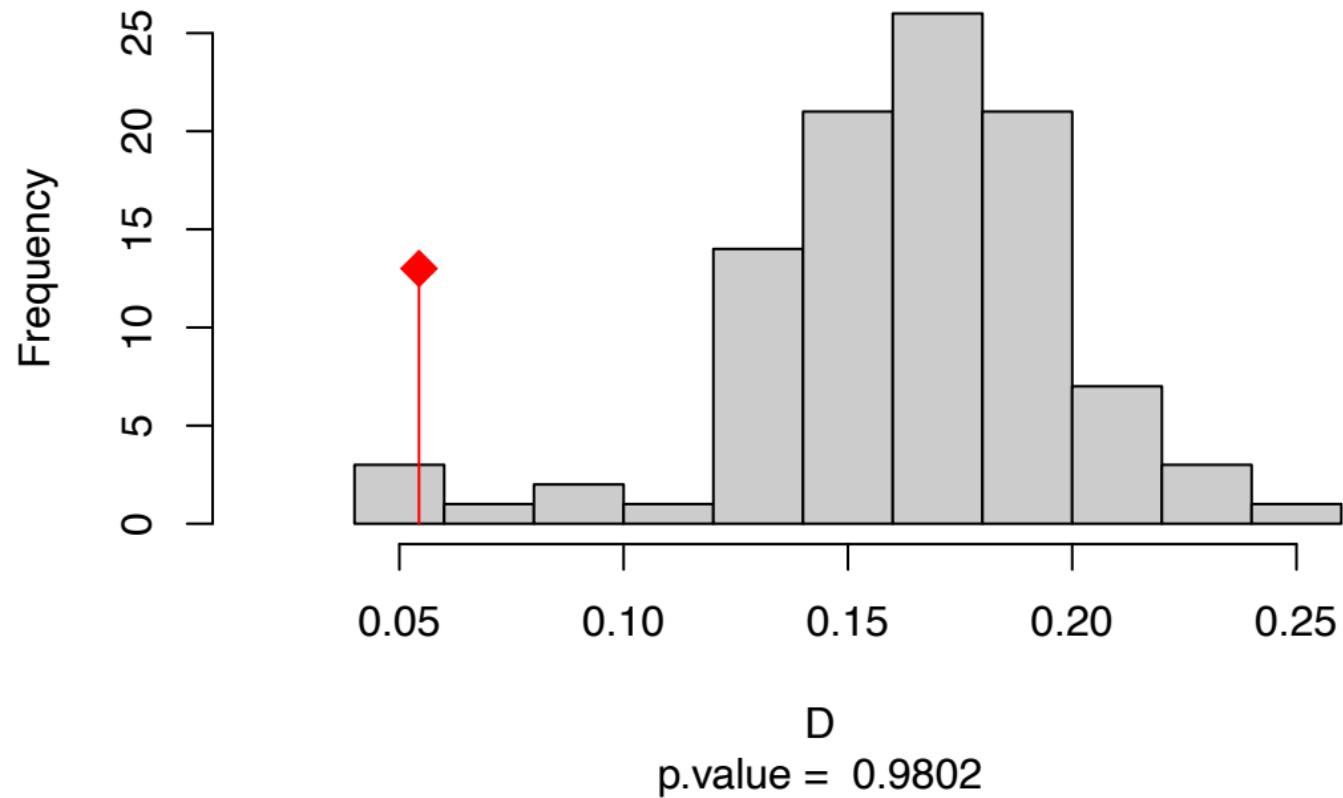


Figure S16

Niche Overlap
Caribbean taxa
Papiamenta

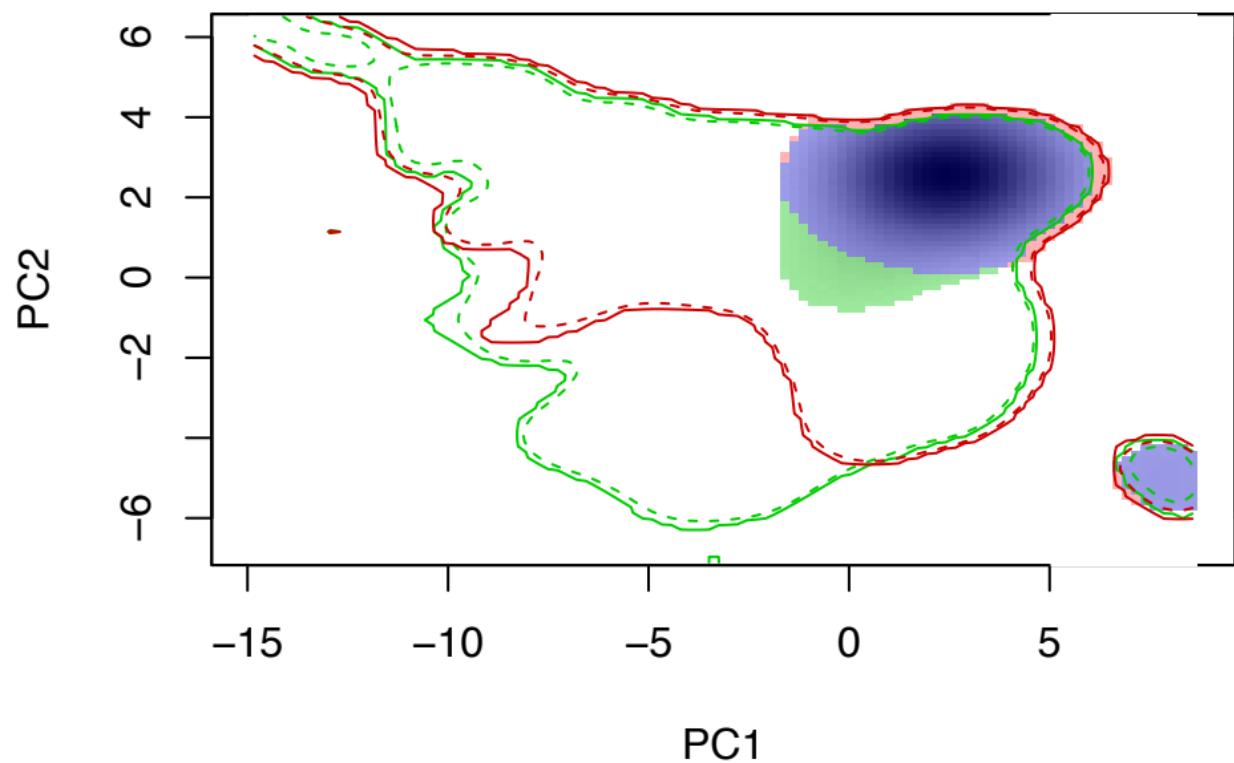


Figure S17

Niche Overlap
Caribbean taxa
Tolteca

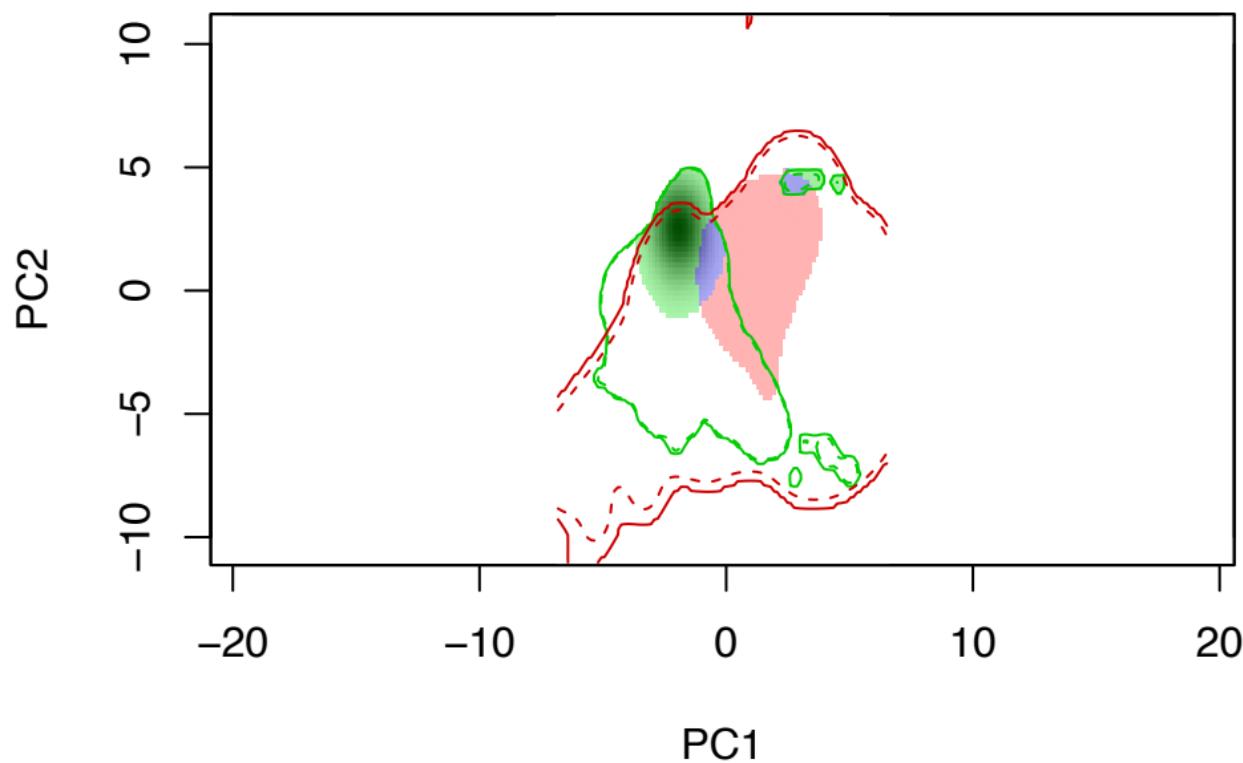


Figure S18

Niche Overlap
Mexican Pholcophora
Caribbean taxa

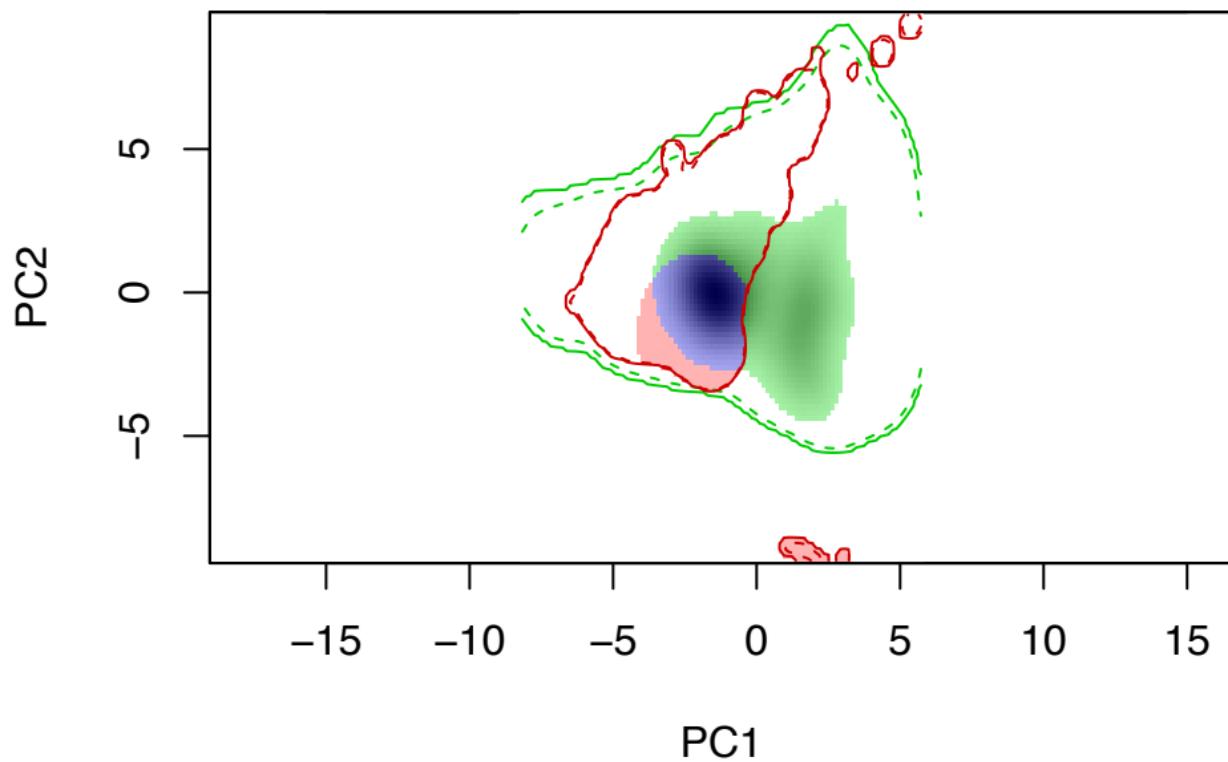


Figure S19

Niche Overlap
Mexican Pholcophora
Papiamenta

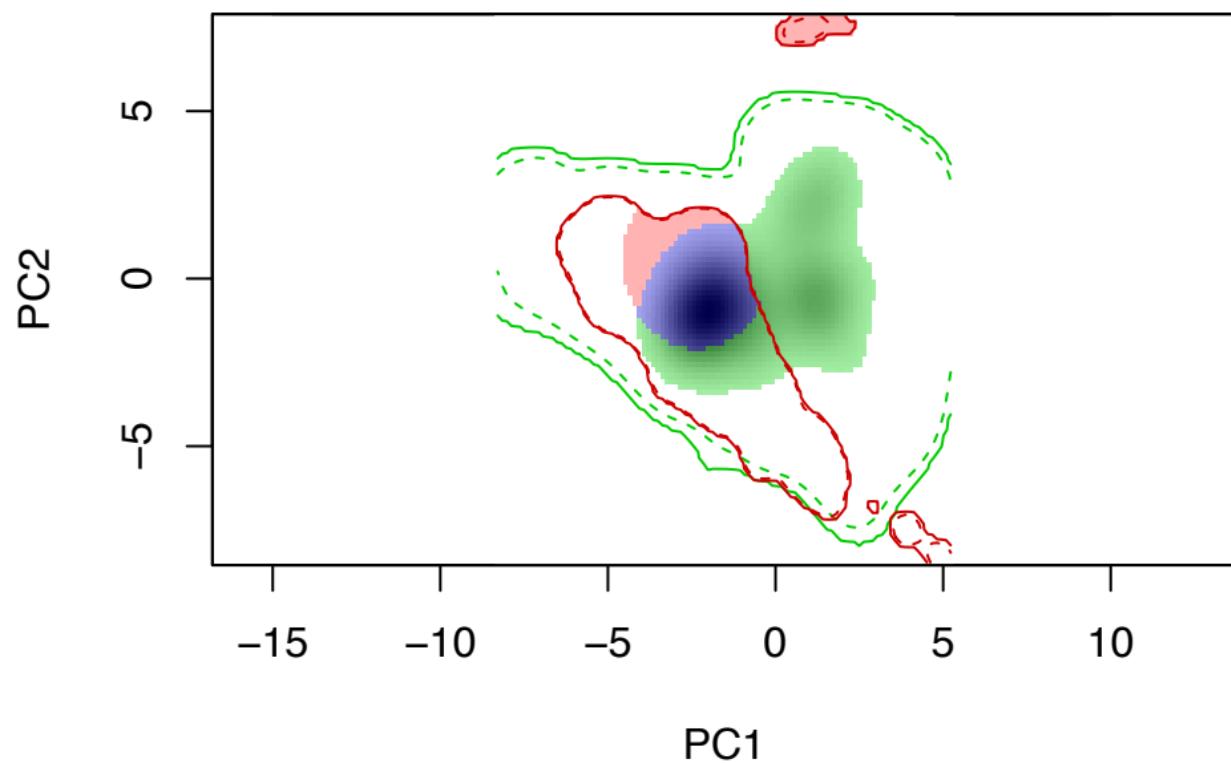


Figure S20

Niche Overlap
Mexican Pholcophora
Tolteca

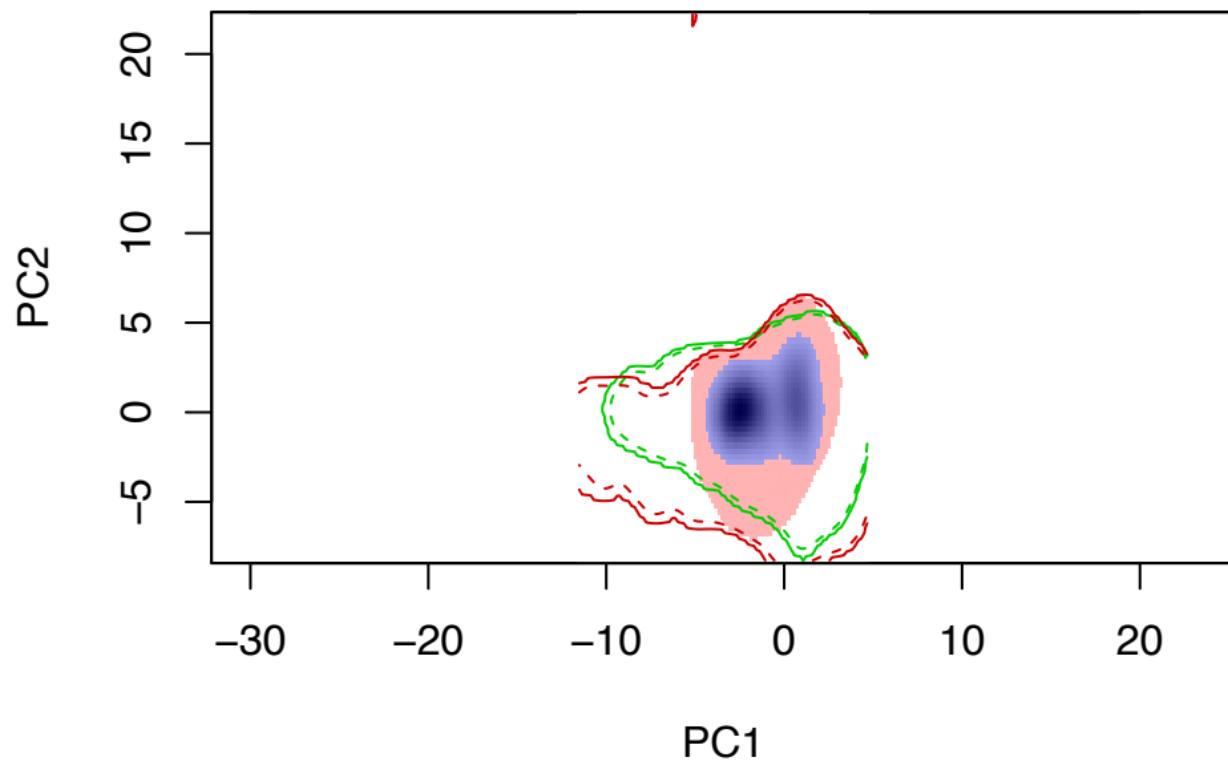


Figure S21

Niche Overlap
Non-Caribbean Pholcophora
Caribbean taxa

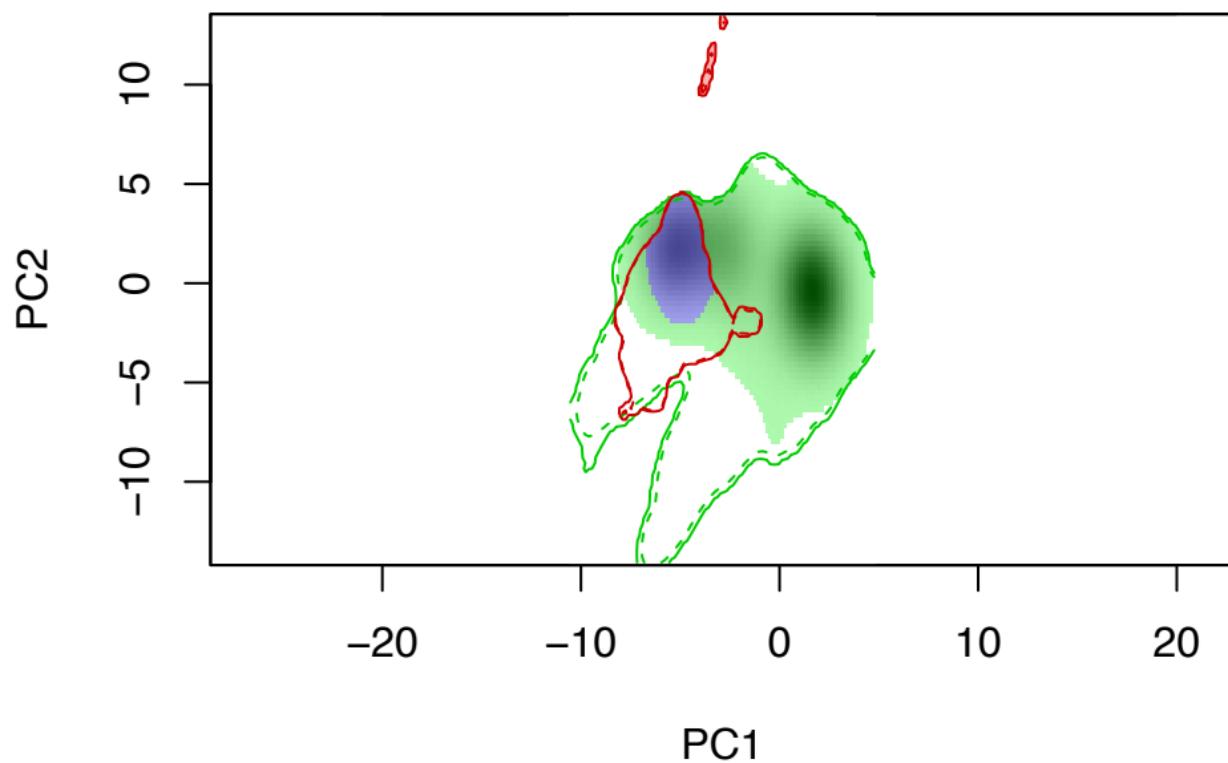


Figure S22

Niche Overlap
Non-Caribbean Pholcophora
Mexican Pholcophora

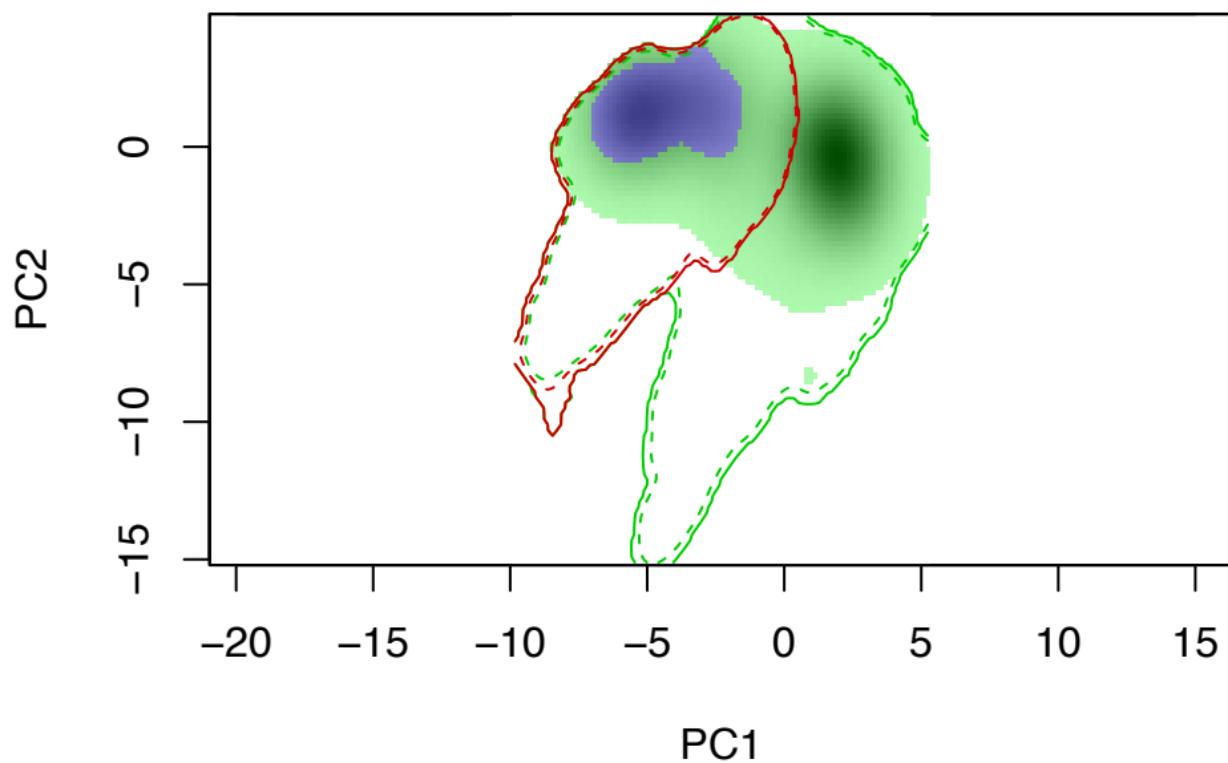


Figure S23

Niche Overlap
