Eggplant Data Summary

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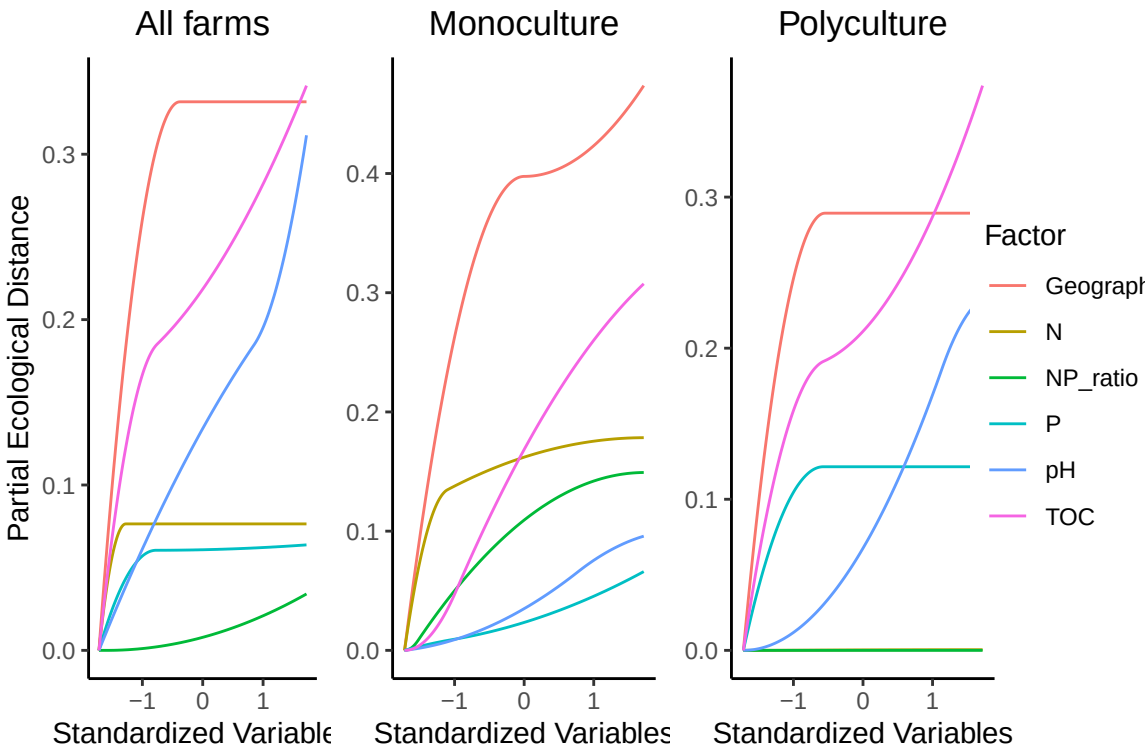
5/22/2020

ALL FUNGI

```
##                   Predictors Coefficients
## 1                 Geographic   0.33169872
## 2                         pH   0.31558702
## 3                          P   0.06383058
## 4                        TOC   0.34304736
## 5                          N   0.07647364
## 6                   NP_ratio   0.03447764
## 7 Percent Deviance Explained  40.07416460
```

```
##                   Predictors Coefficients
## 1                 Geographic   0.47525279
## 2                         pH   0.09608983
## 3                          P   0.06661869
## 4                        TOC   0.30841957
## 5                          N   0.17840319
## 6                   NP_ratio   0.14920165
## 7 Percent Deviance Explained  63.89519283
```

```
##                   Predictors Coefficients
## 1                 Geographic 2.893546e-01
## 2                         pH 2.332499e-01
## 3                          P 1.215231e-01
## 4                        TOC 3.761705e-01
## 5                          N 4.276065e-04
## 6                   NP_ratio 0.000000e+00
## 7 Percent Deviance Explained 4.727725e+01
```