Non-Caribbean Pholcophora
Papiamenta

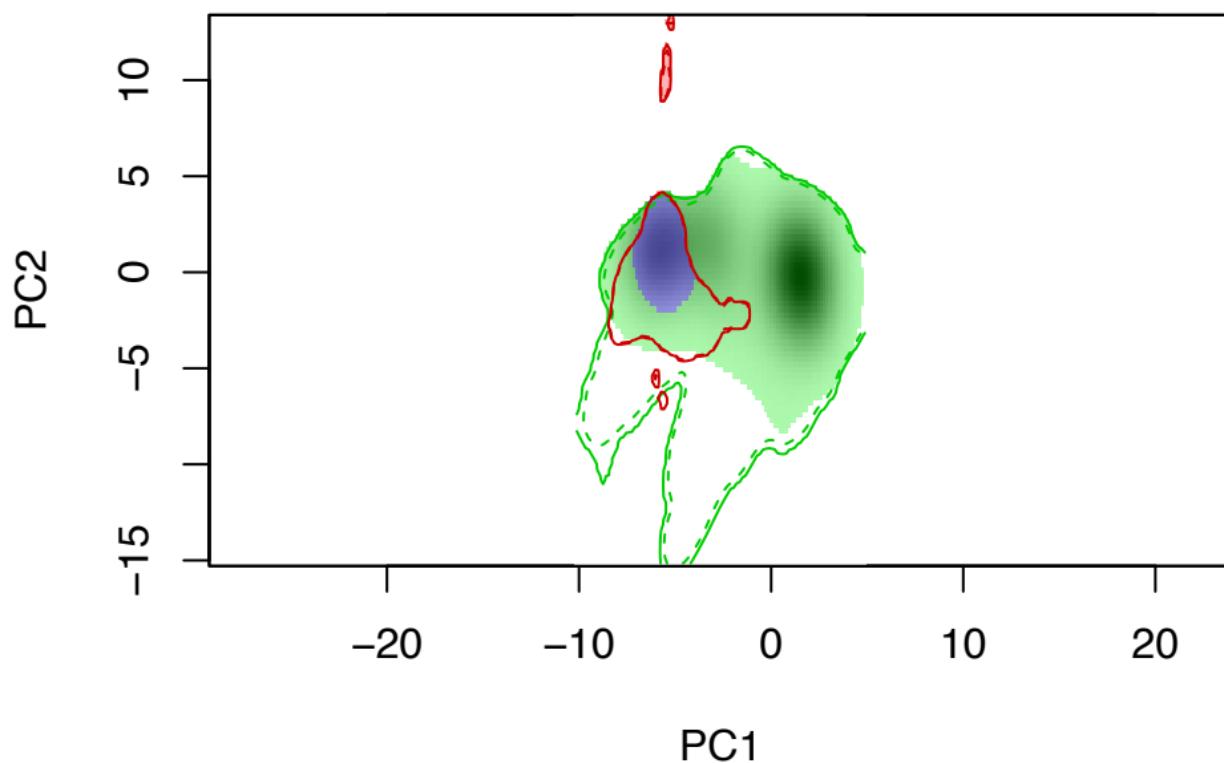


Figure S24

Niche Overlap
Non-Caribbean Pholcophora
Tolteca

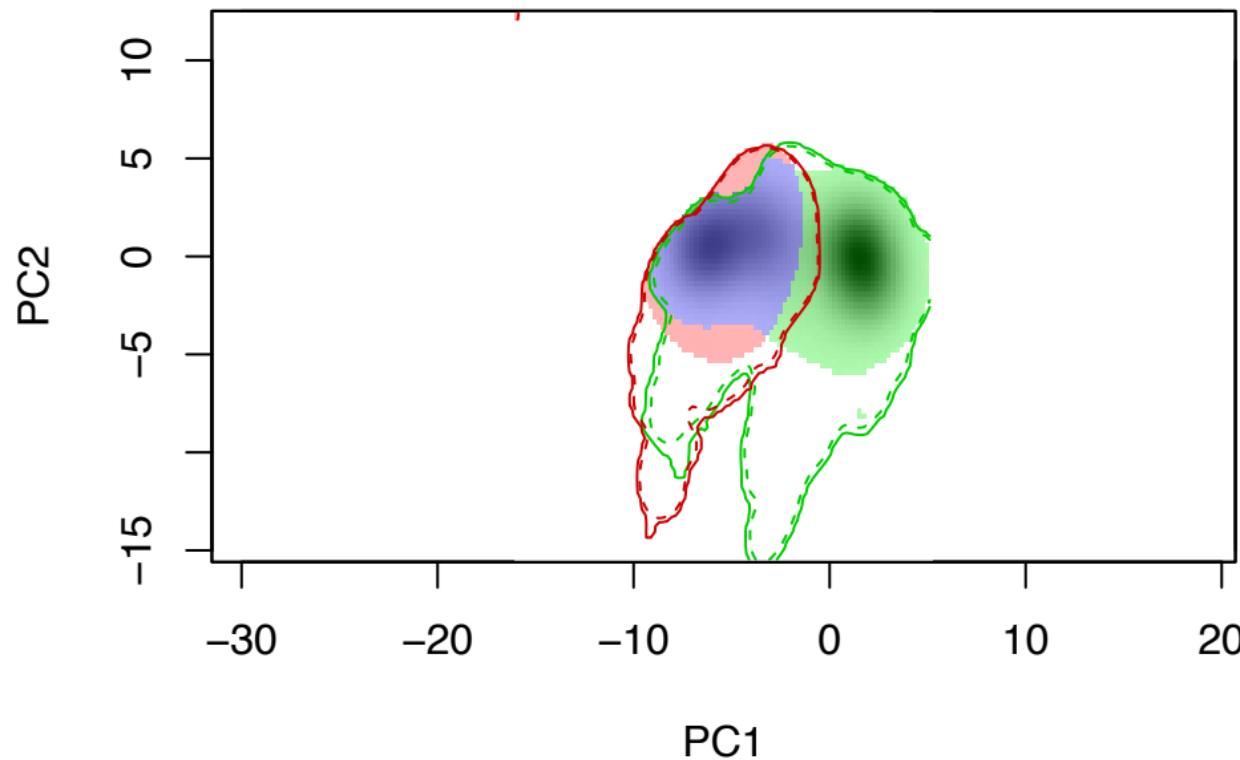


Figure S25

Niche Overlap
P. americana
Caribbean taxa

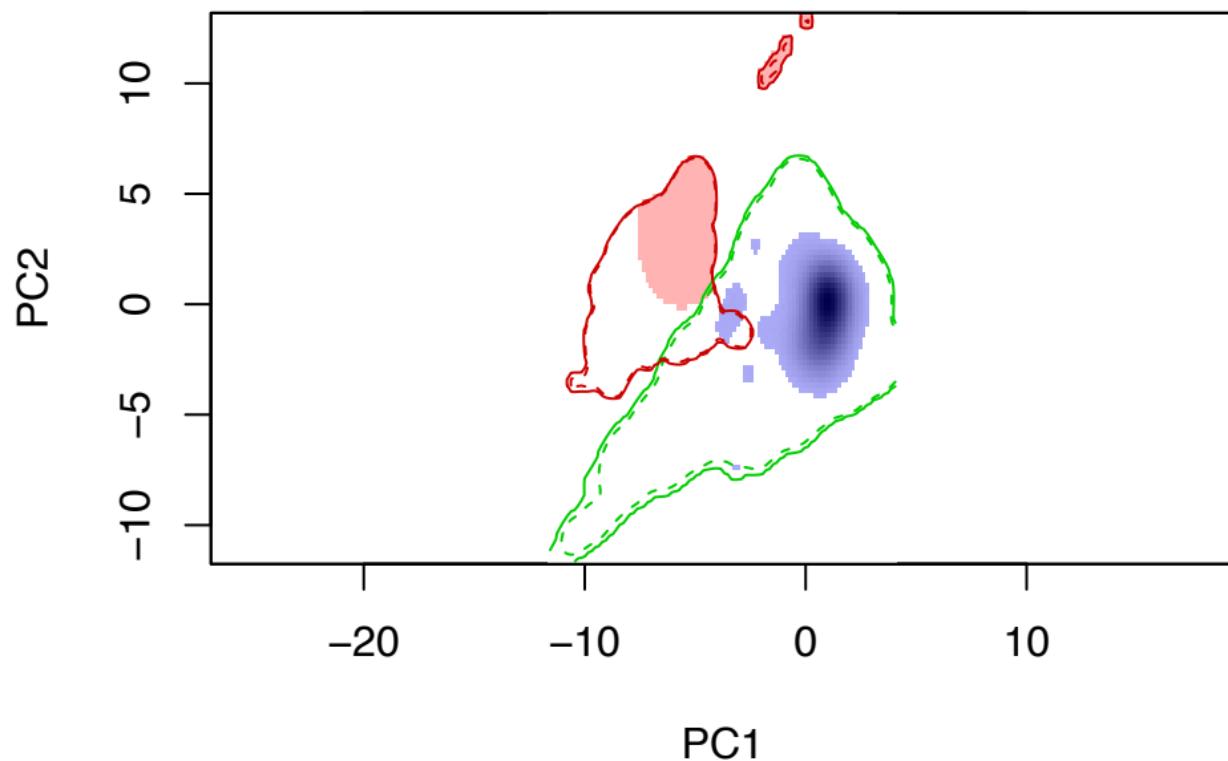


Figure S26

Niche Overlap
P. americana
Mexican Pholcophora

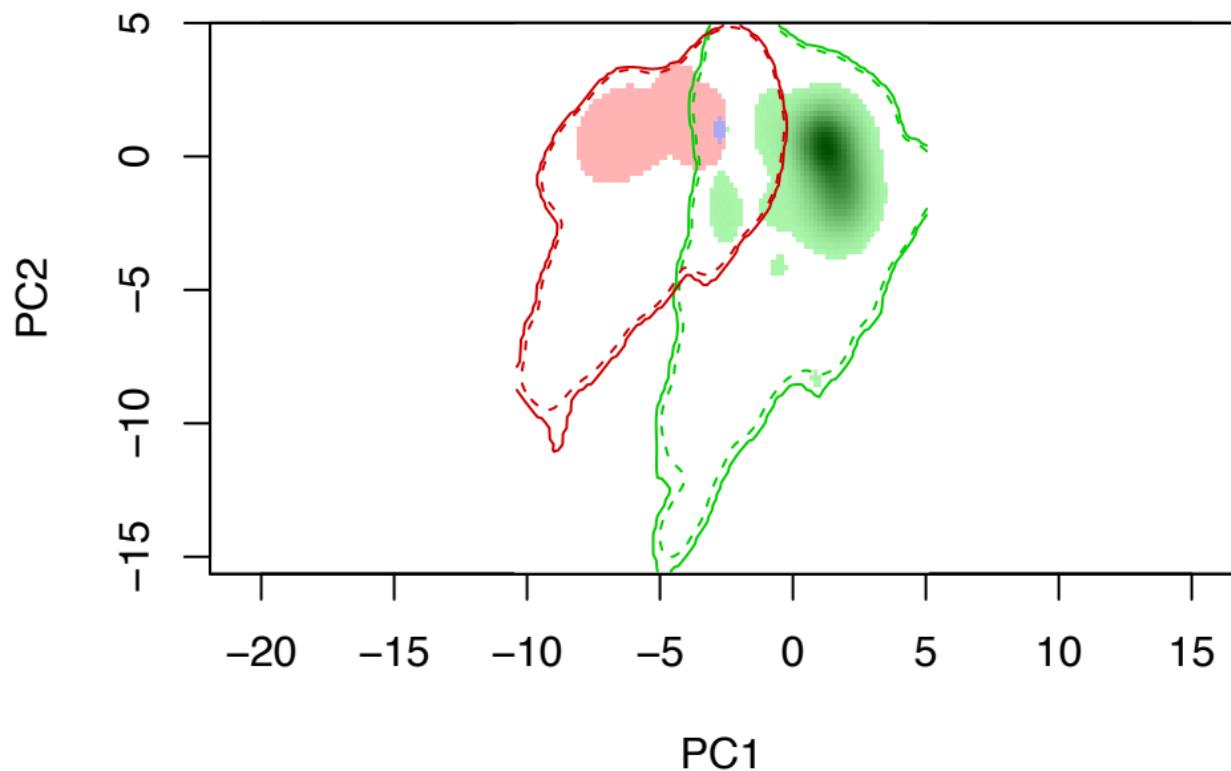


Figure S27

Niche Overlap
P. americana
Non-Caribbean Pholcophora

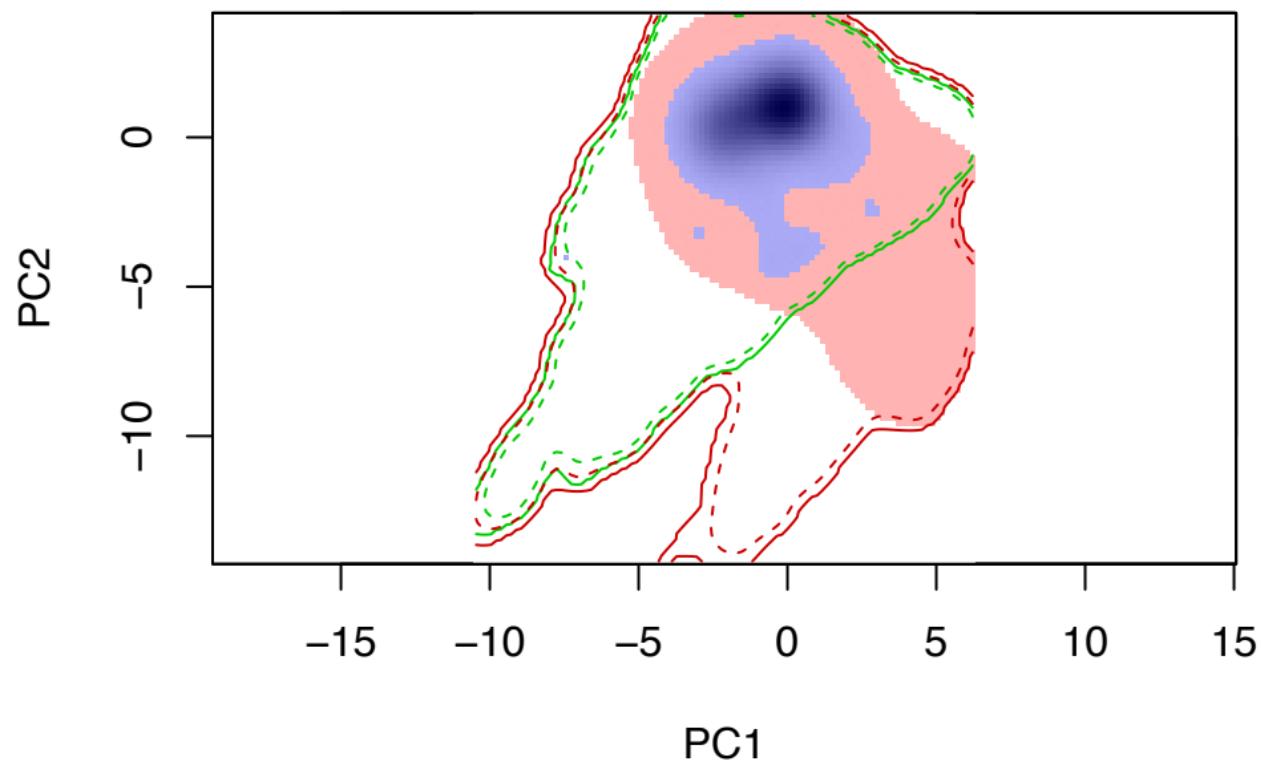


Figure S28

Niche Overlap
P. americana
Papiamenta

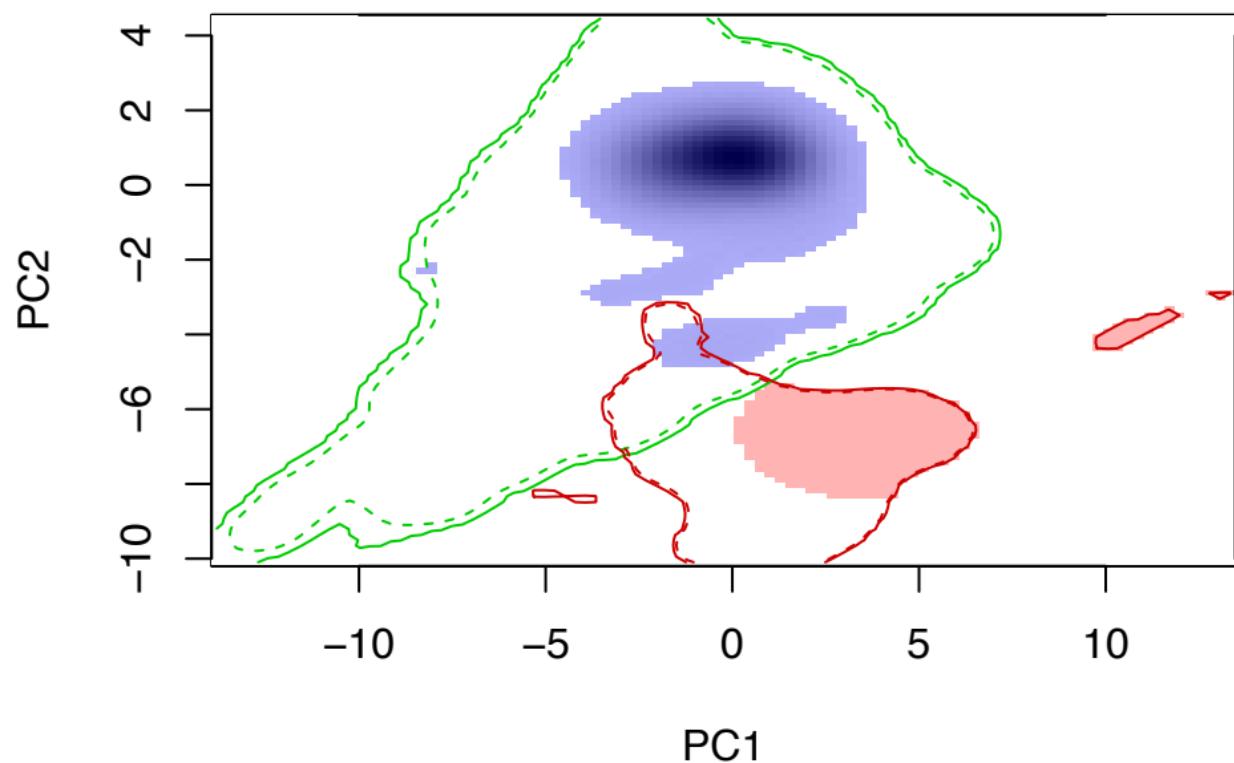


Figure S29

Niche Overlap
P. americana
Tolteca

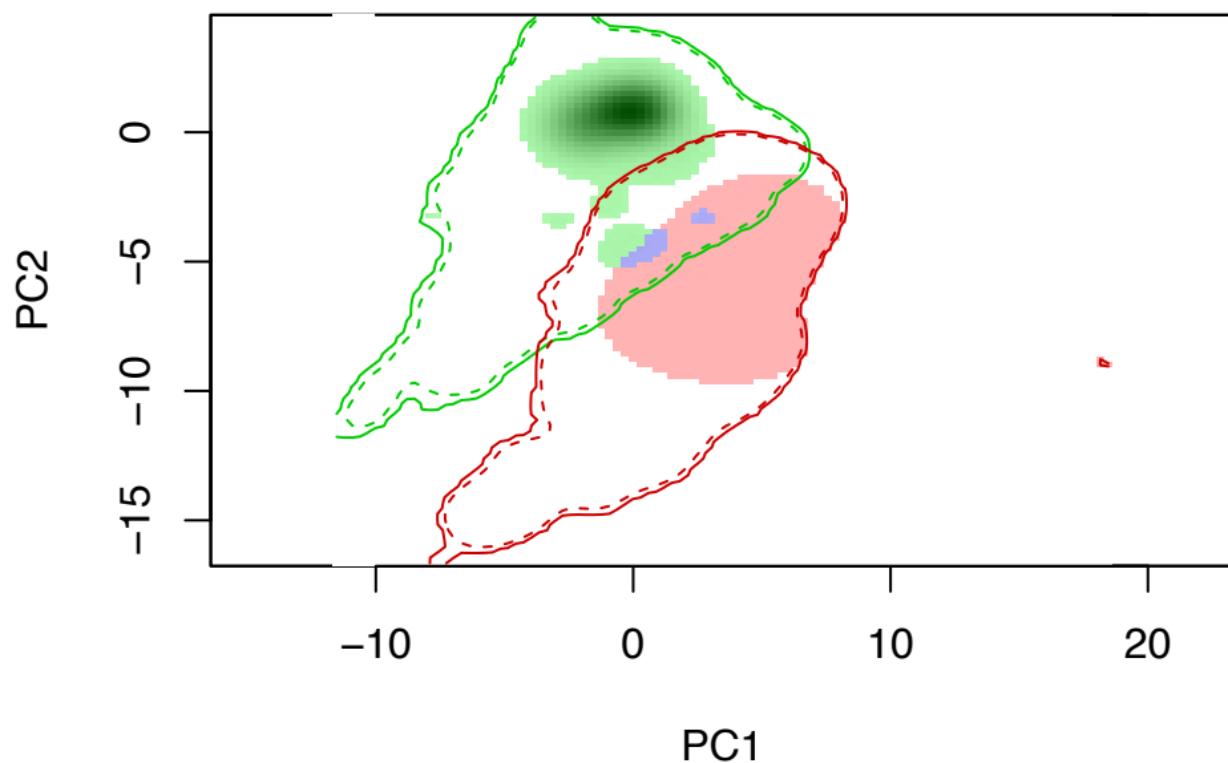


Figure S30

Niche Overlap
Papiamenta
Tolteca

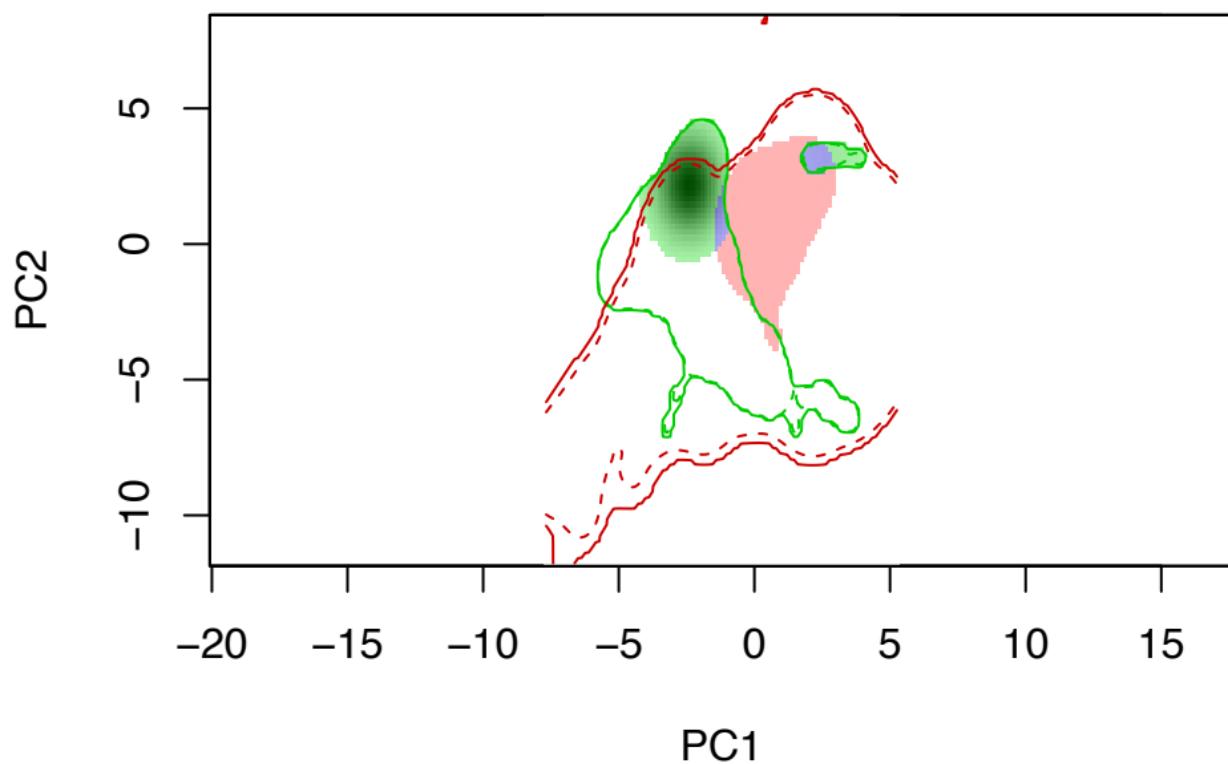
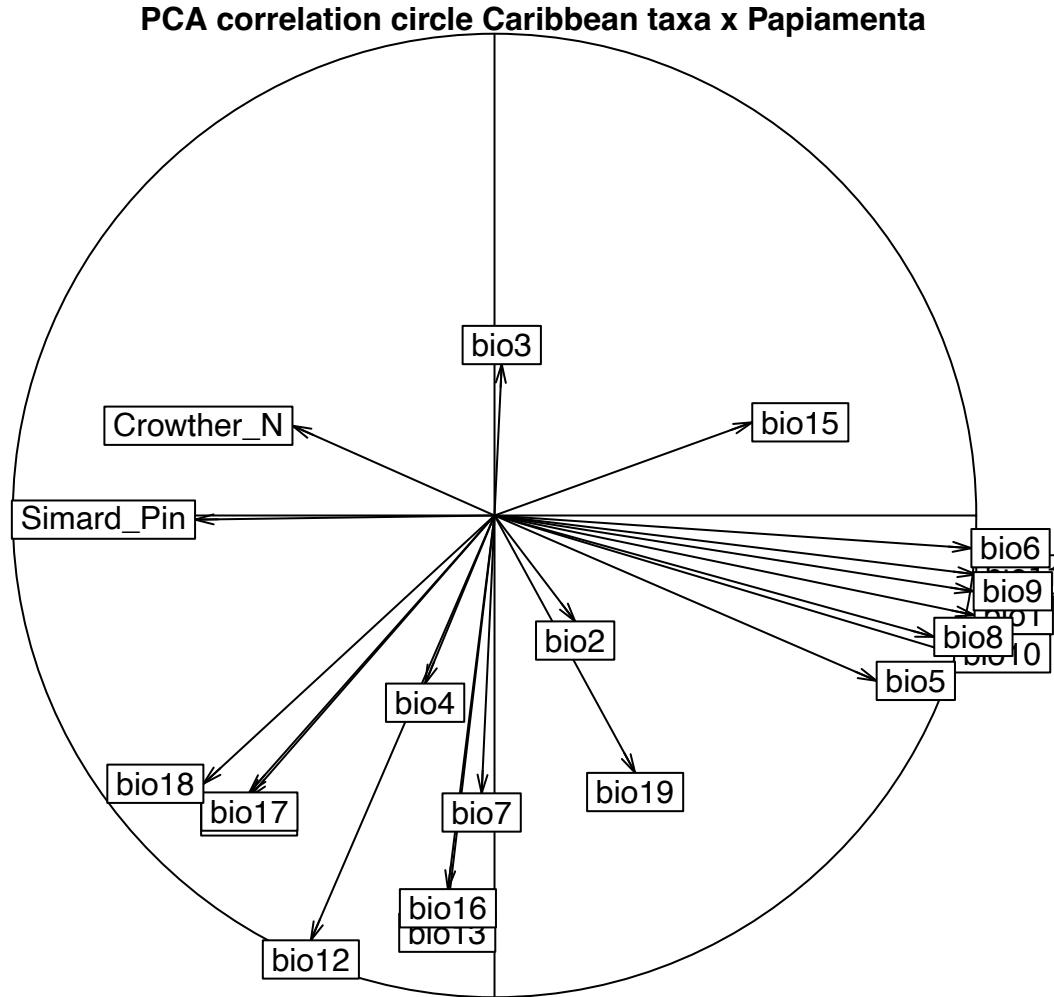


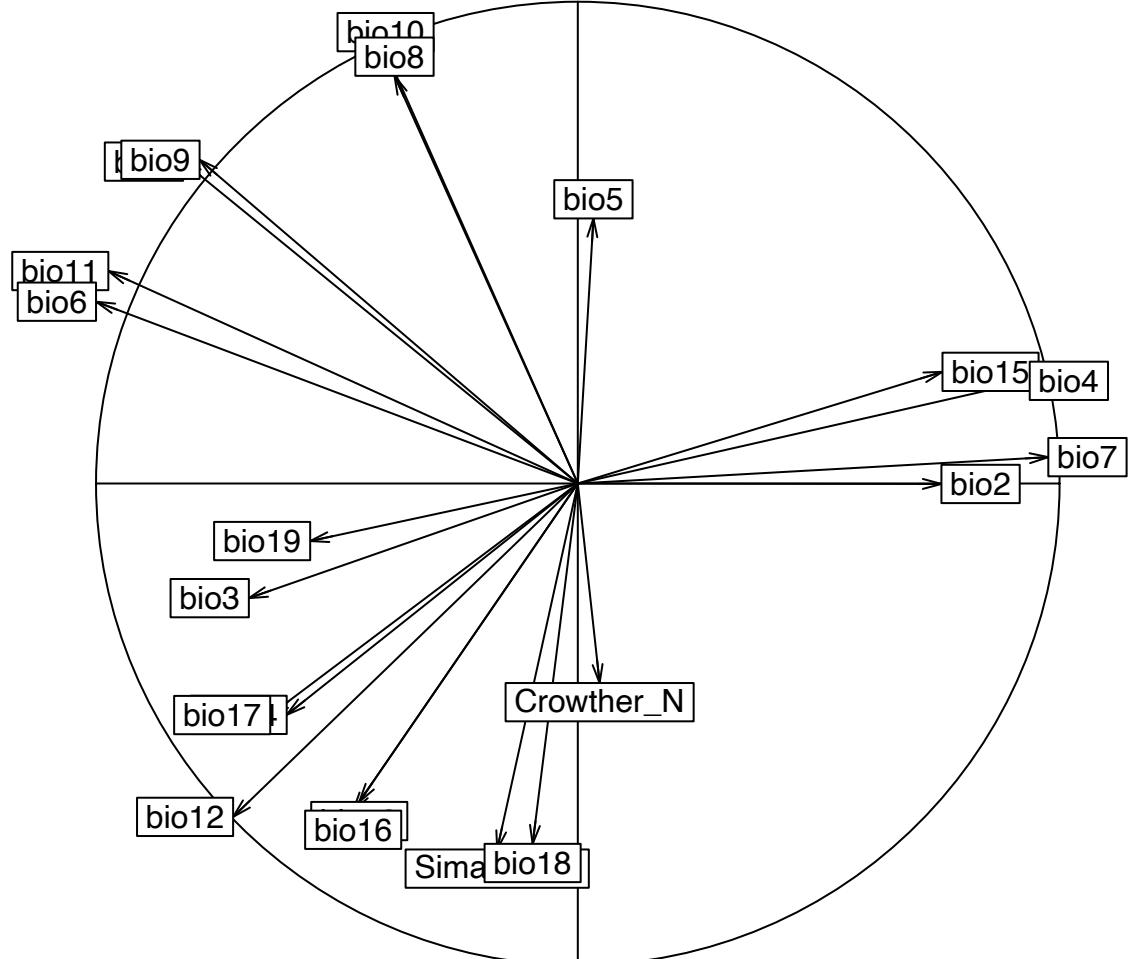
Figure S31



Axis 1 = 35.5 % Axis 2 = 18.47 %

Figure S32

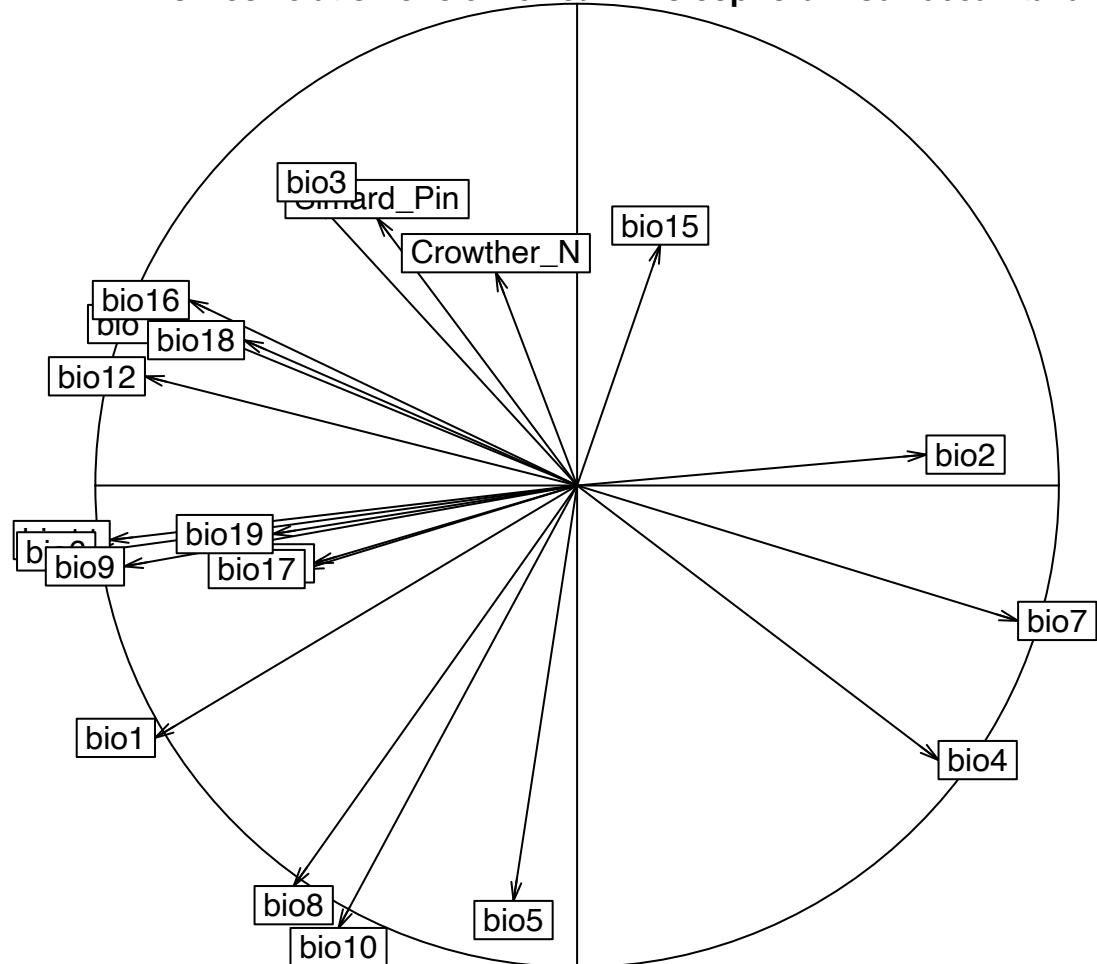
PCA correlation circle Caribbean taxa x Tolteca



Axis 1 = 36.33 % Axis 2 = 25.63 %

Figure S33

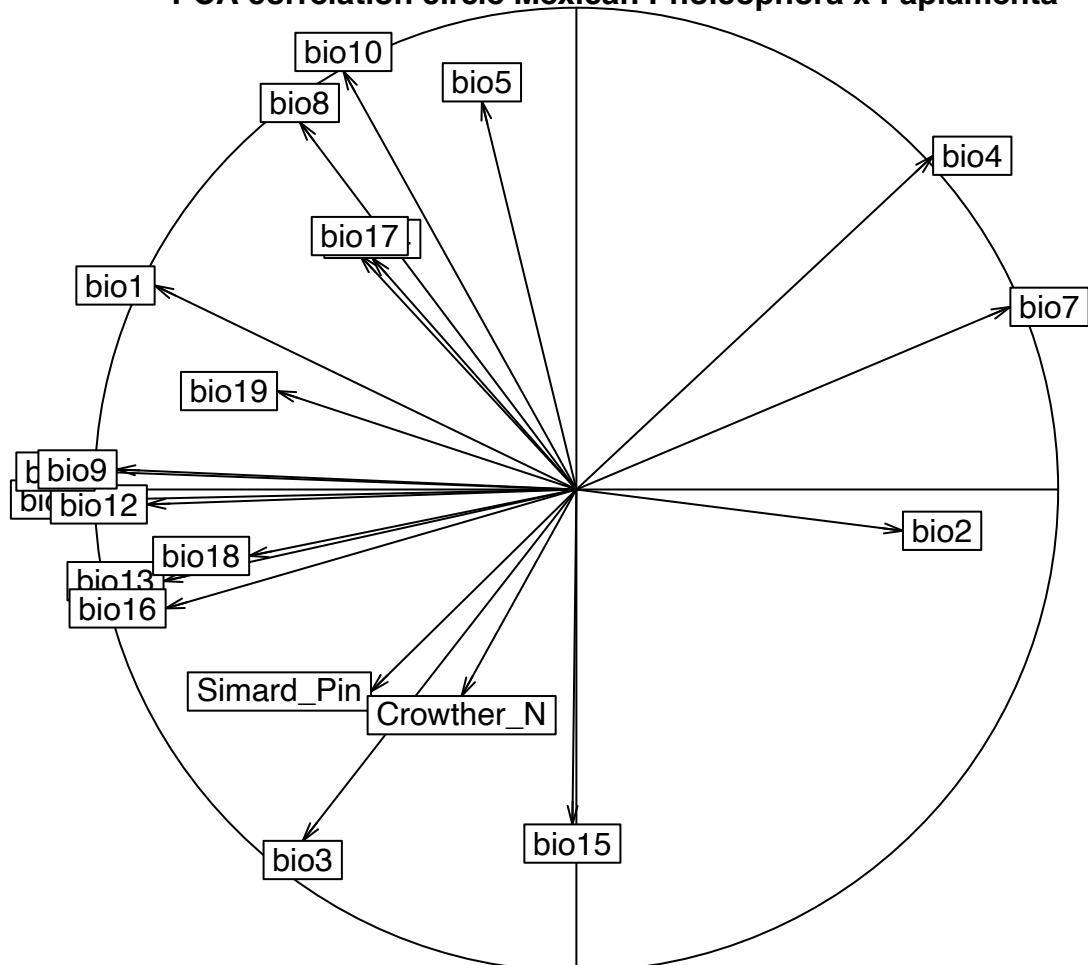
PCA correlation circle Mexican Pholcophora x Caribbean taxa



Axis 1 = 41.93 % Axis 2 = 18.75 %

Figure S34

PCA correlation circle Mexican Pholcophora x Papiamenta



Axis 1 = 41.38 % Axis 2 = 19.68 %

Figure S35

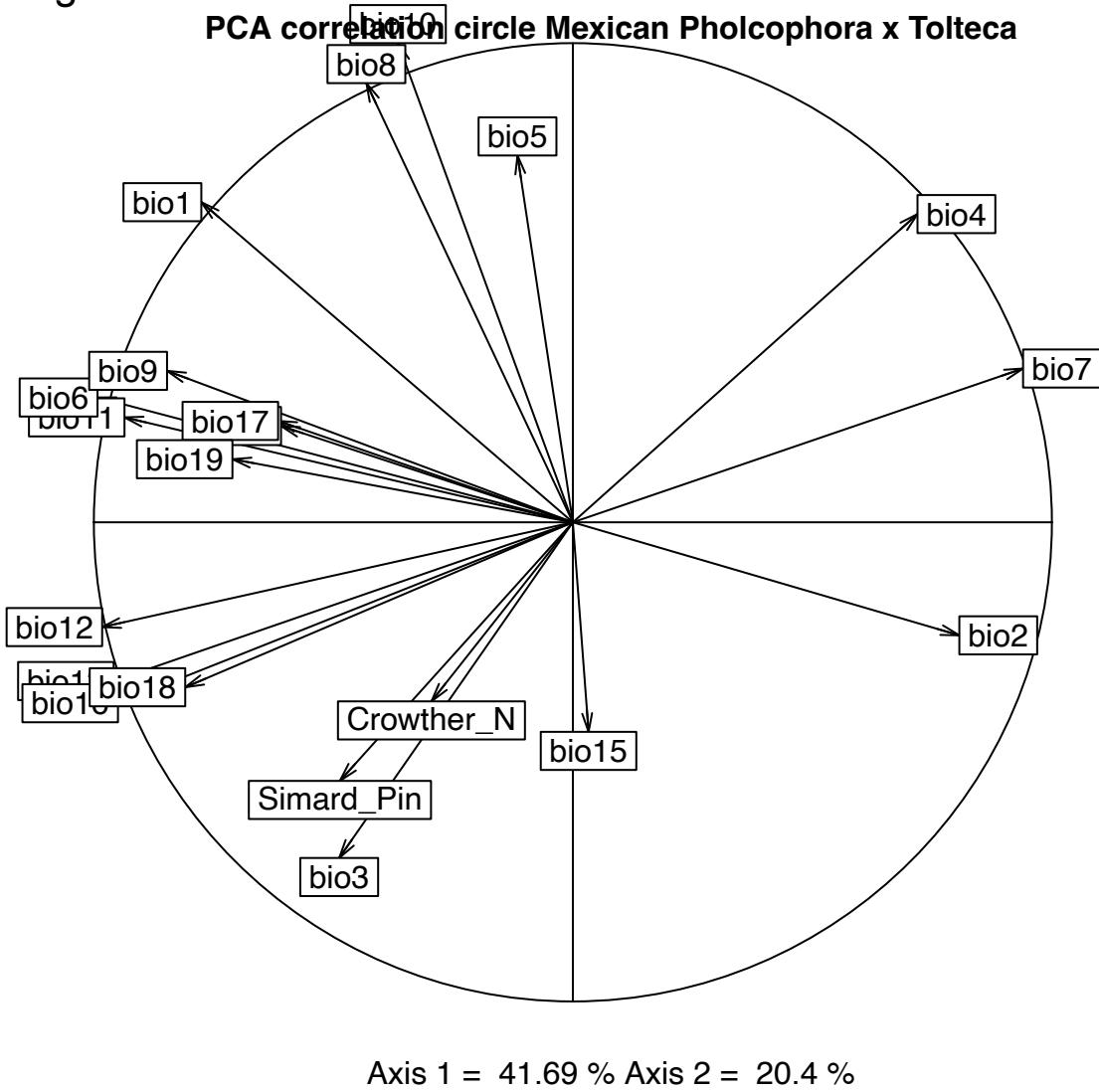
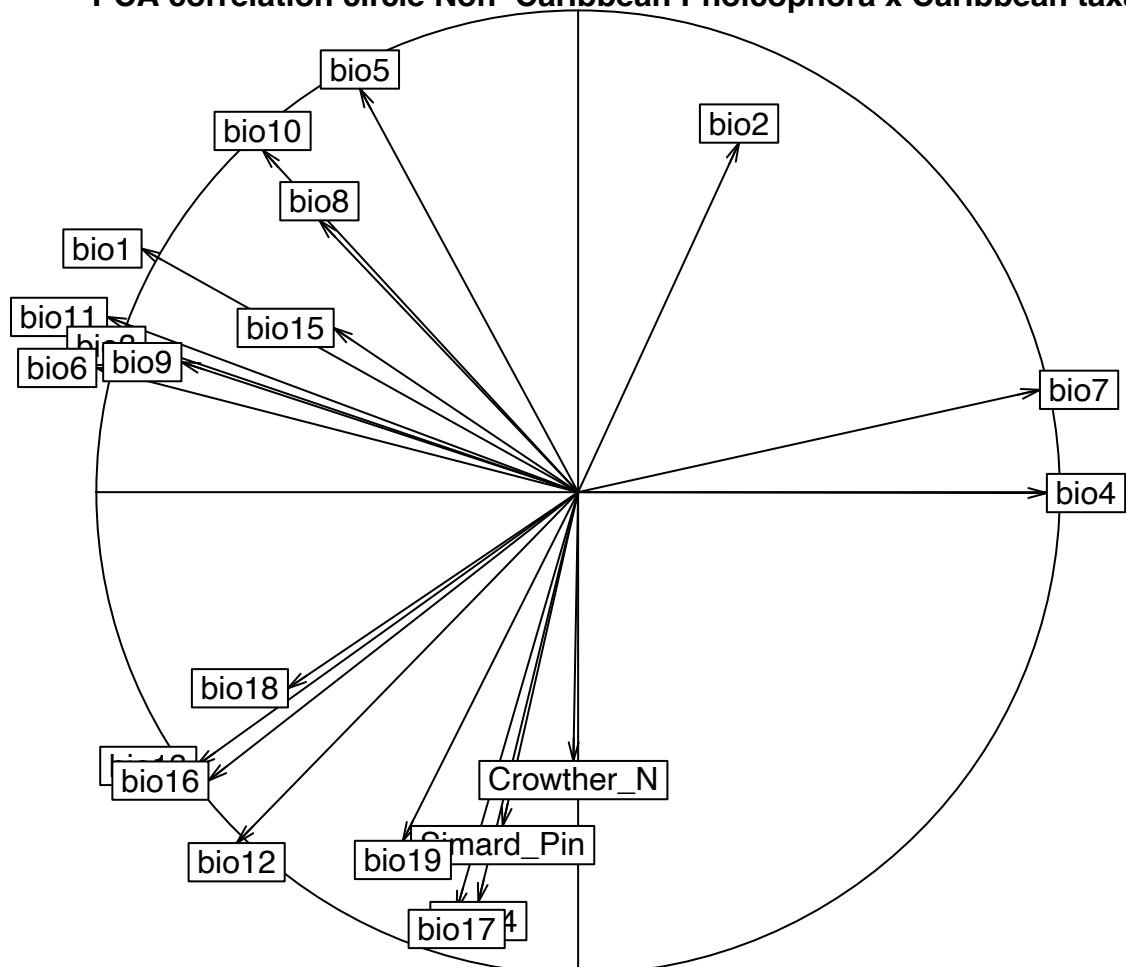


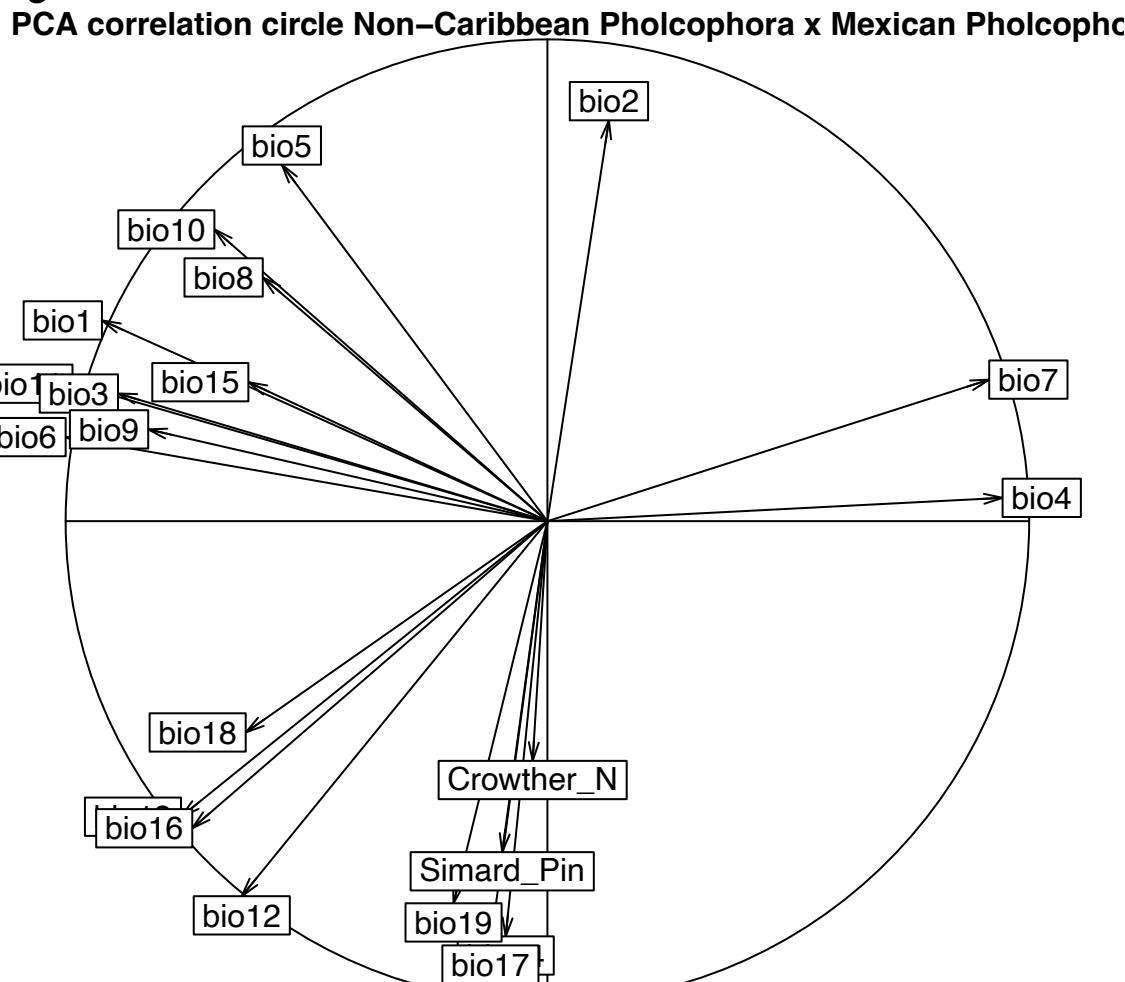
Figure S36

PCA correlation circle Non-Caribbean Pholcophora x Caribbean taxa



Axis 1 = 41.86 % Axis 2 = 30.01 %

Figure S37



Axis 1 = 42.24 % Axis 2 = 30.37 %

Figure S38

PCA correlation circle Non-Caribbean Holcophora x Papiamenta

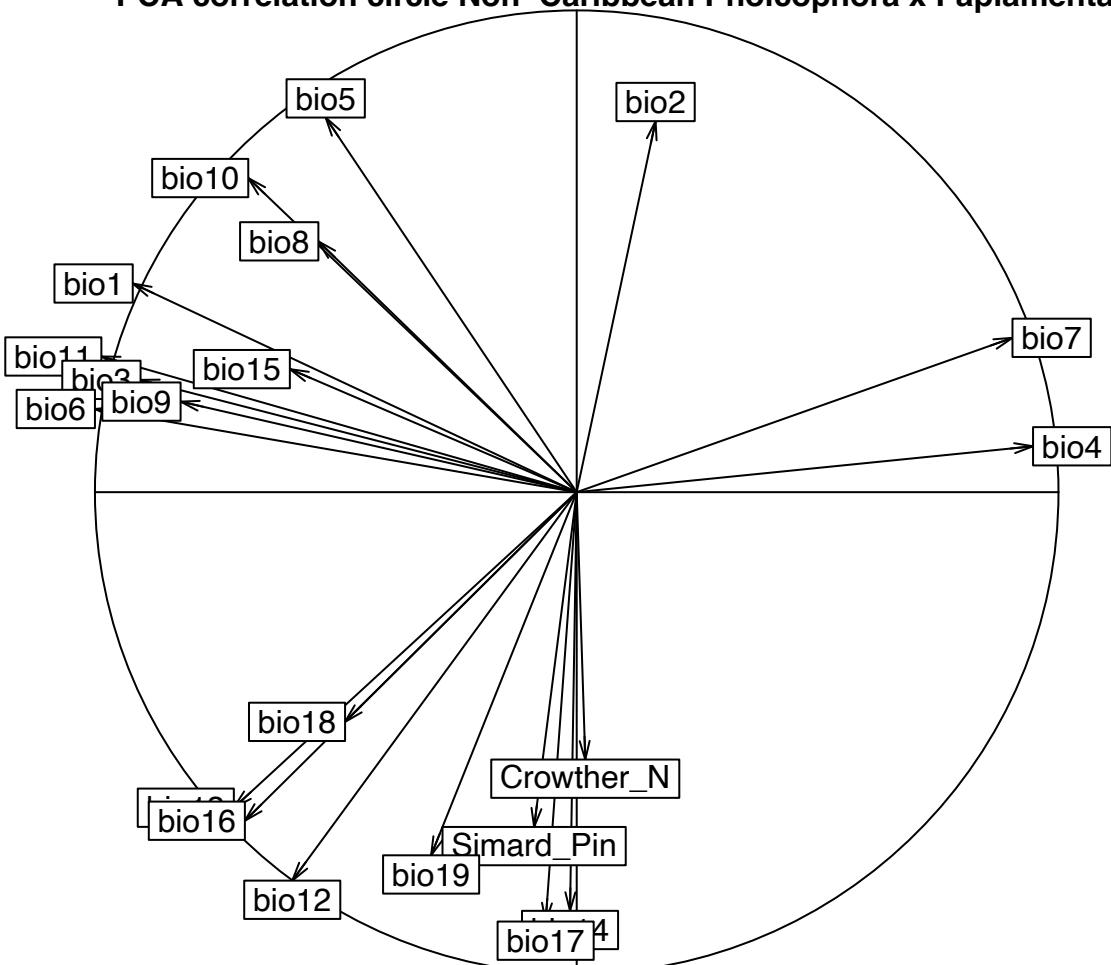
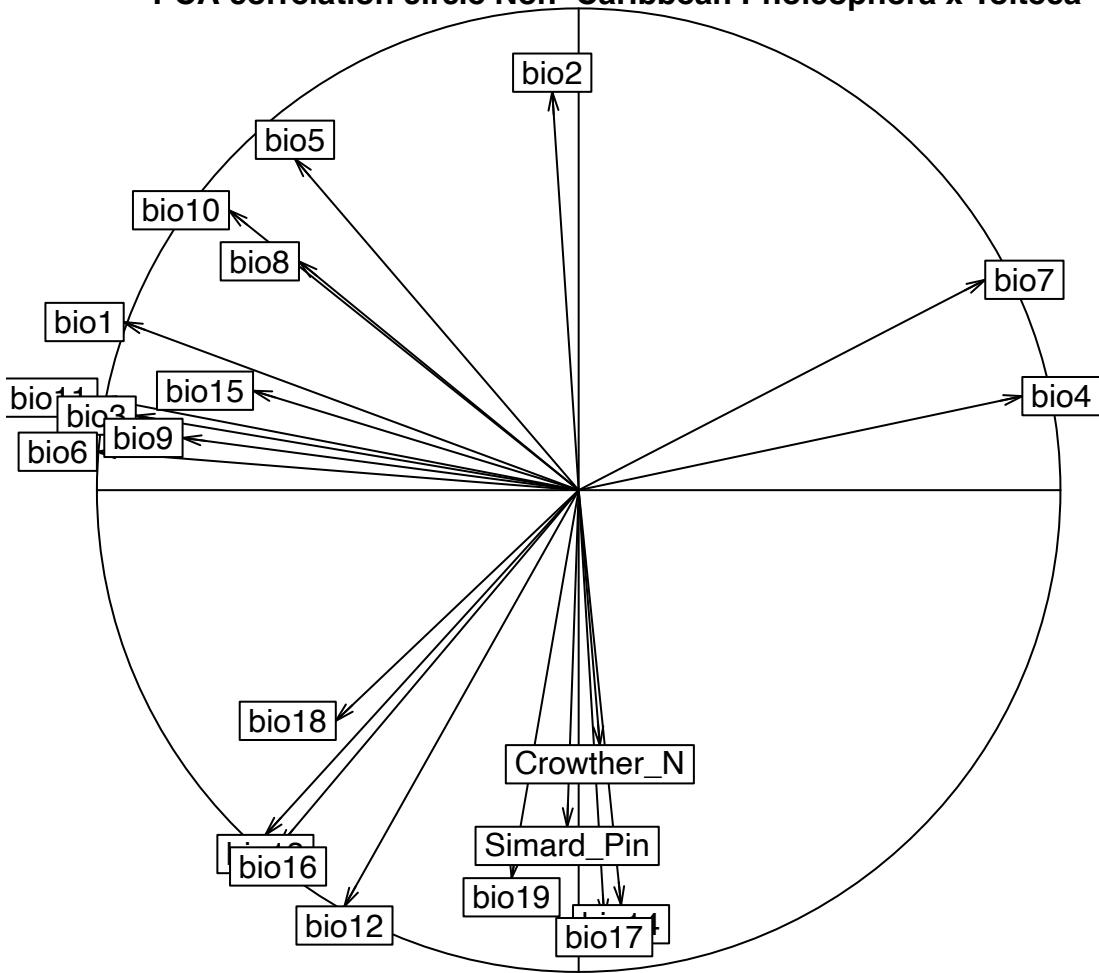


Figure S39

PCA correlation circle Non-Caribbean Pholcophora x Tolteca



Axis 1 = 40.25 % Axis 2 = 32.18 %

Figure S40

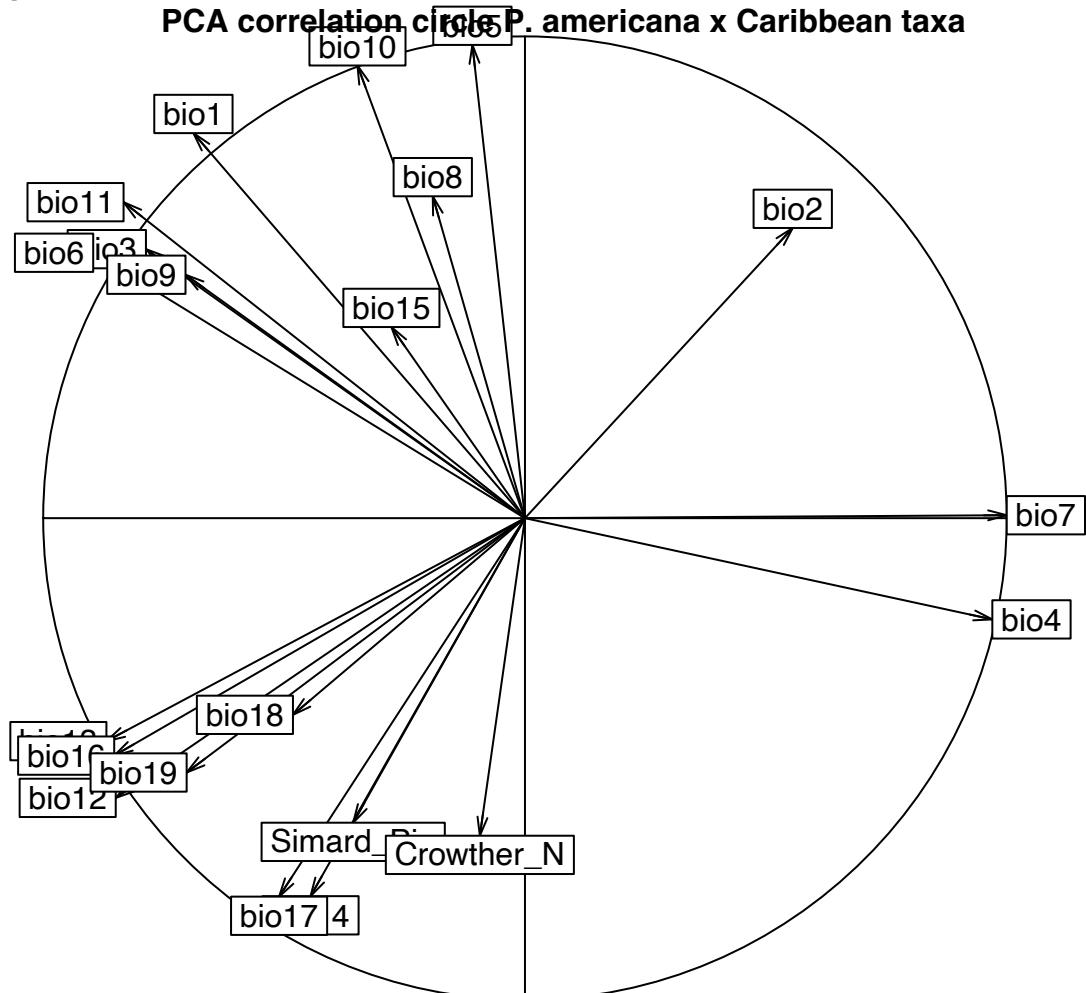
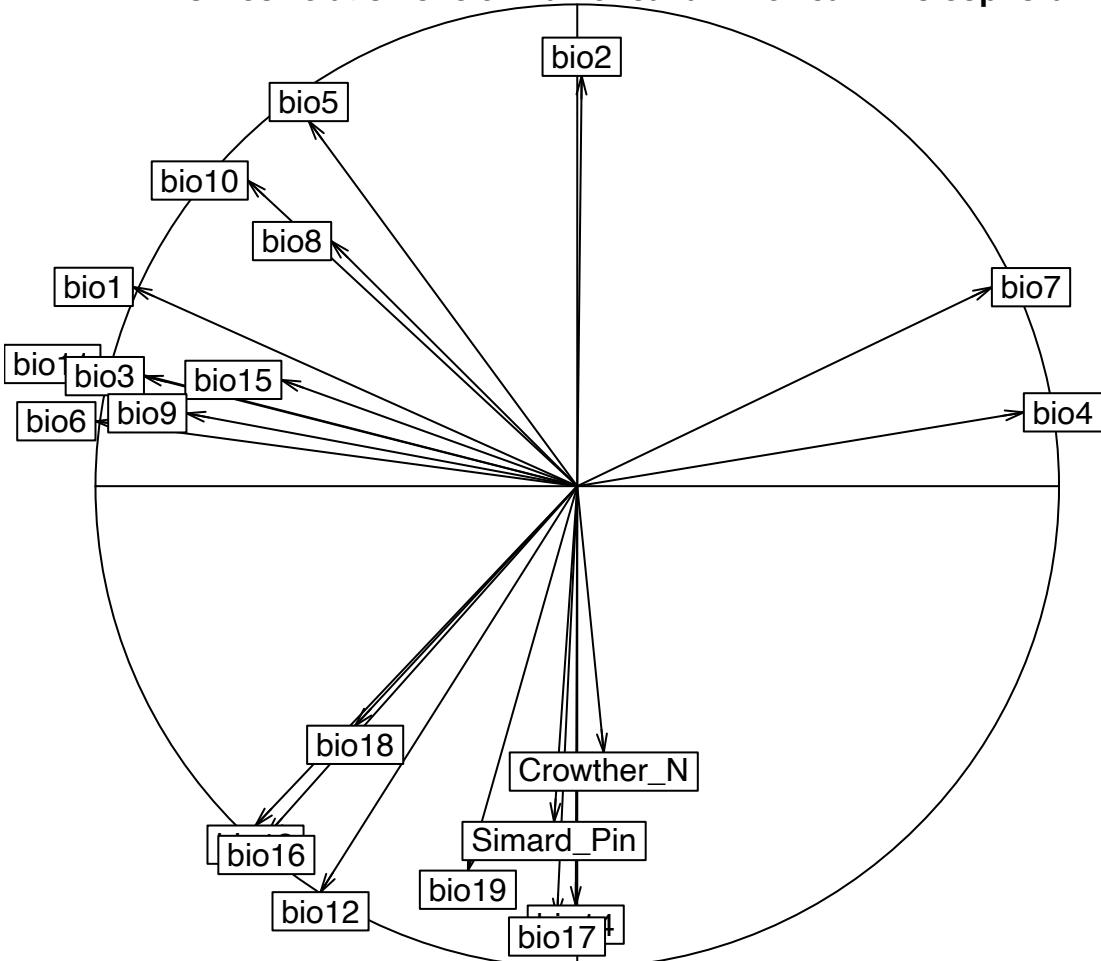


Figure S41

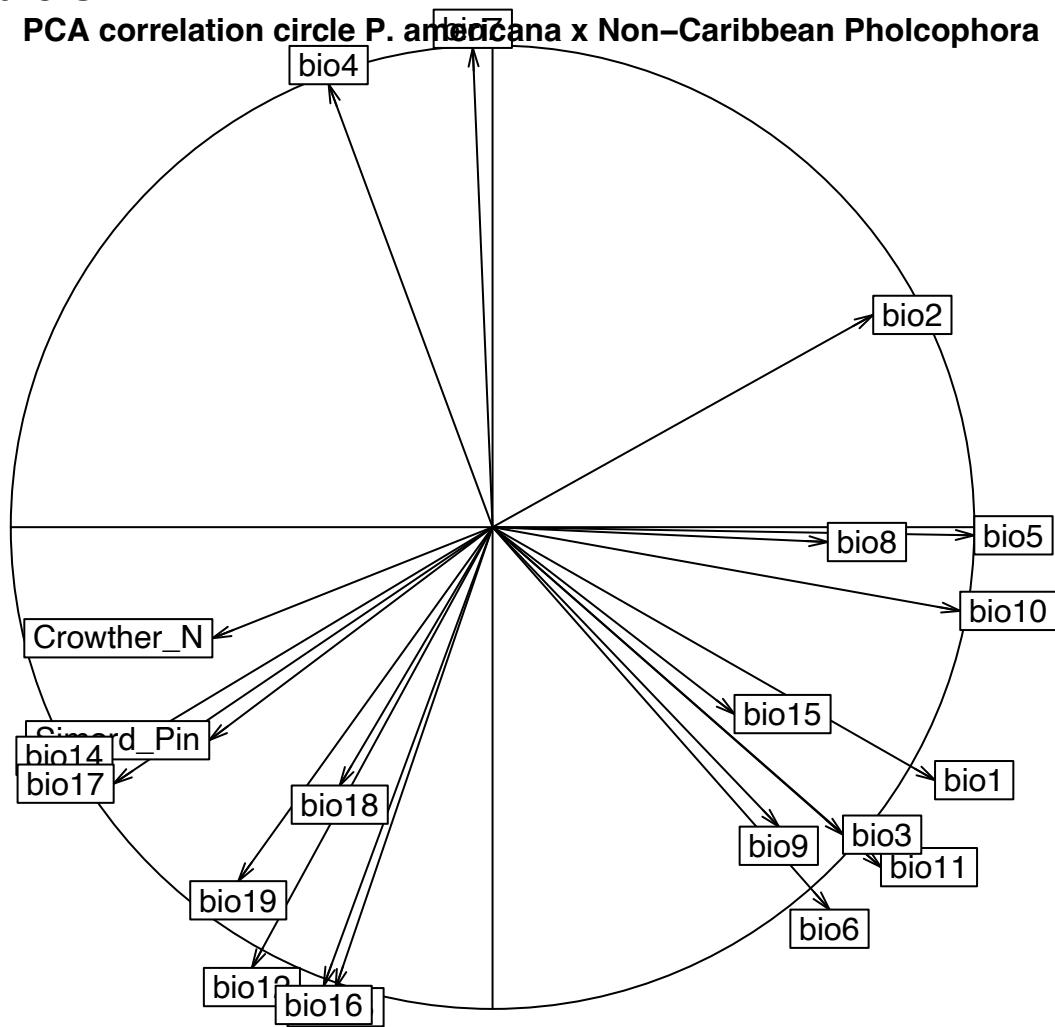
PCA correlation circle *P. americana* x Mexican Pholcophora



Axis 1 = 38.94 % Axis 2 = 33.45 %

Figure S42

PCA correlation circle *P. americana* x Non-Caribbean Pholcophora



Axis 1 = 36.84 % Axis 2 = 35.15 %

Figure S43

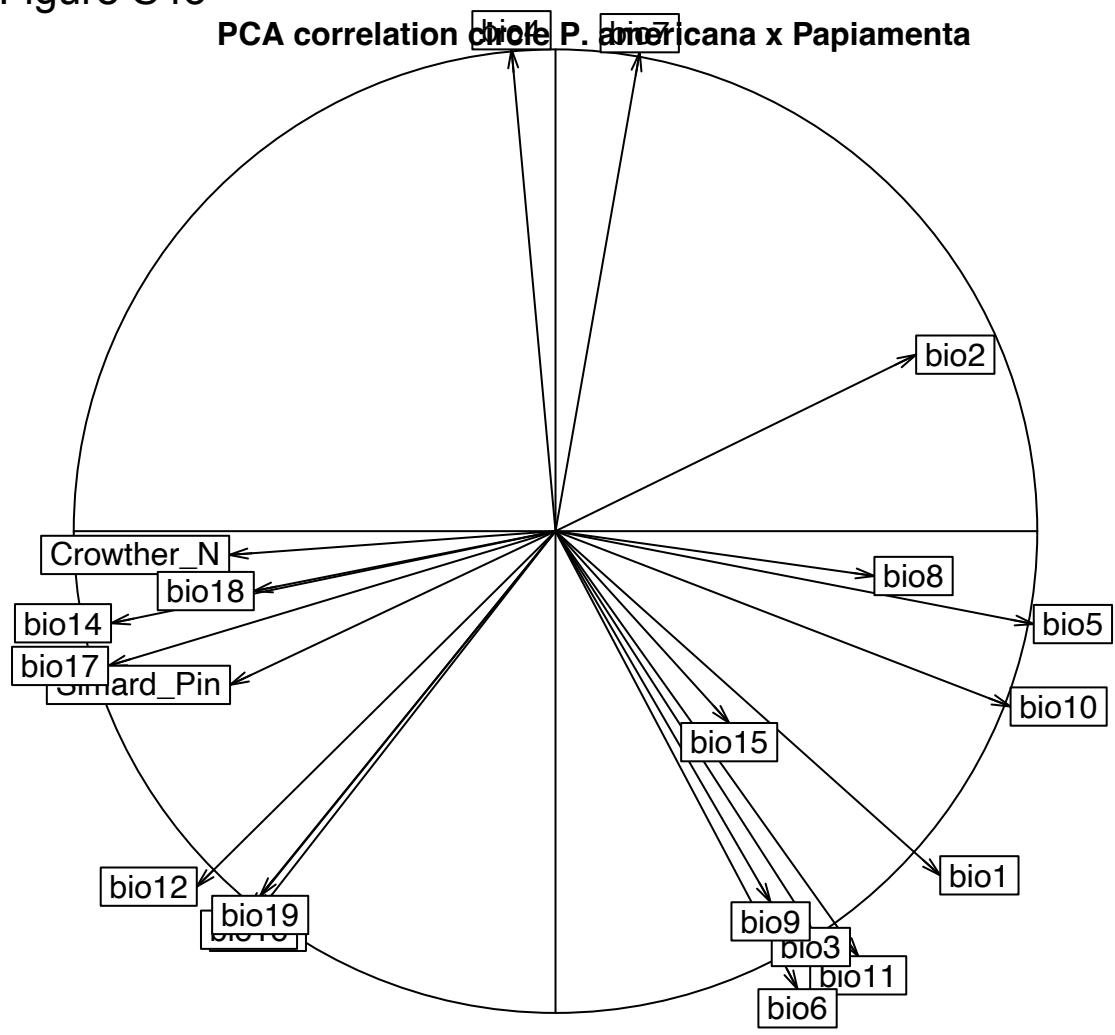


Figure S44

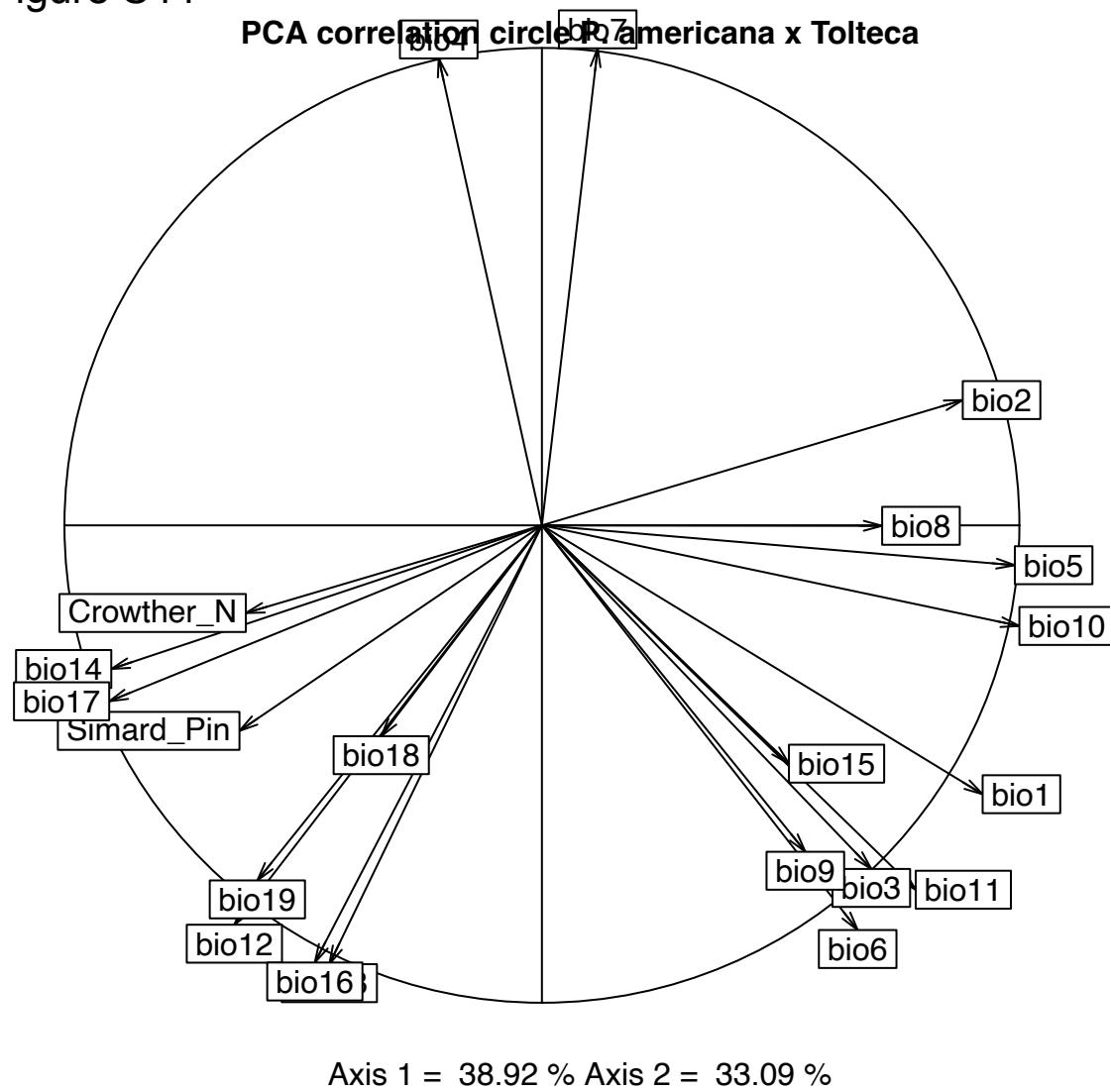


Figure S45

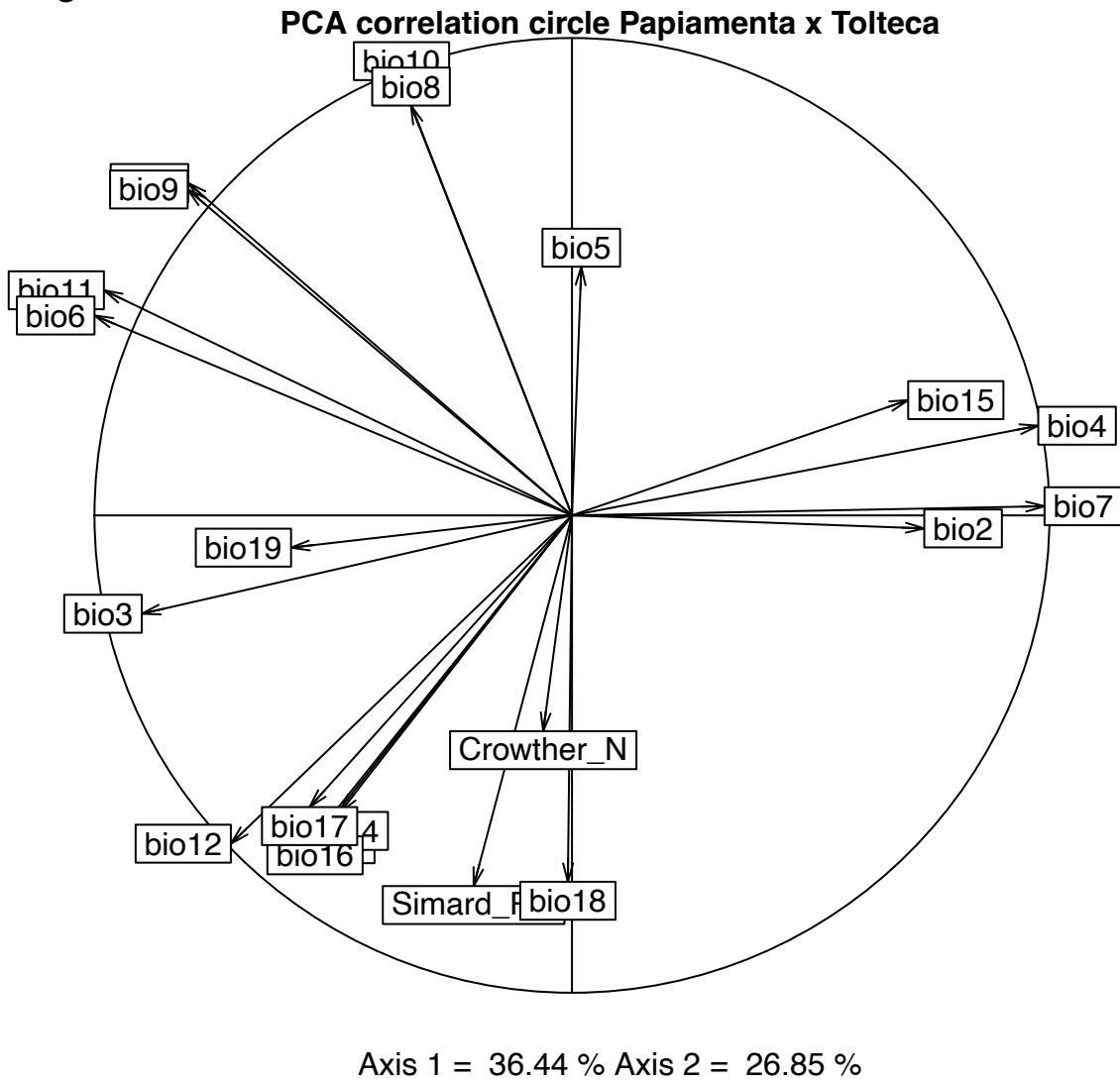


Figure S46

Similarity
Caribbean taxa
x
Papiamenta

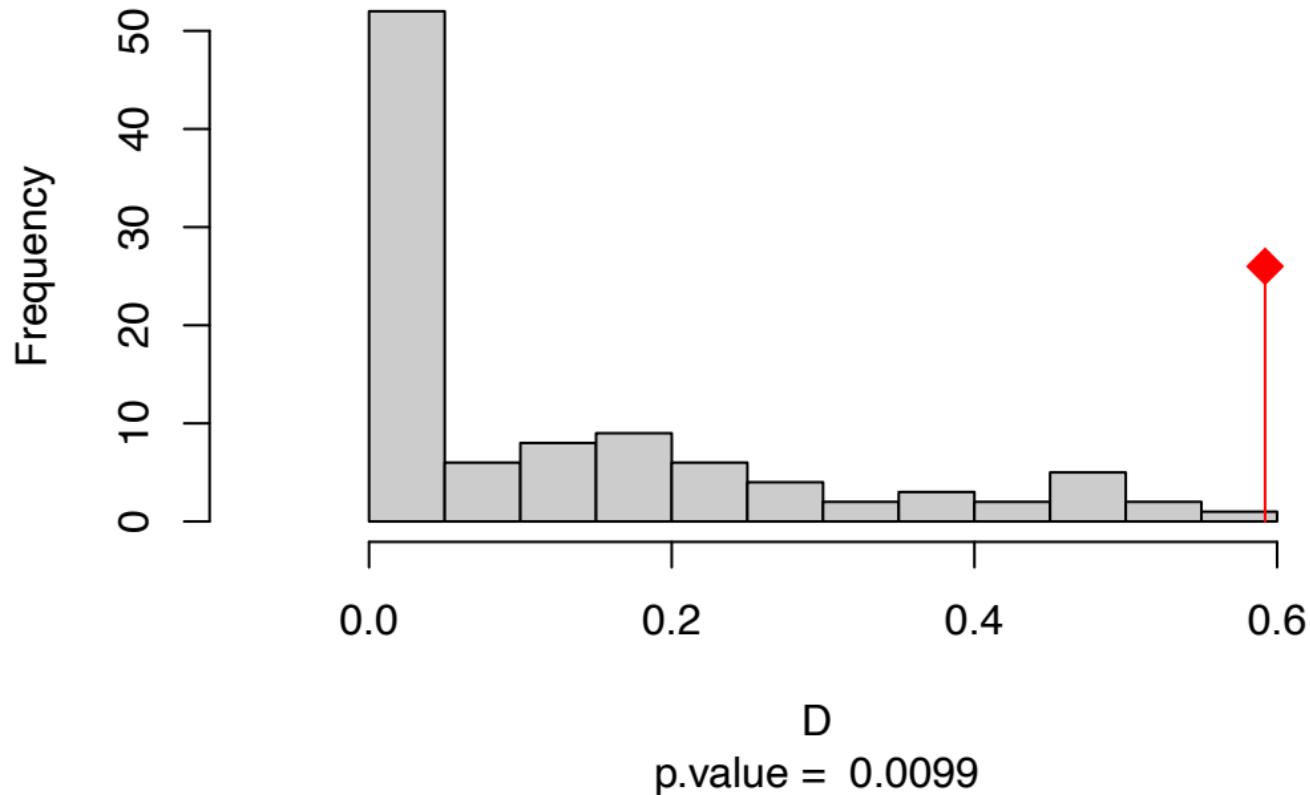


Figure S47

Similarity
Caribbean taxa
x
Tolteca

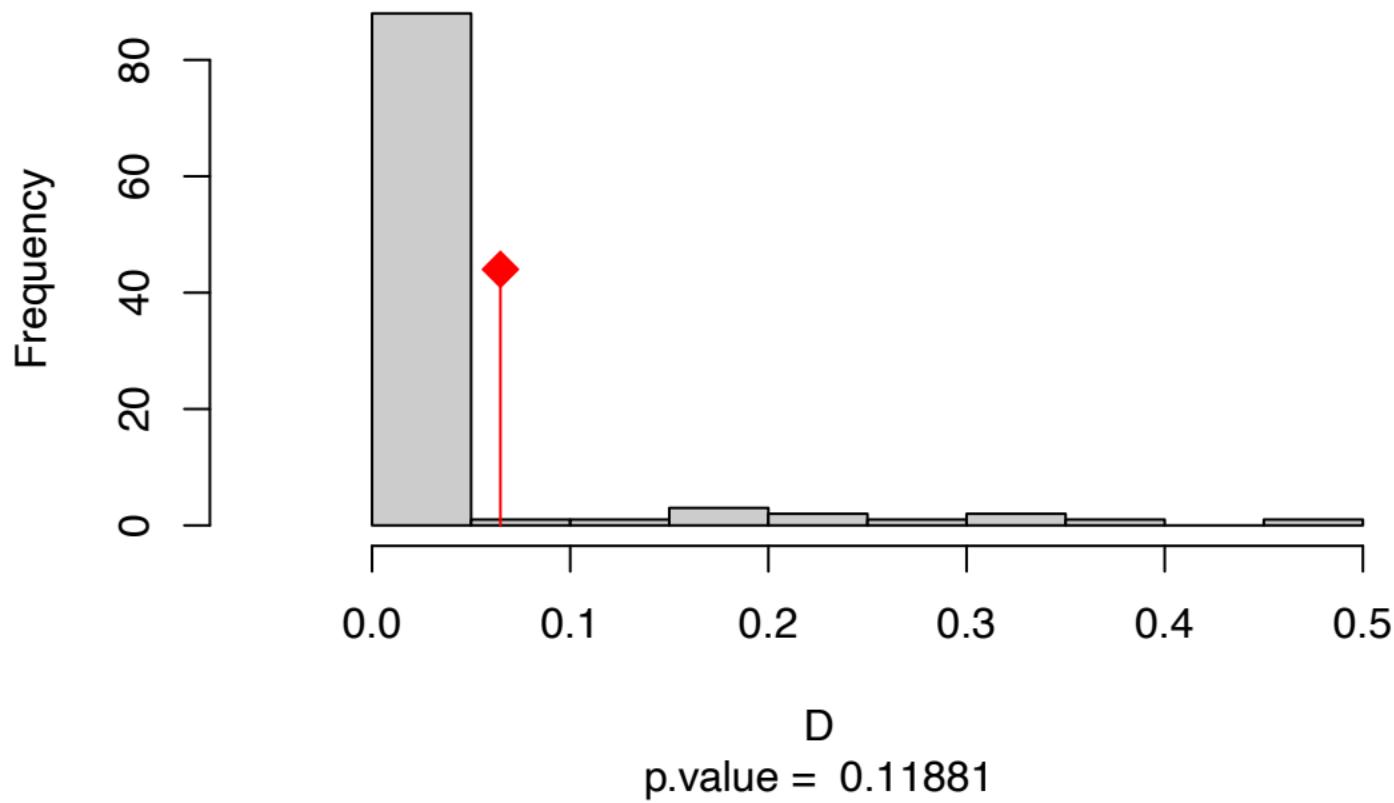


Figure S48

Similarity
Mexican Pholcophora
x
Caribbean taxa

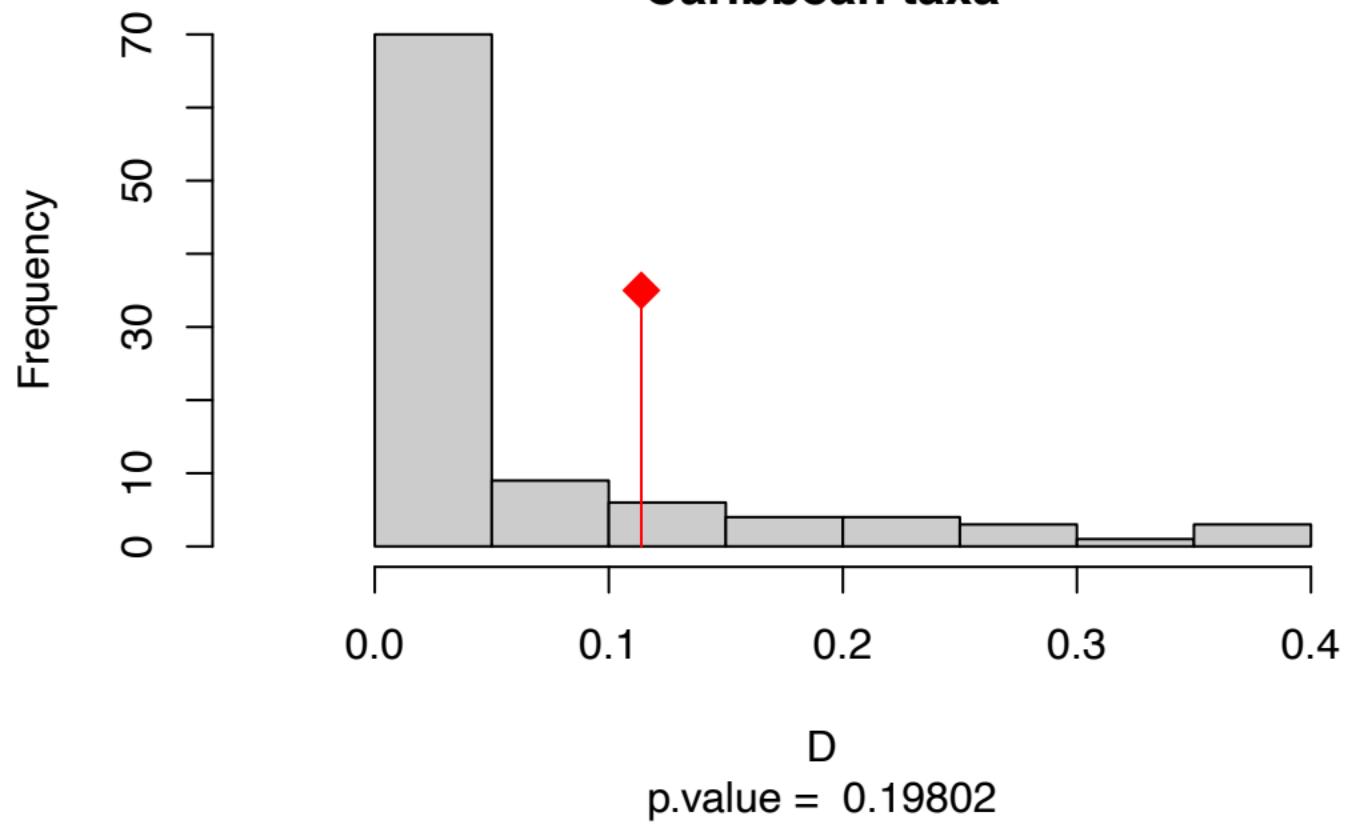


Figure S49

Similarity
Mexican Pholcophora
x
Papiamenta

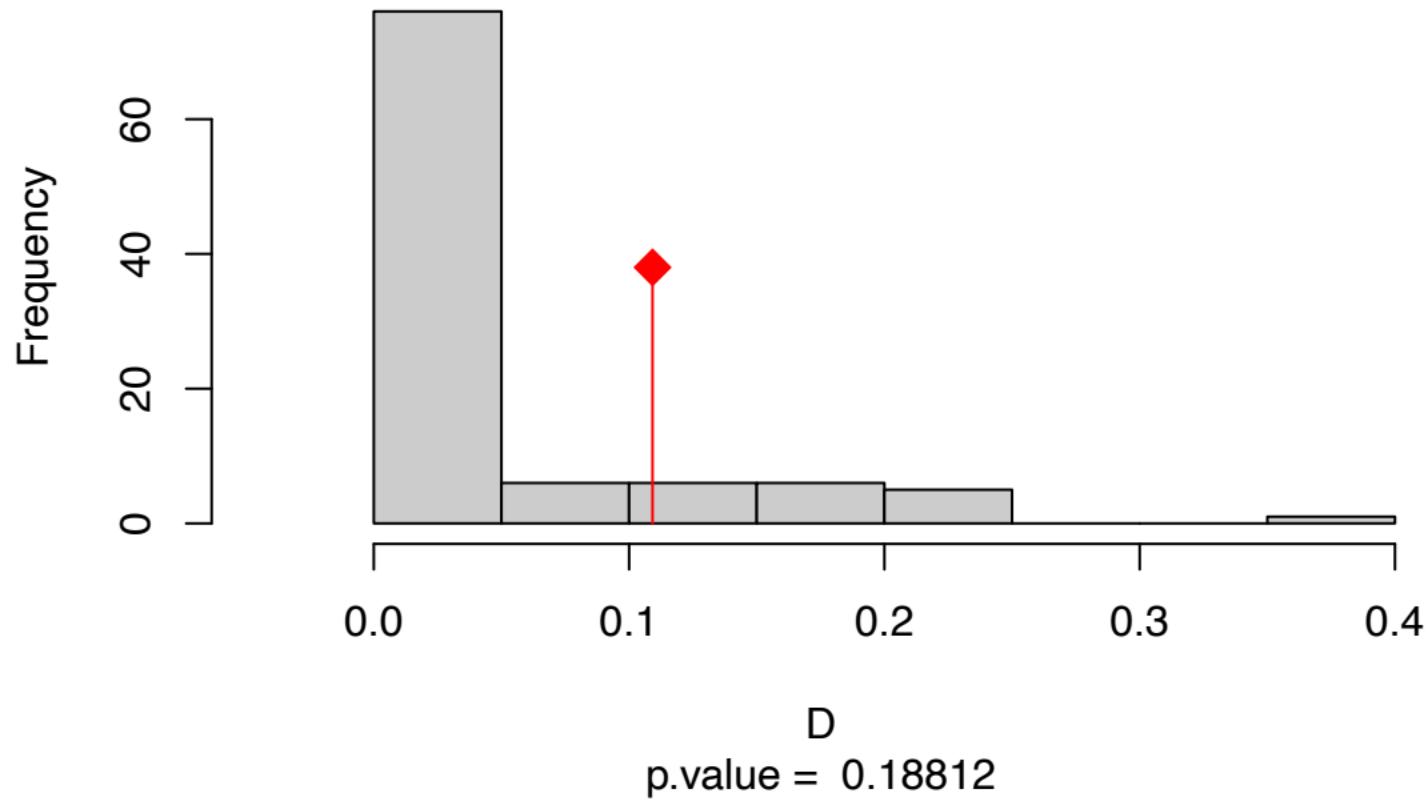


Figure S50

Similarity
Mexican Pholcophora
x
Tolteca

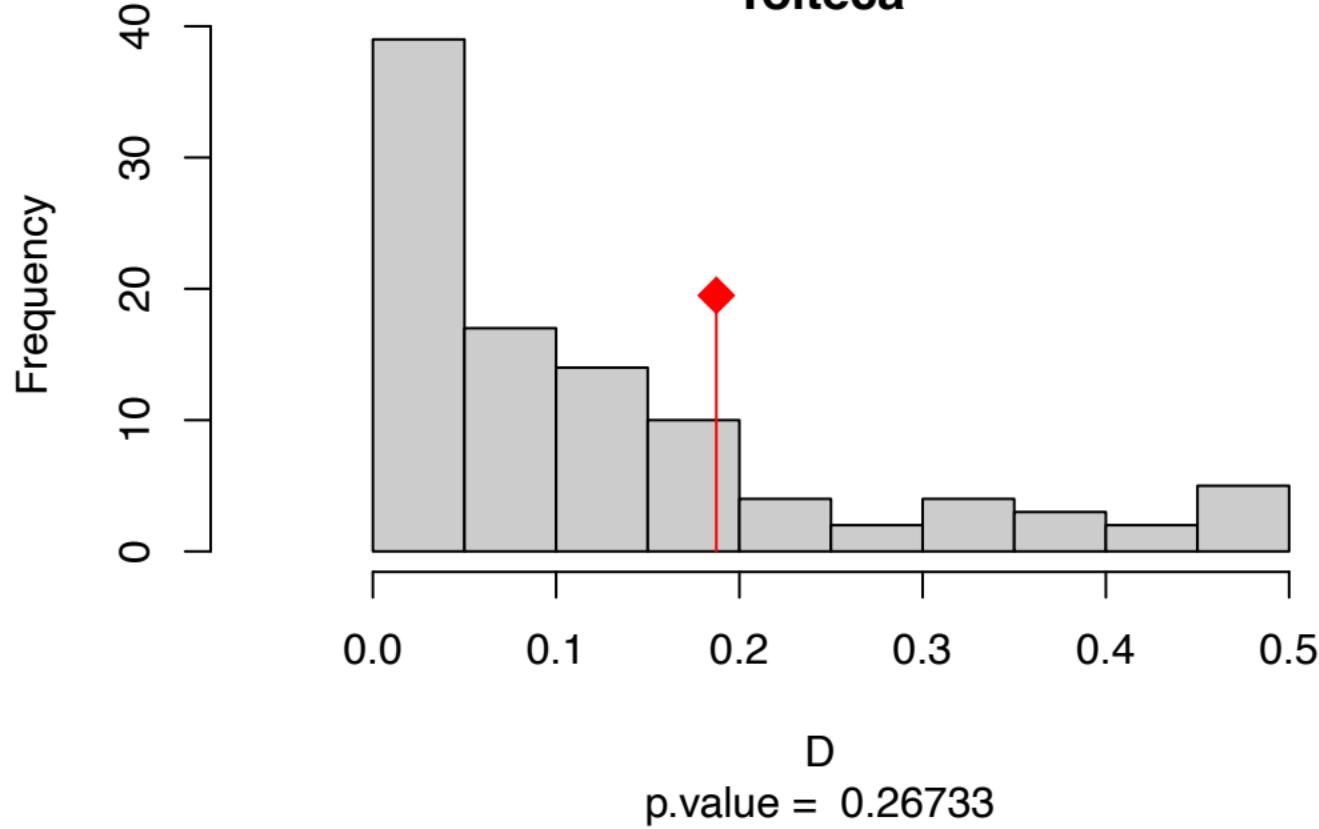


Figure S51

Similarity
Non-Caribbean Pholcophora
x
Caribbean taxa

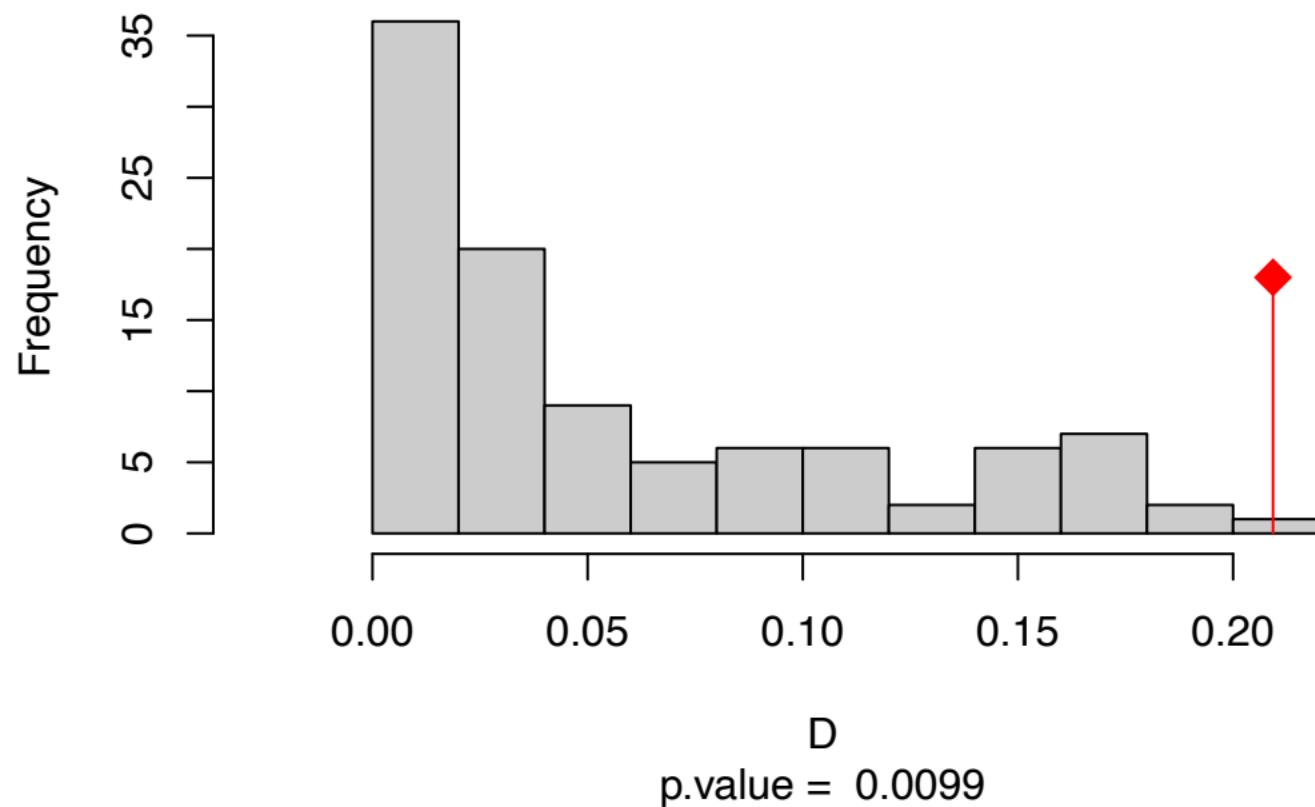


Figure S52

Similarity
Non-Caribbean Pholcophora
x
Mexican Pholcophora

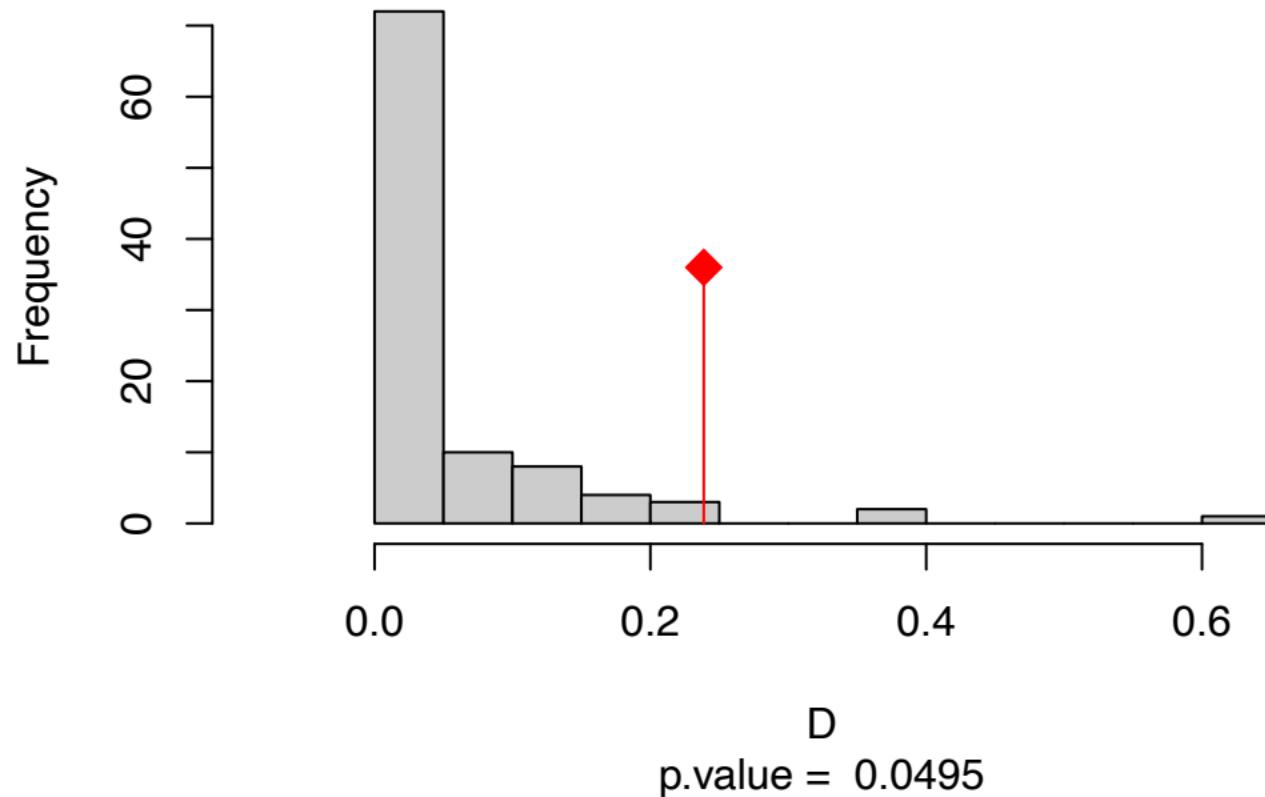


Figure S53

Similarity
Non-Caribbean Pholcophora
x
Papiamenta

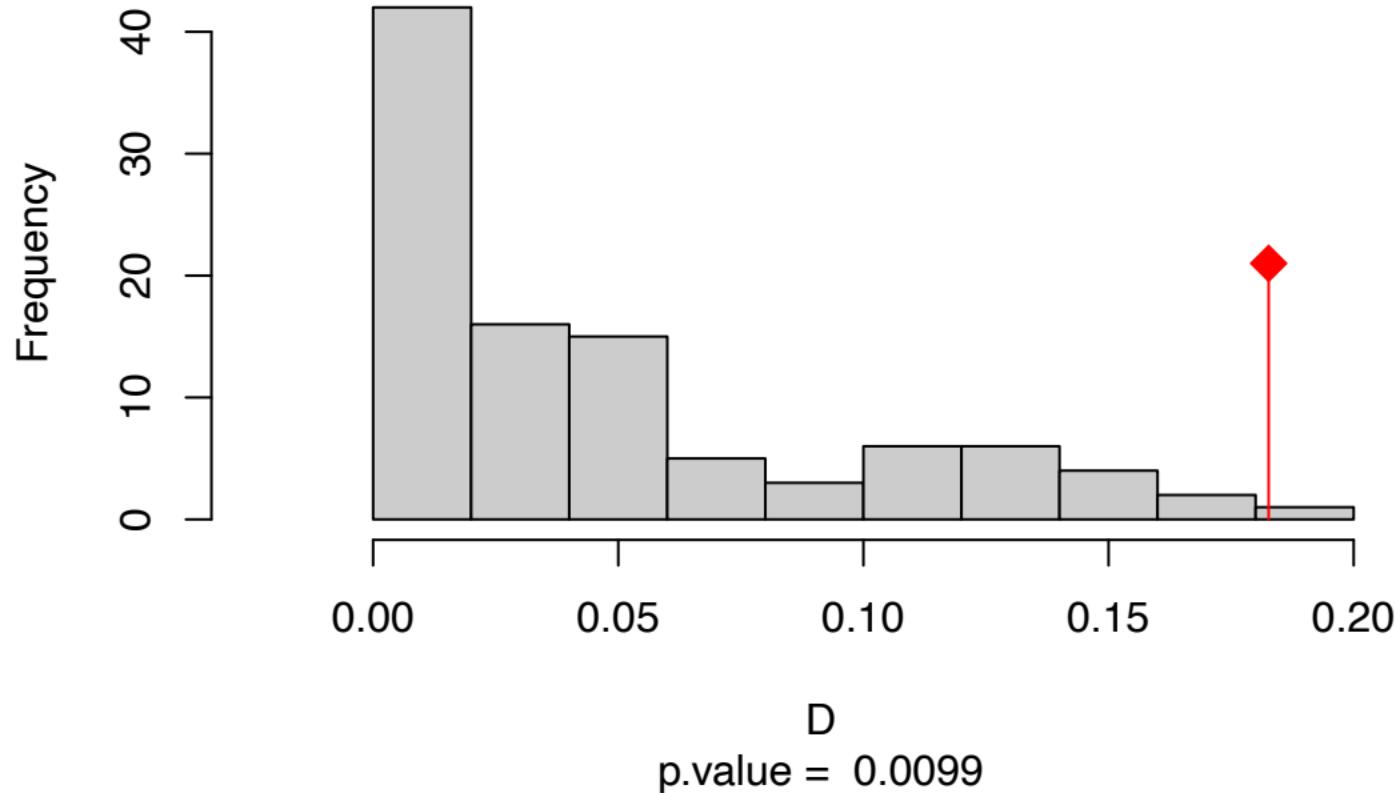


Figure S54

Similarity
Non-Caribbean Pholcophora
x
Tolteca

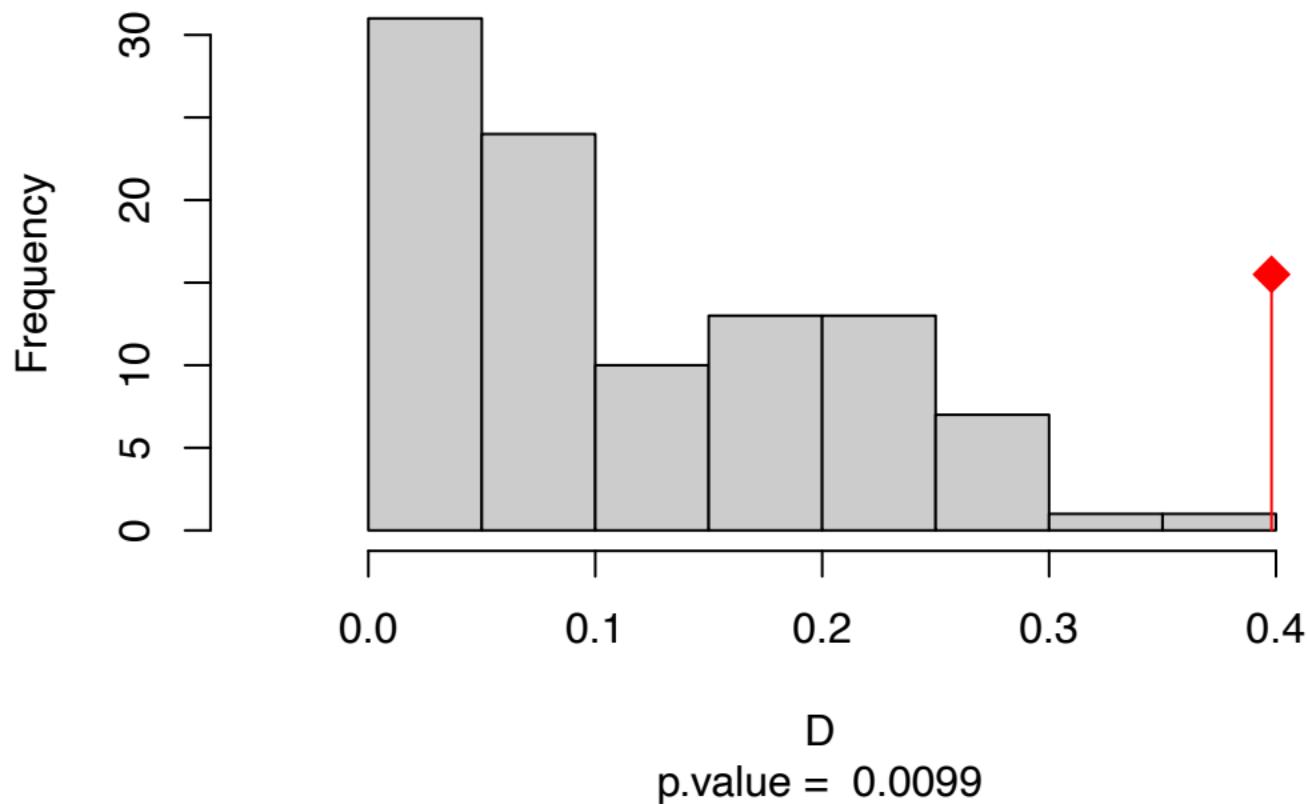


Figure S55

Similarity
P. americana
x
Caribbean taxa

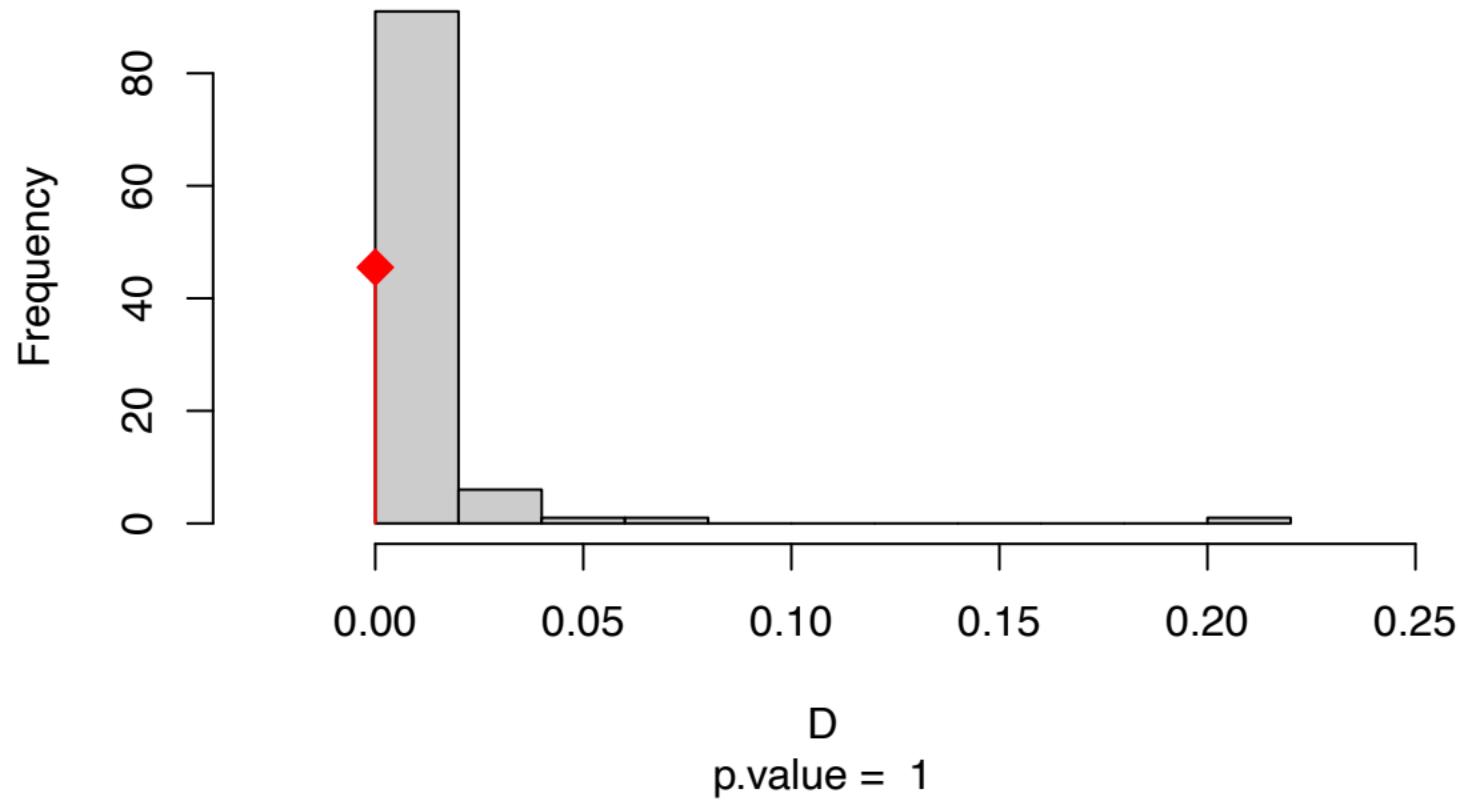


Figure S56

Similarity
P. americana

x

Mexican Pholcophora

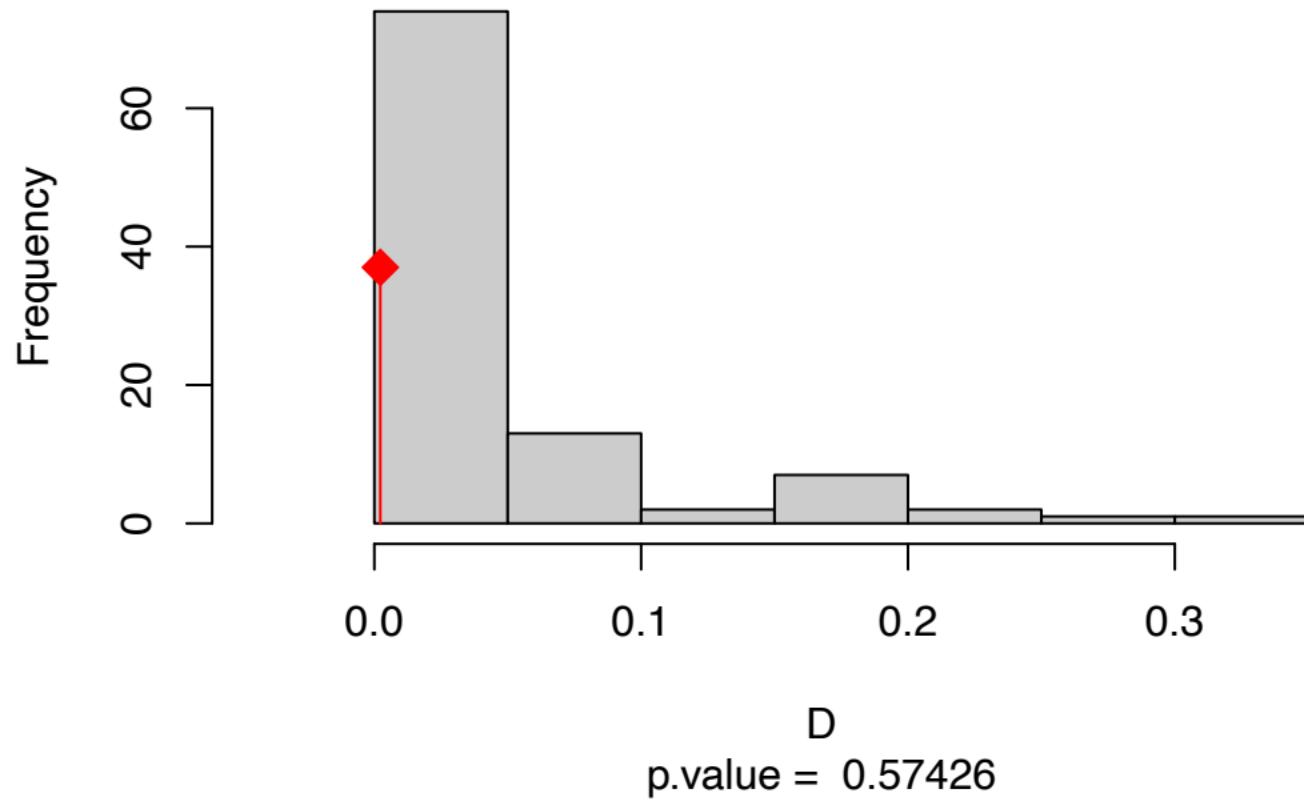


Figure S57

Similarity
P. americana

x

Non-Caribbean Pholcophora

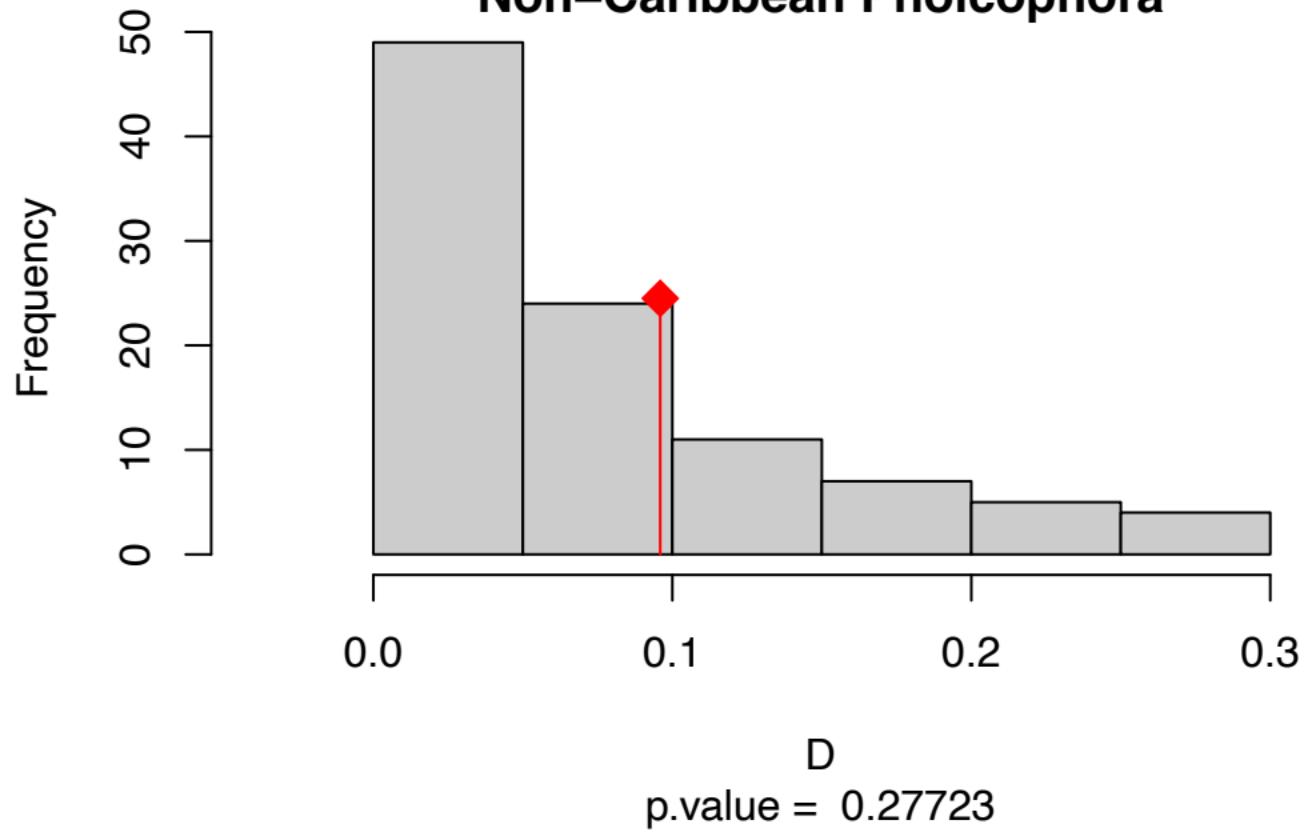


Figure S58

Similarity
P. americana
x
Papiamenta

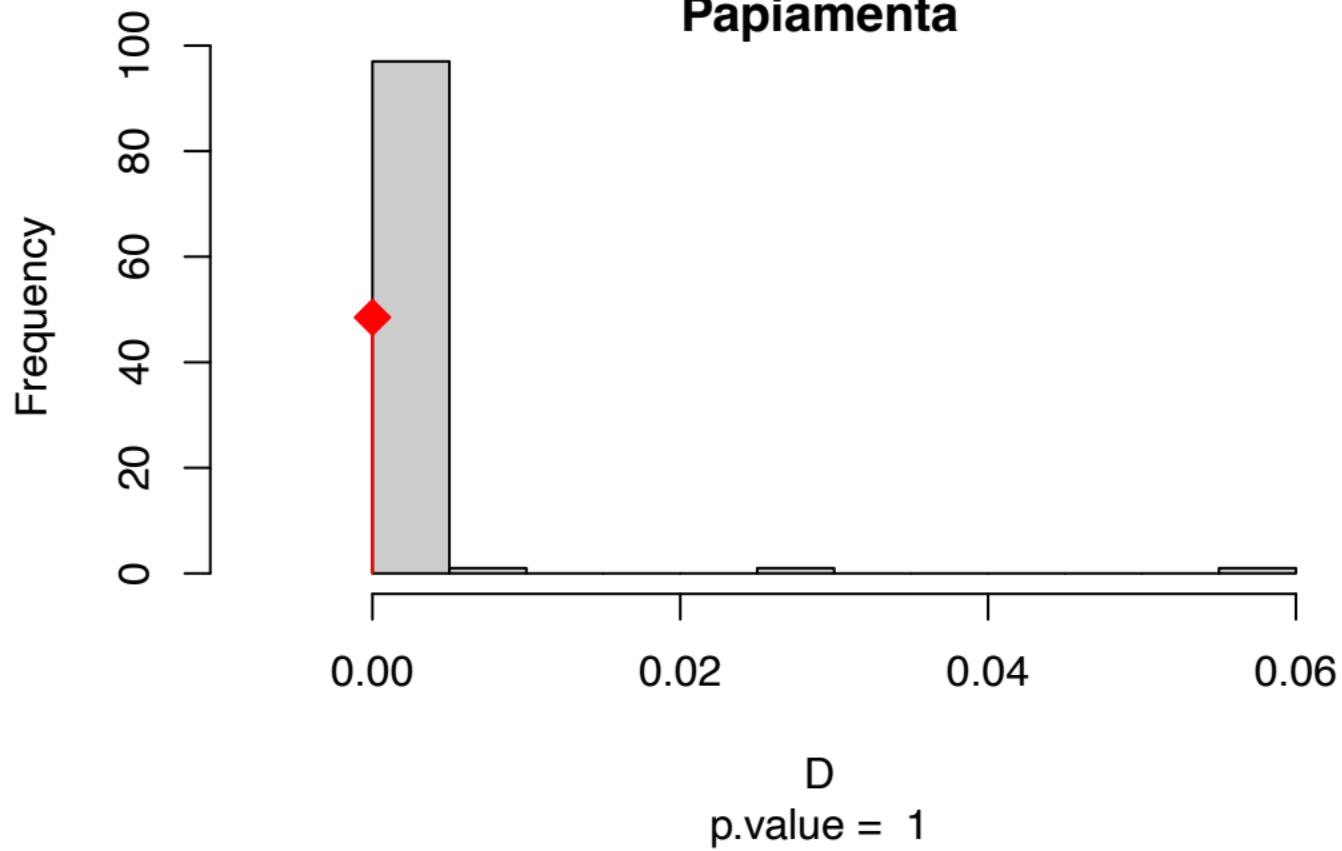


Figure S59

Similarity
P. americana
x
Tolteca

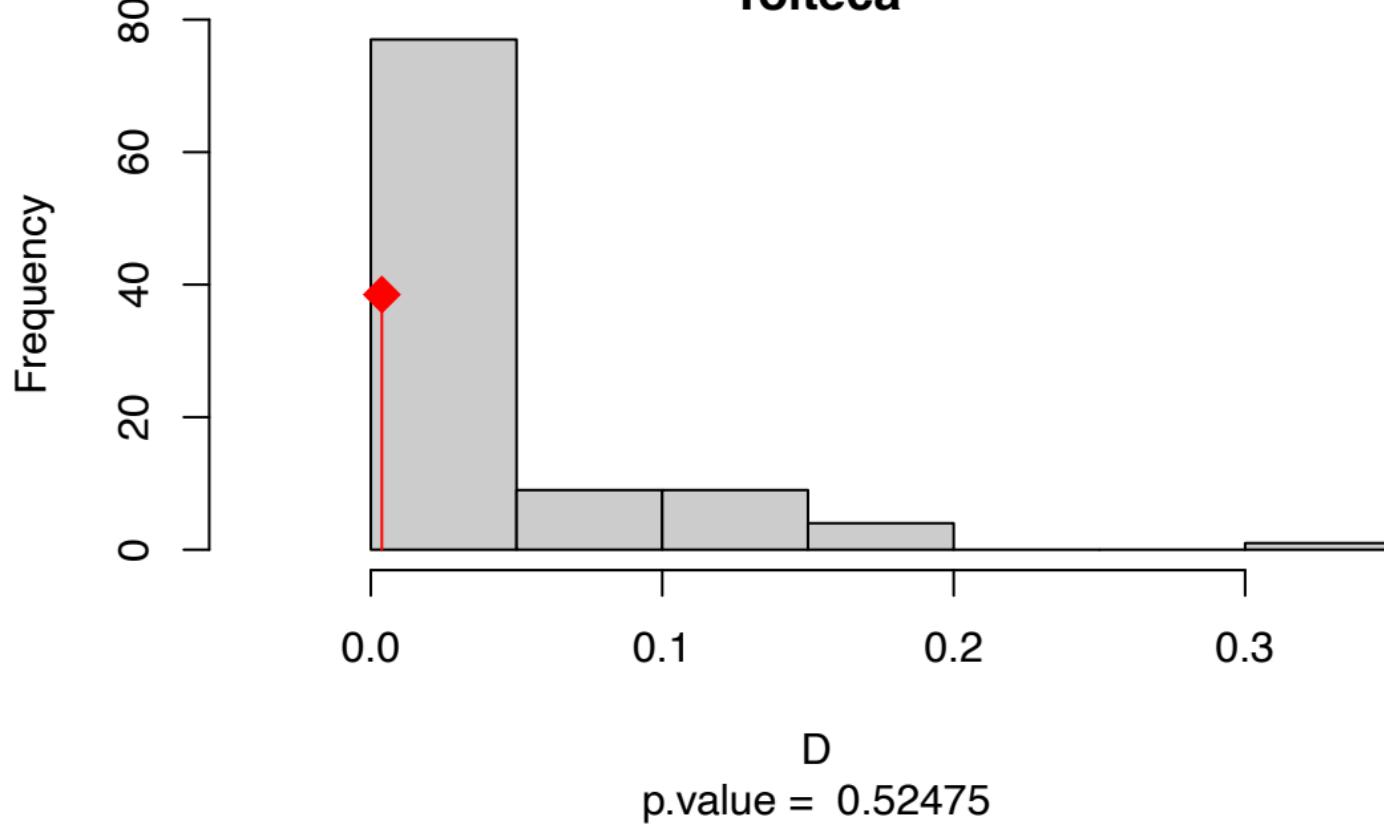


Figure S60

Similarity
Papiamenta
x
Tolteca

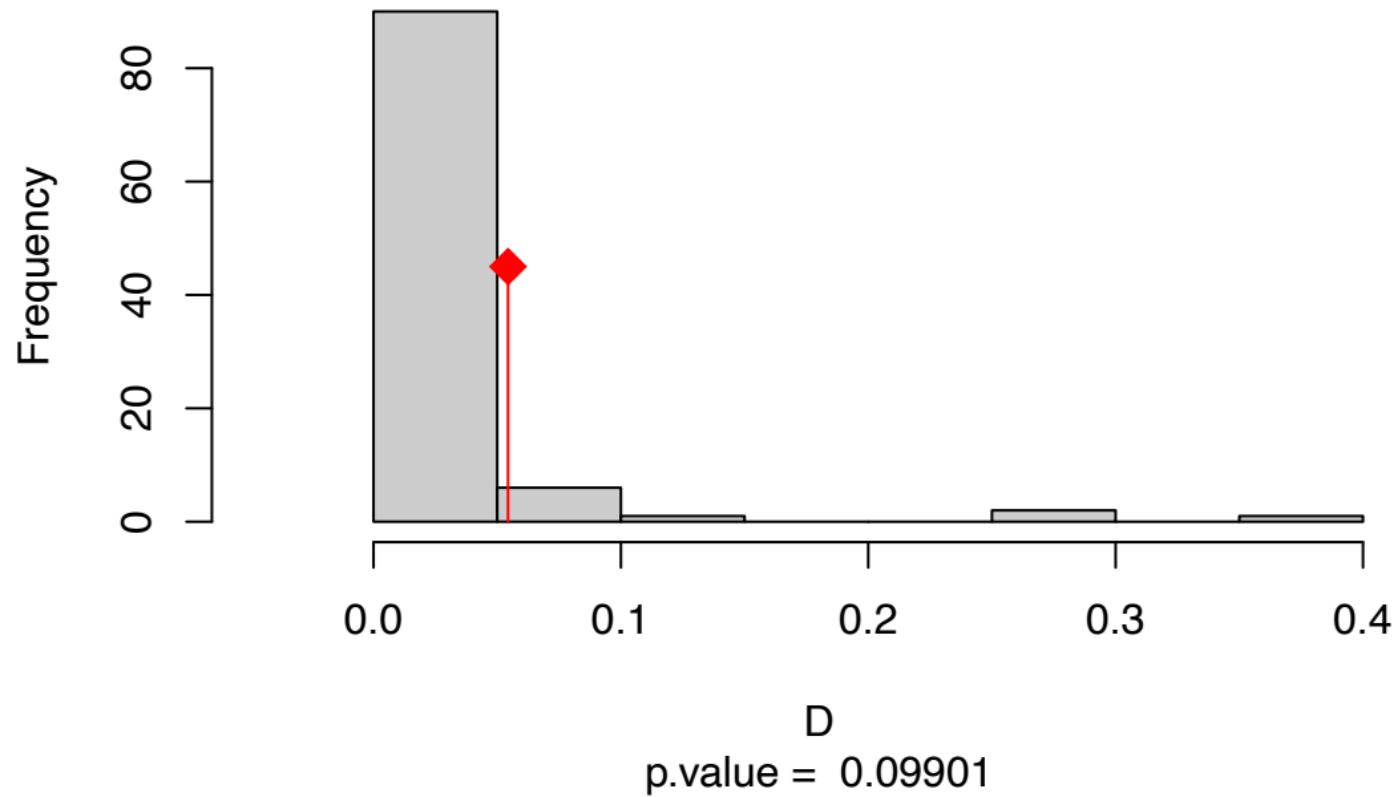


Figure S61

Similarity
Papiamenta
x
Caribbean taxa

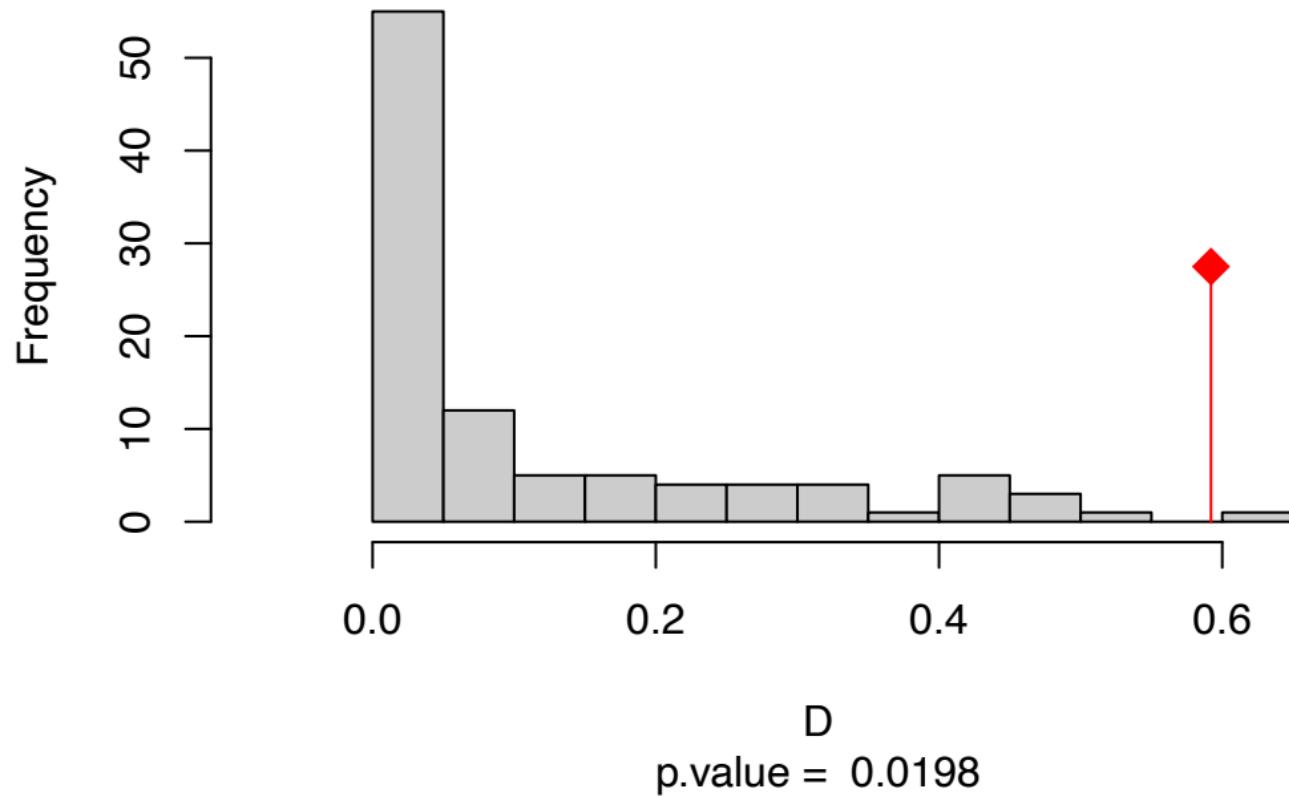


Figure S62

Similarity
Tolteca
x
Caribbean taxa

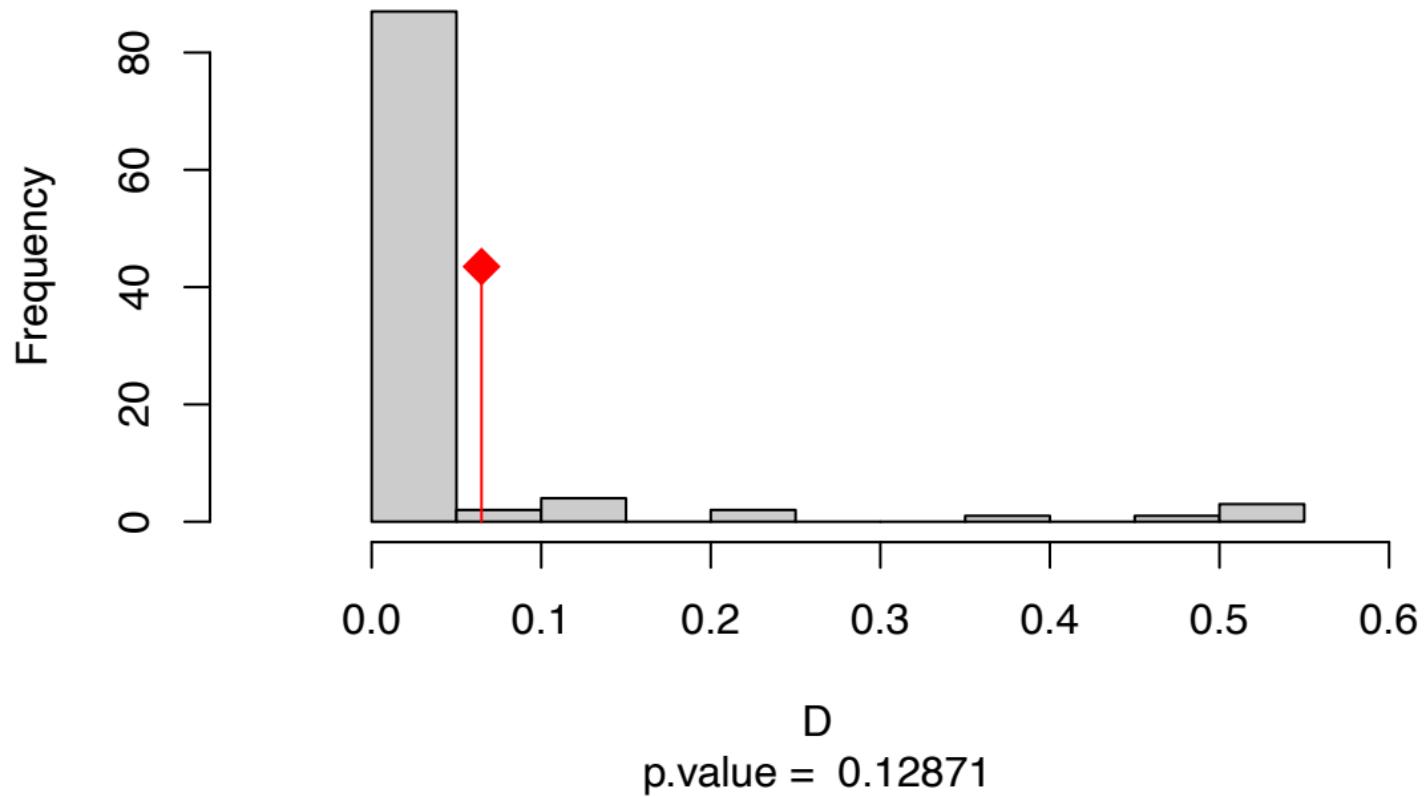


Figure S63

Similarity
Caribbean taxa
x
Mexican Pholcophora

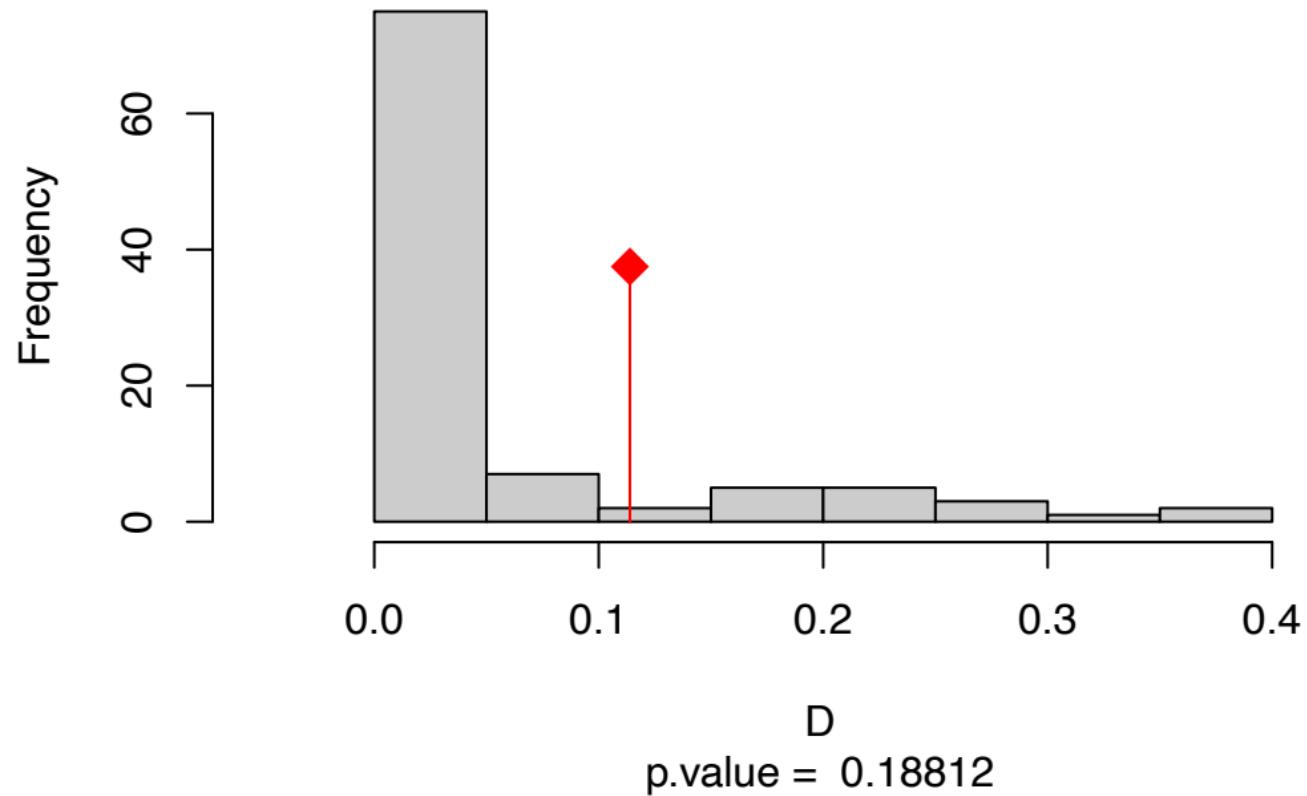


Figure S64

Similarity
Papiamenta
x
Mexican Pholcophora

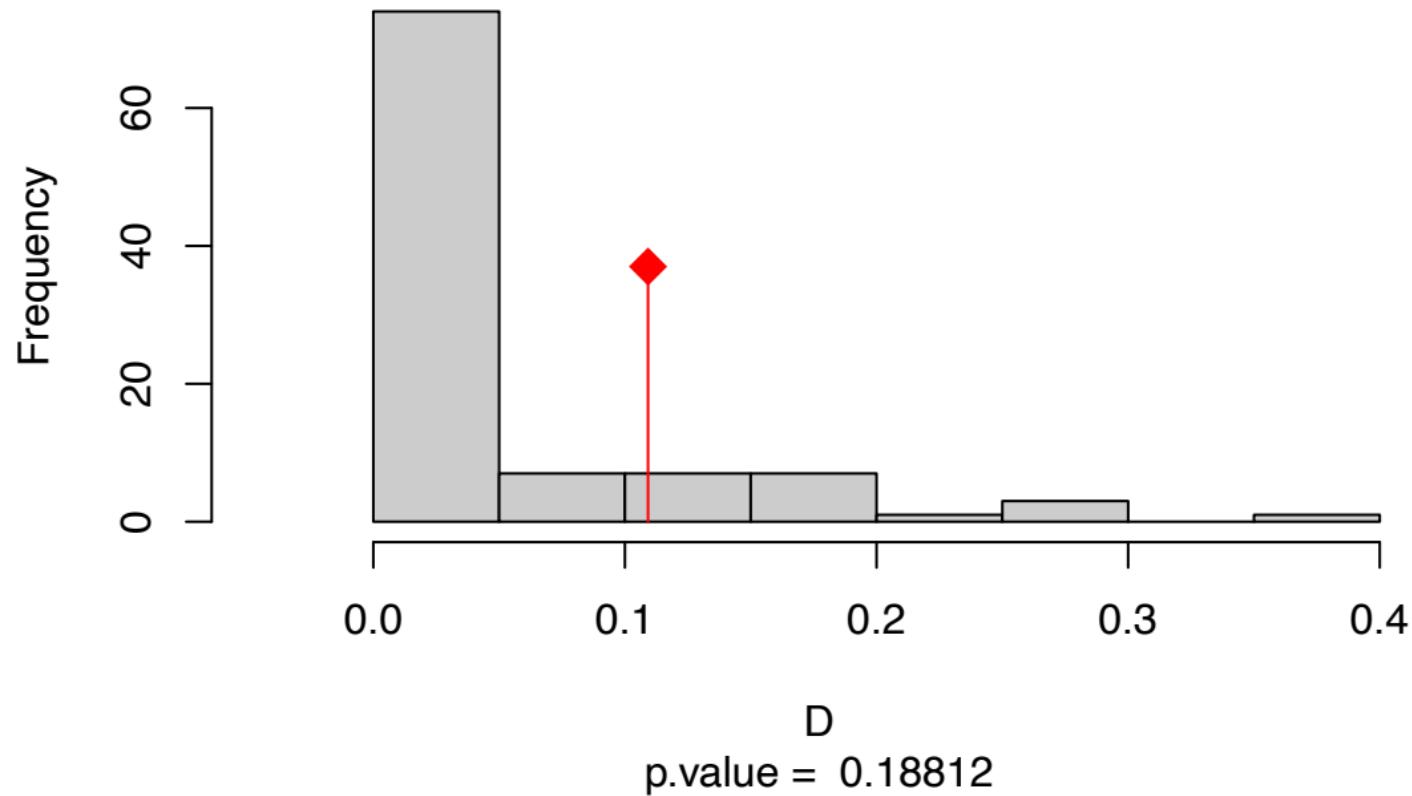


Figure S65

Similarity
Tolteca
x
Mexican Pholcophora

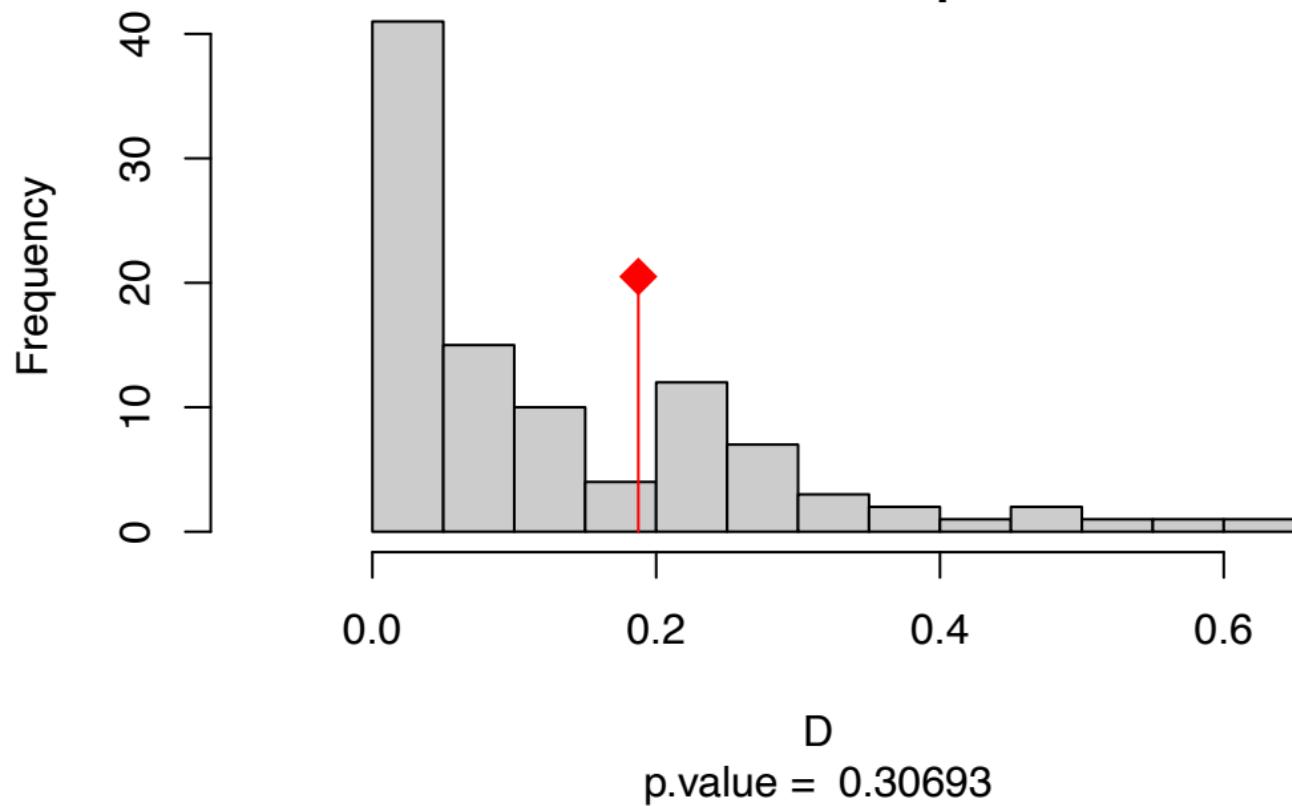


Figure S66

Similarity
Caribbean taxa
x
Non-Caribbean Pholcophora

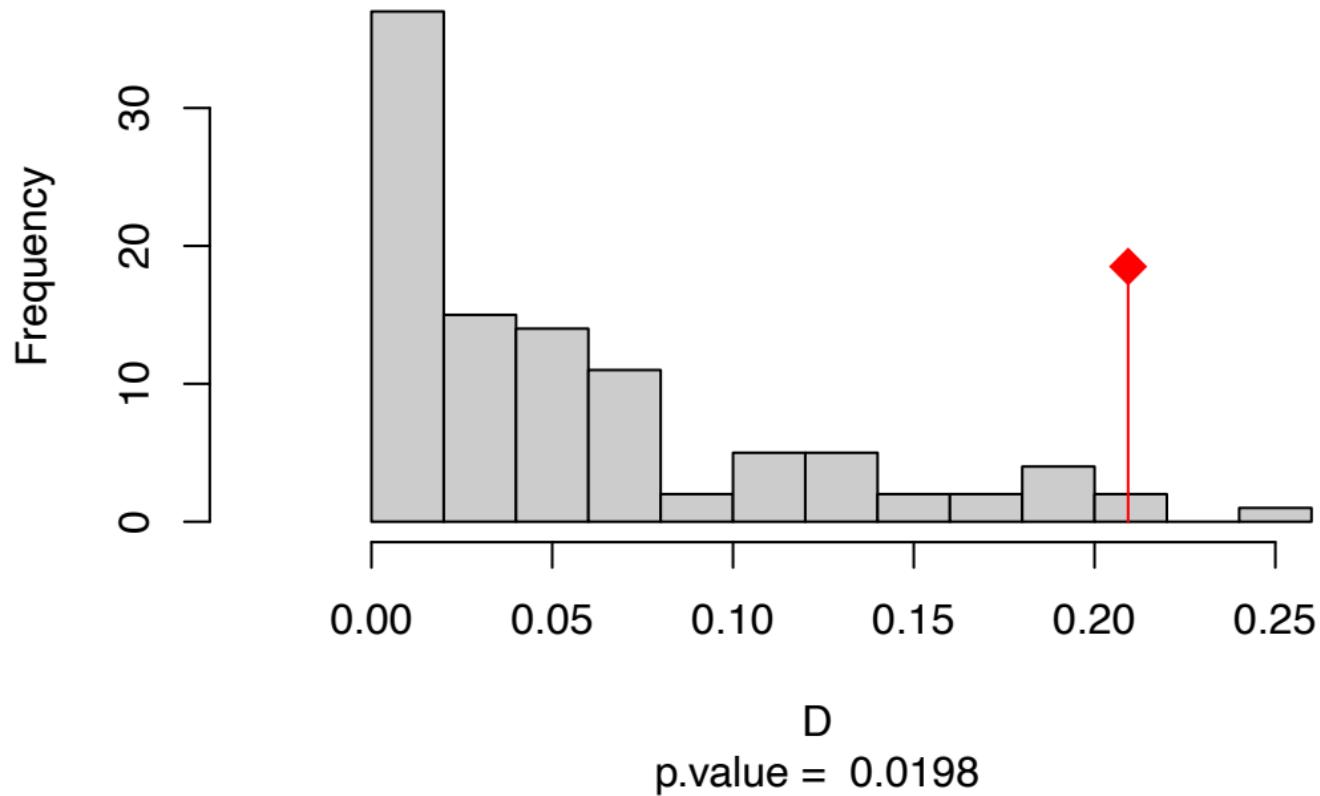


Figure S67

Similarity
Mexican Pholcophora

x

Non-Caribbean Pholcophora

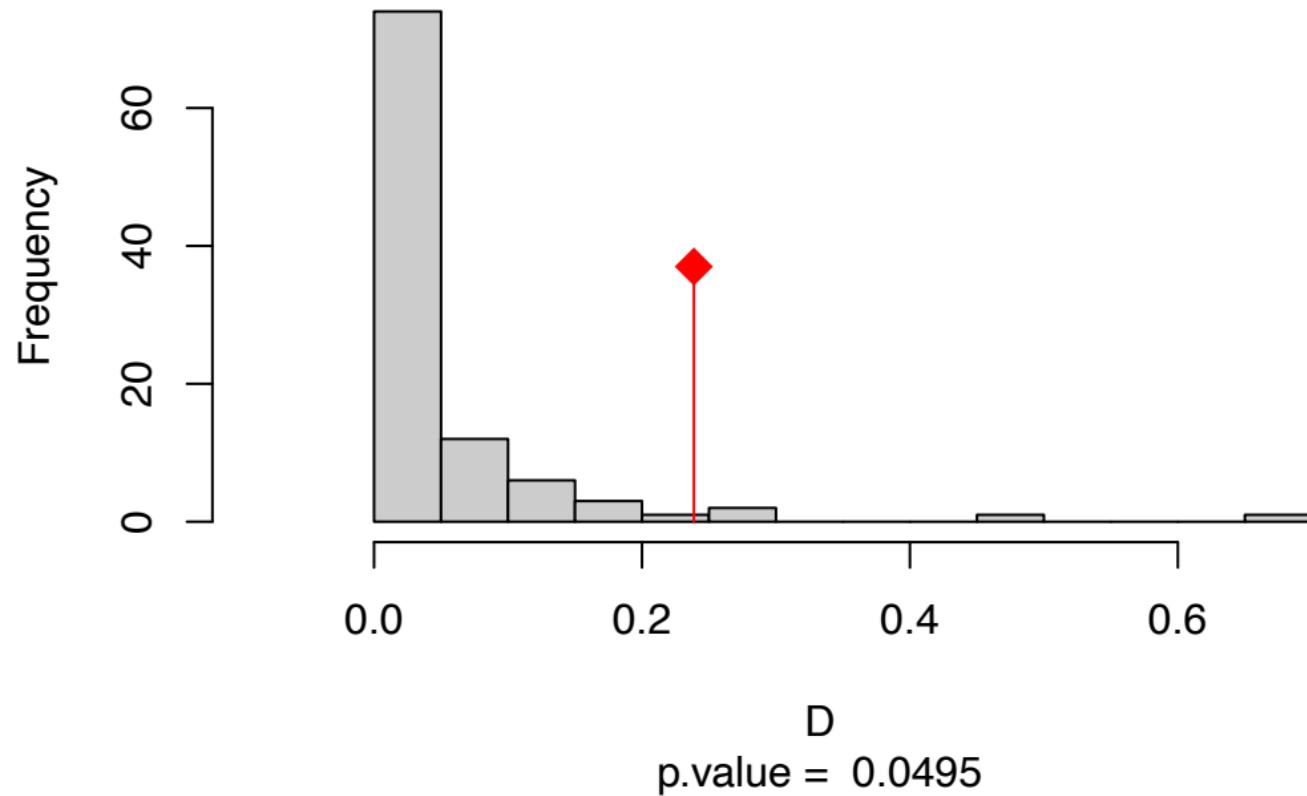


Figure S68

Similarity
Papiamenta
x
Non-Caribbean Pholcophora

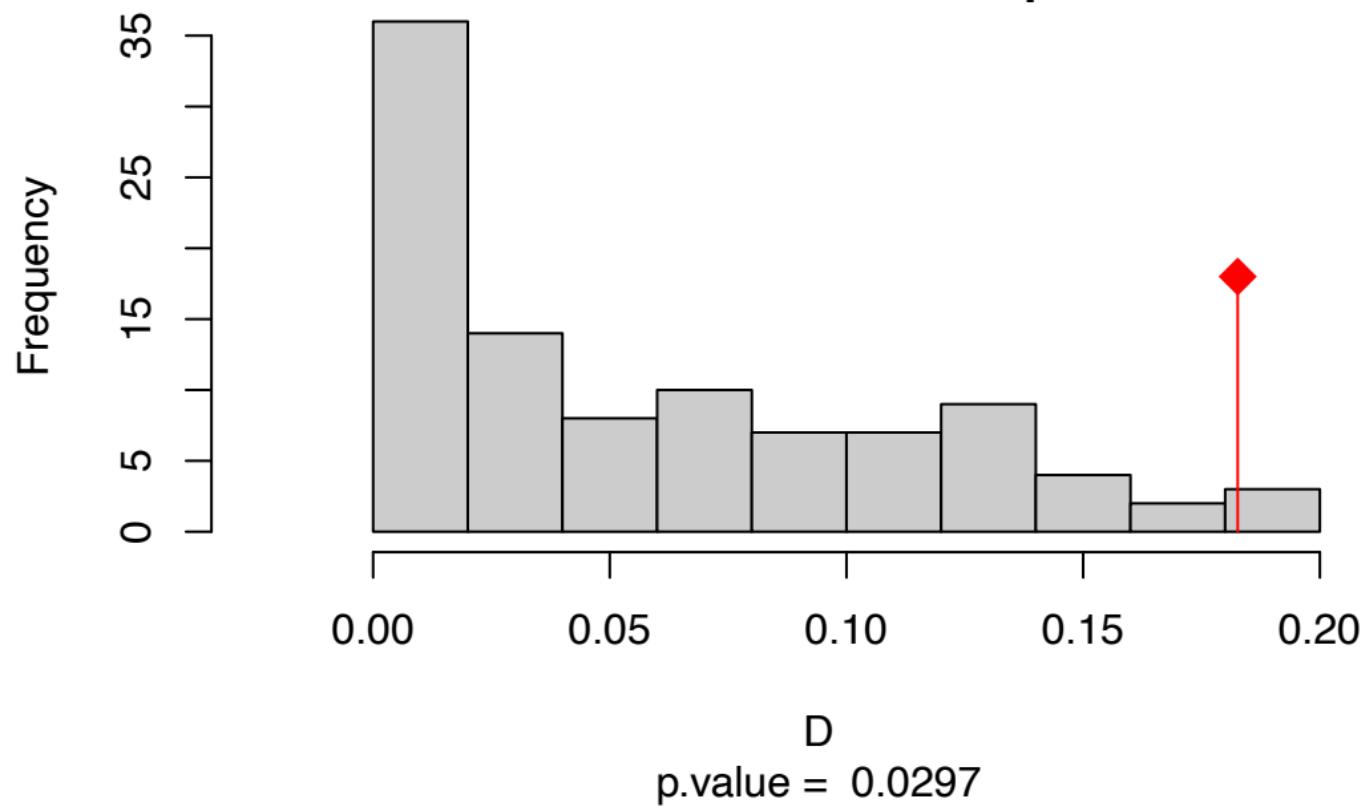


Figure S69

Similarity
Tolteca
 \times

Non-Caribbean Pholcophora

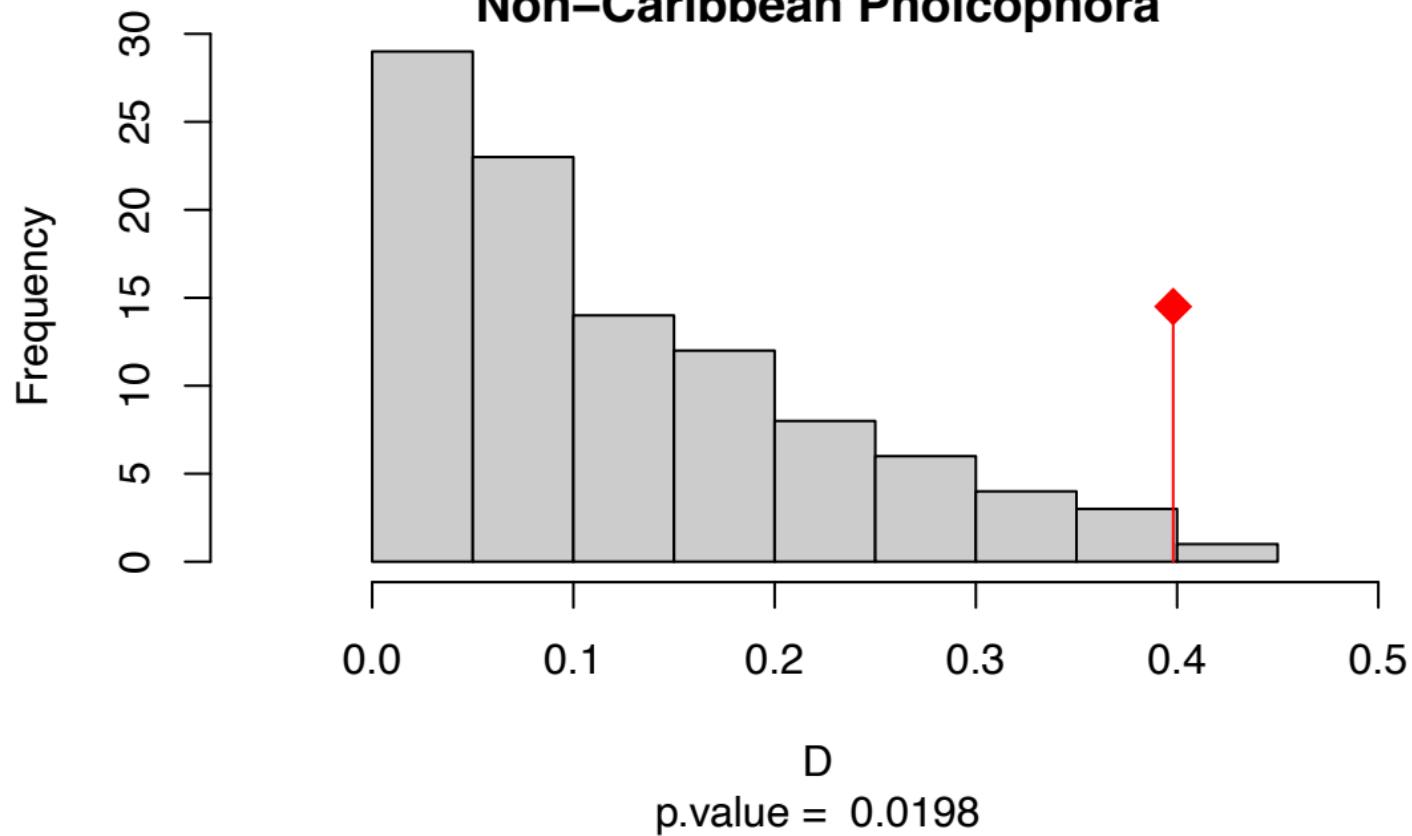


Figure S70

Similarity
Caribbean taxa
x
P. americana

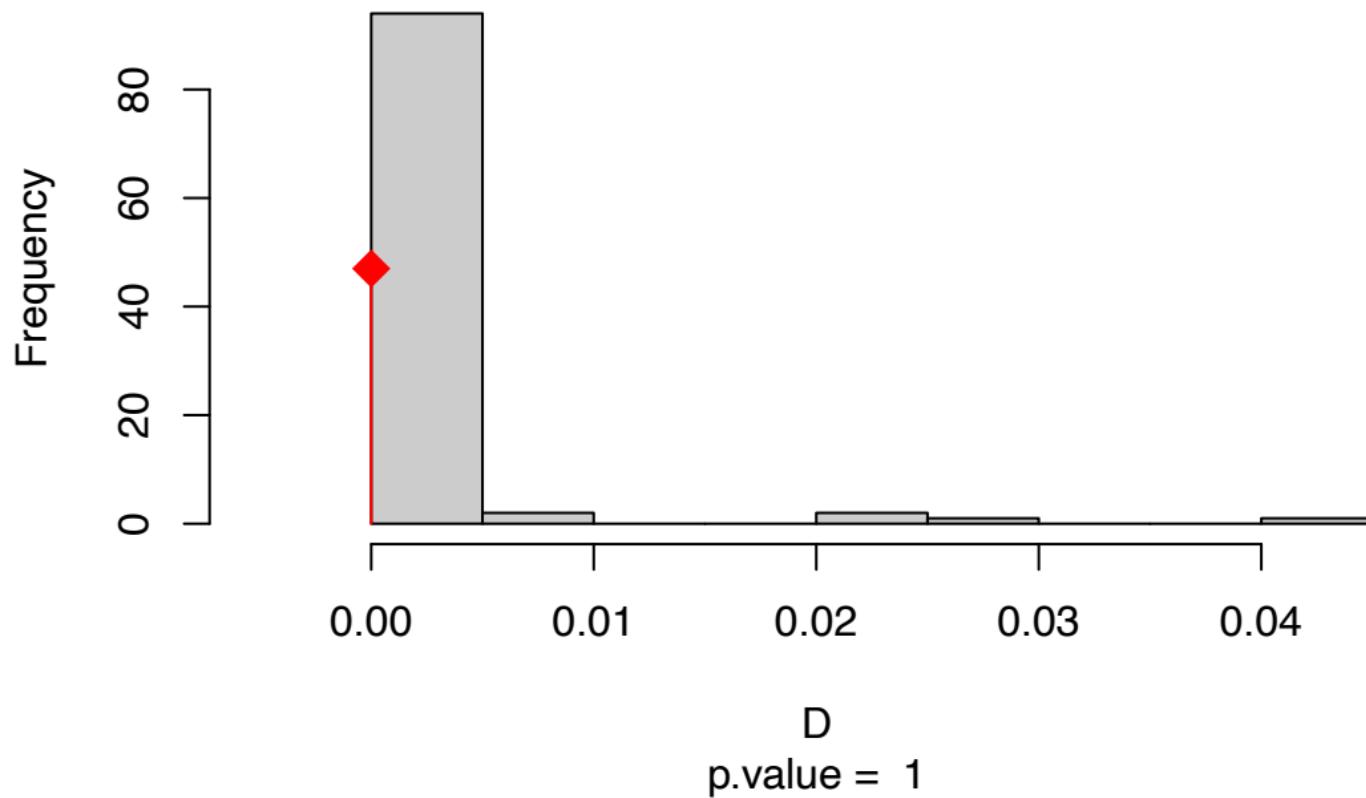


Figure S71

Similarity
Mexican Pholcophora
x
P. americana

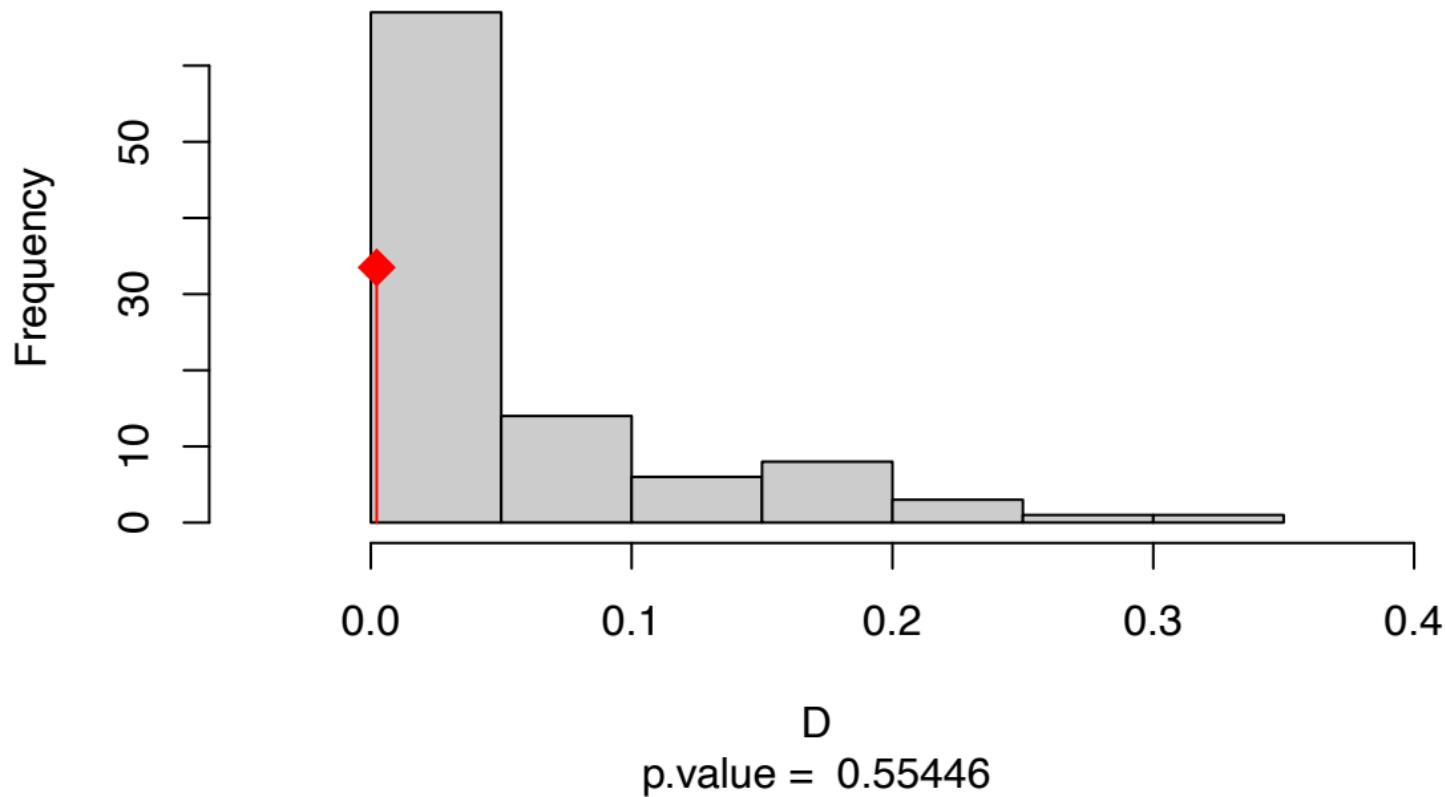


Figure S72

Similarity
Non-Caribbean Pholcophora
x
P. americana

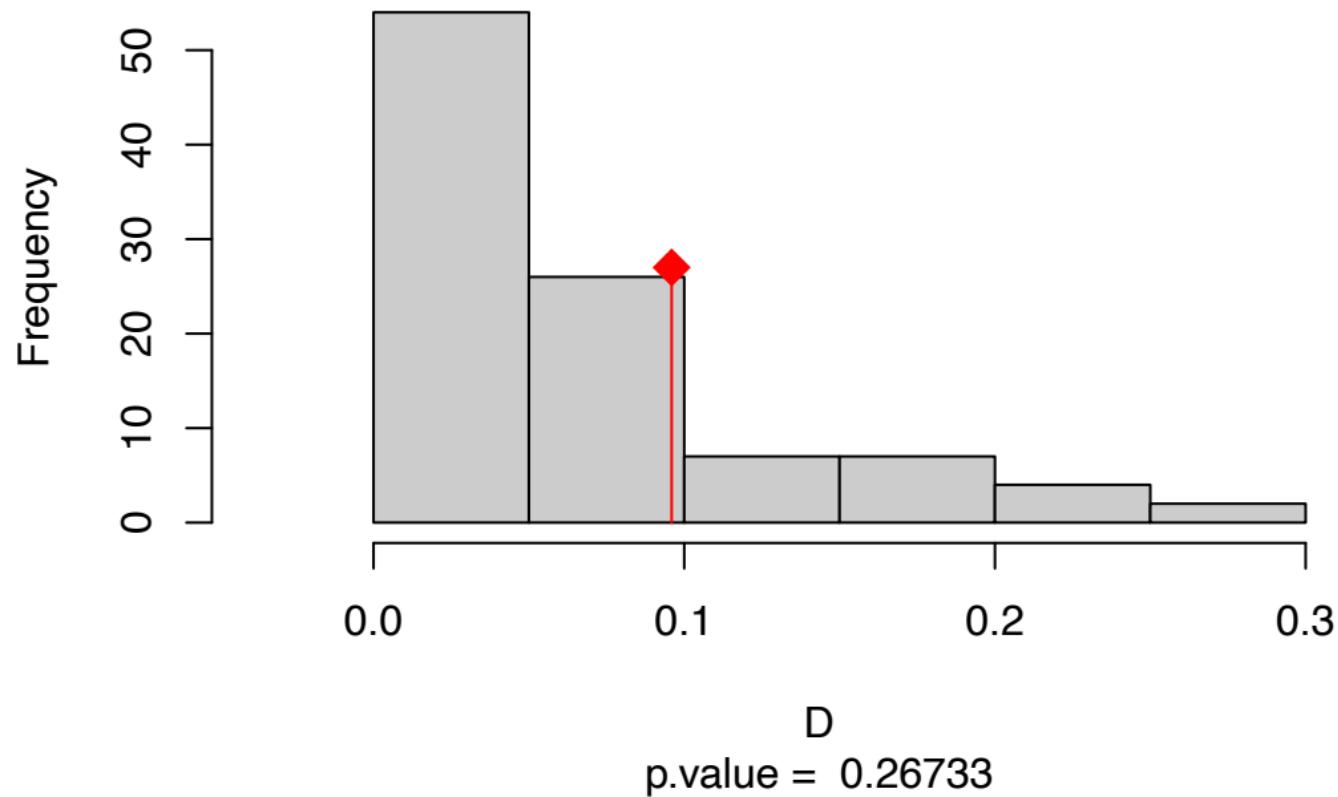


Figure S73

Similarity
Papiamenta
x
P. americana

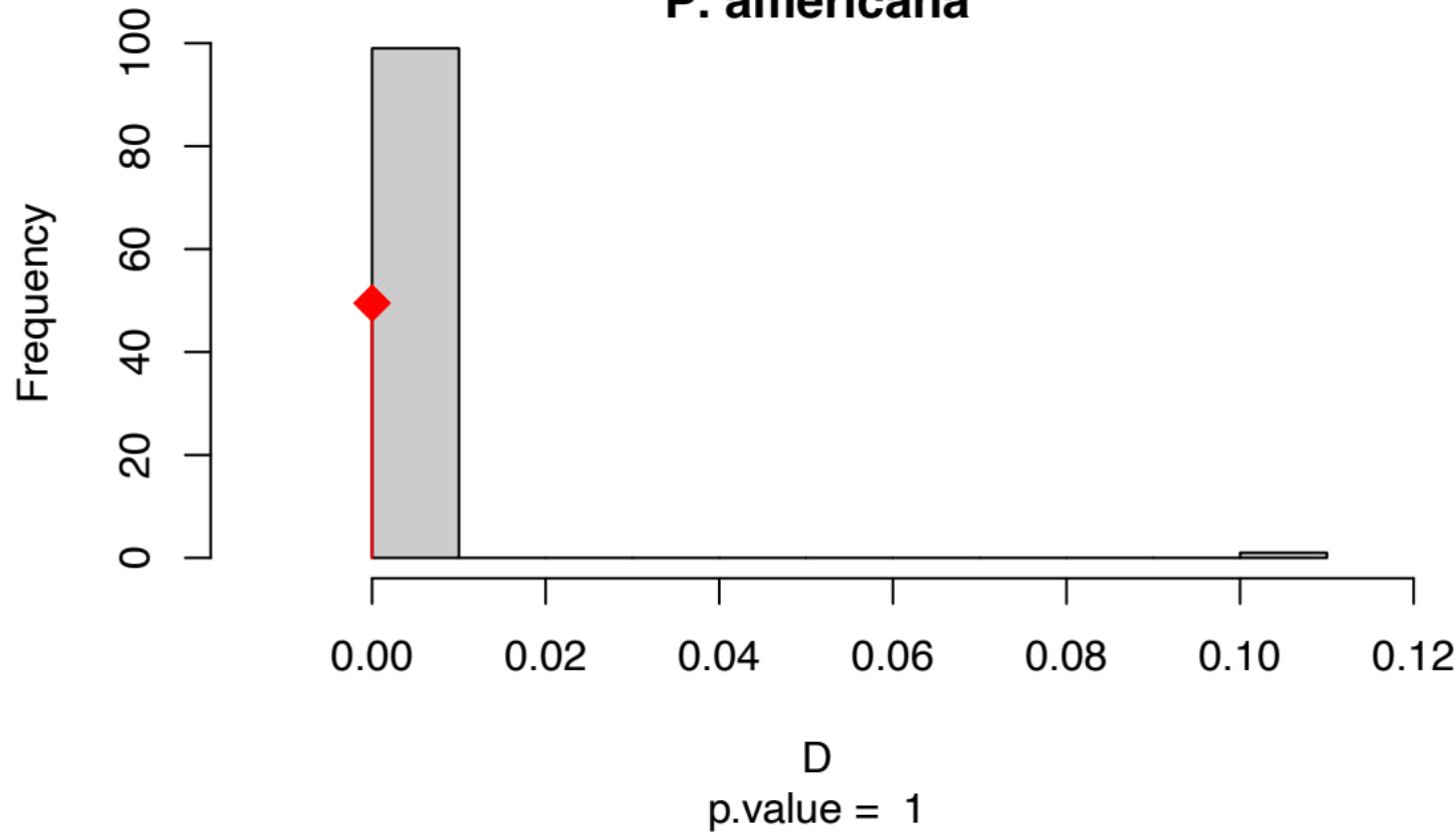


Figure S74

Similarity
Tolteca
x
P. americana

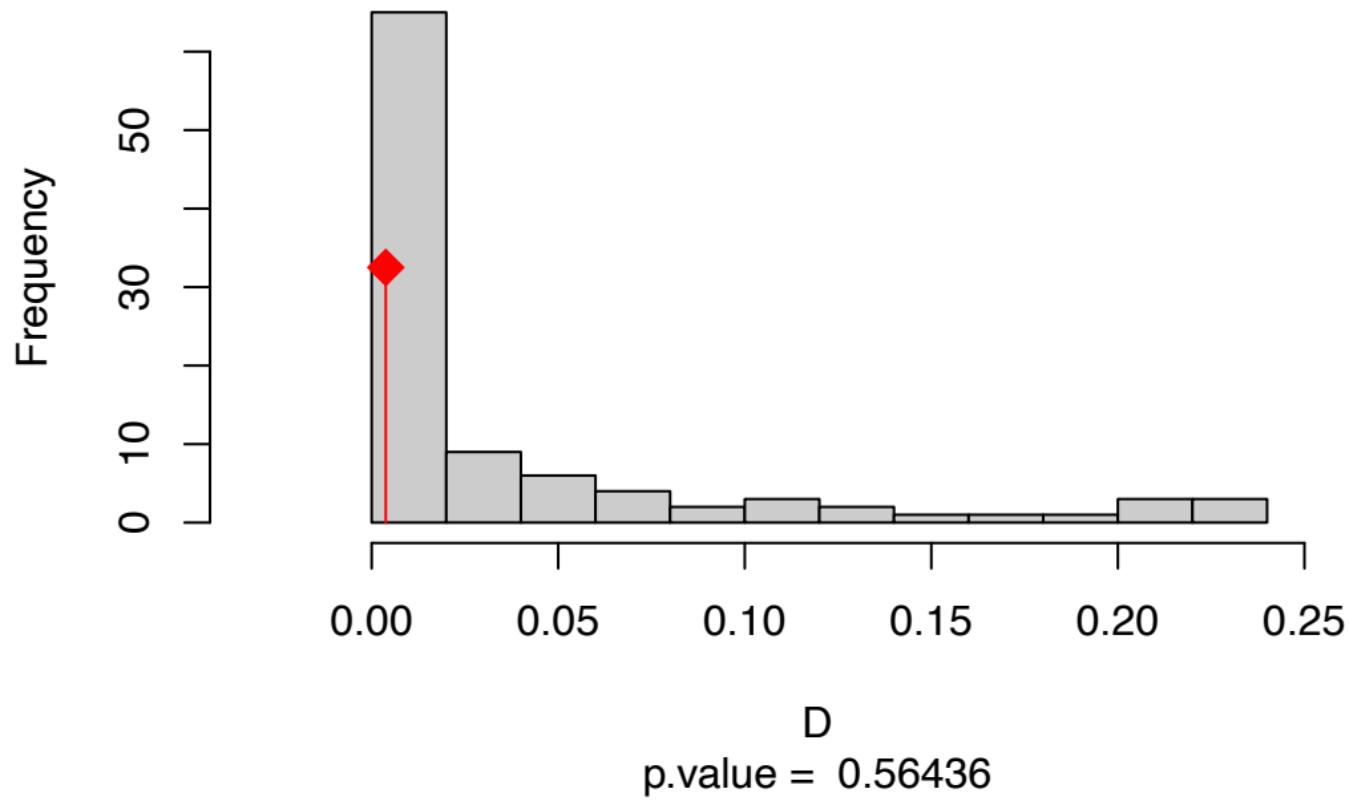
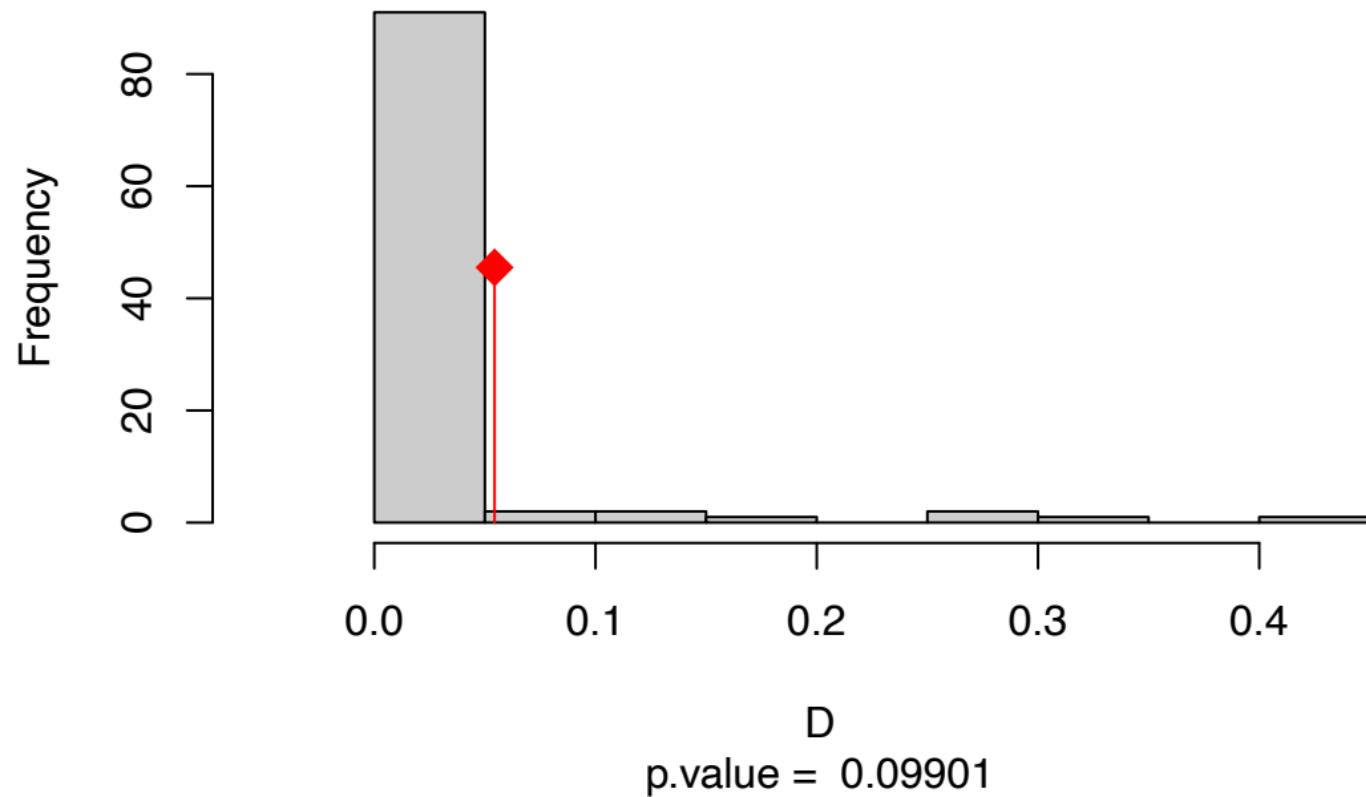


Figure S75

Similarity
Tolteca
x
Papiamenta



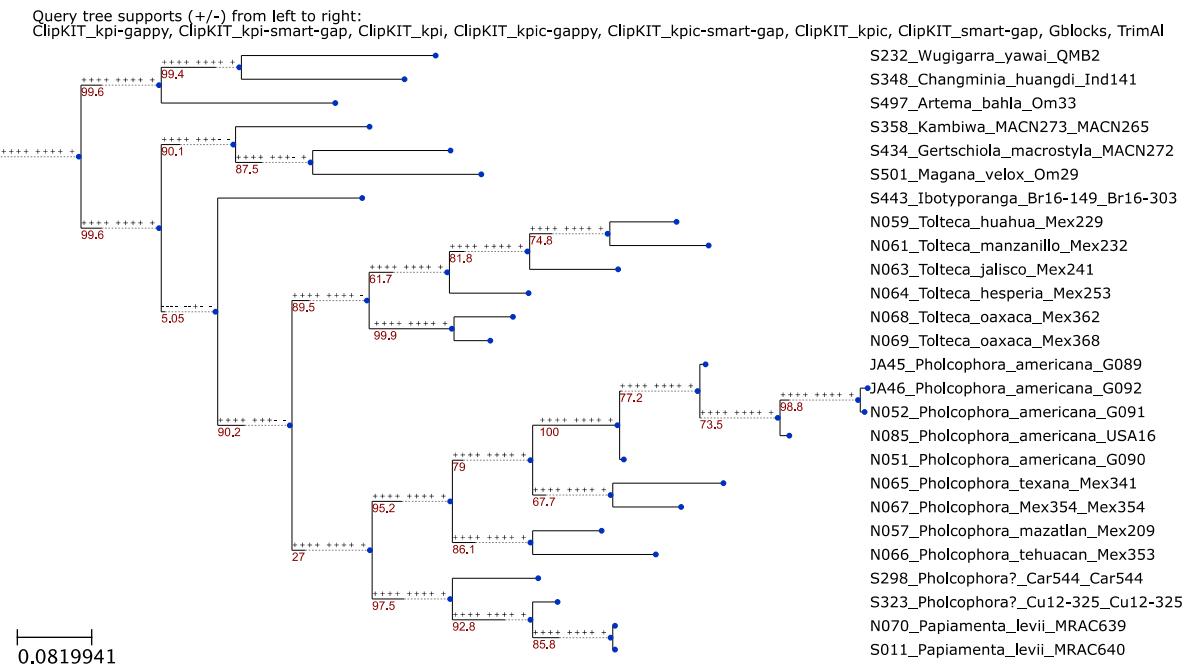


Figure S76. Summary tree of all trees using unpartitioned analysis. All the trees were constructed from the same gene set but with different multiple-sequence-alignment (MSA) trimming strategies. The ClipKIT_gappy tree was used as the reference tree, the trees (query trees) from other MSA-trimming strategies were compared to the reference tree, with '+' or '-' indicating that the query trees agree or disagree with the branching events, respectively. Numbers on the branches are SH-aLRT support (%). Best-fit model according to BIC for the reference tree: SYM+I+G4.

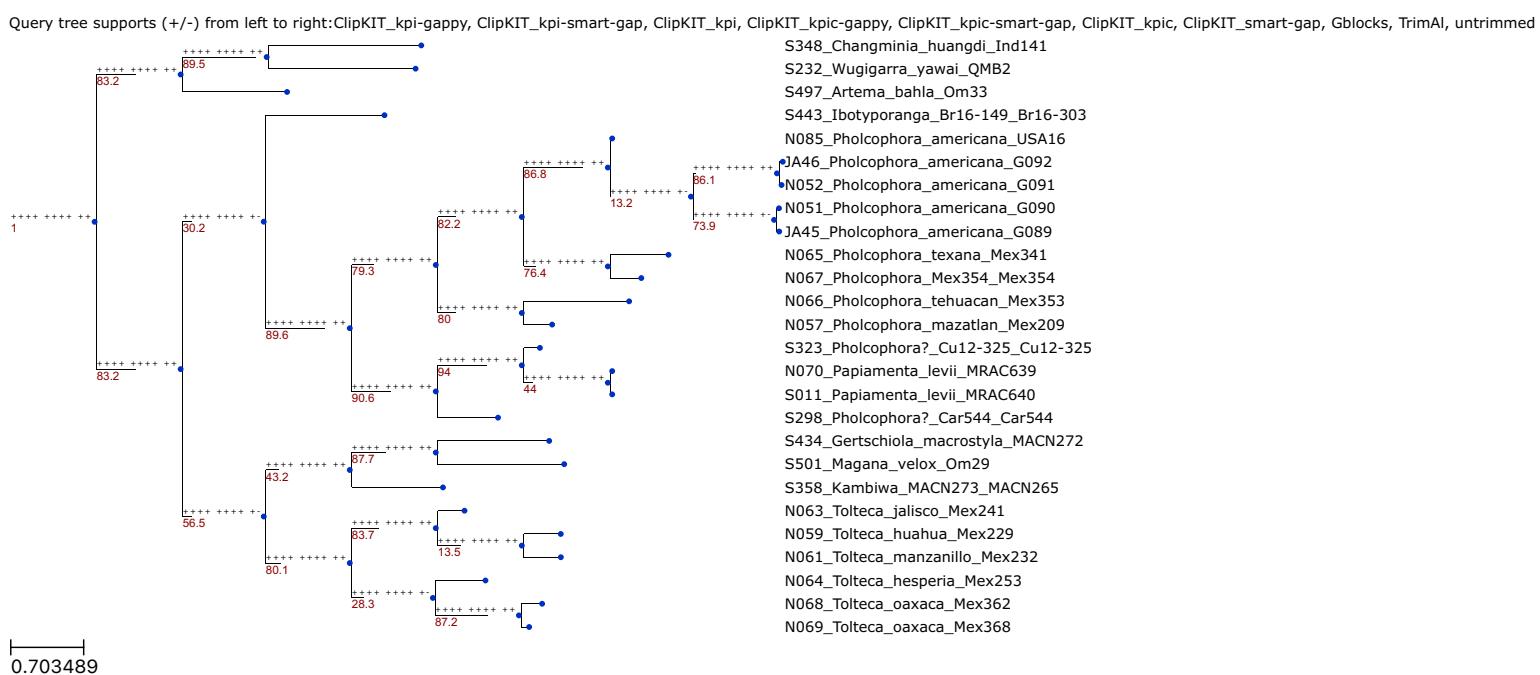


Figure S77. Summary tree of all trees using partitioned analysis. All the trees were constructed from the same gene set but with different multiple-sequence-alignment (MSA) trimming strategies or the untrimmed MSA. The ClipKIT_gappy tree was used as the reference tree, the trees (query trees) from other MSA-trimming strategies were compared to the reference tree, with '+' or '-' indicating that the query trees agree or disagree with the branching events, respectively. Numbers on the branches are SH-aLRT support (%).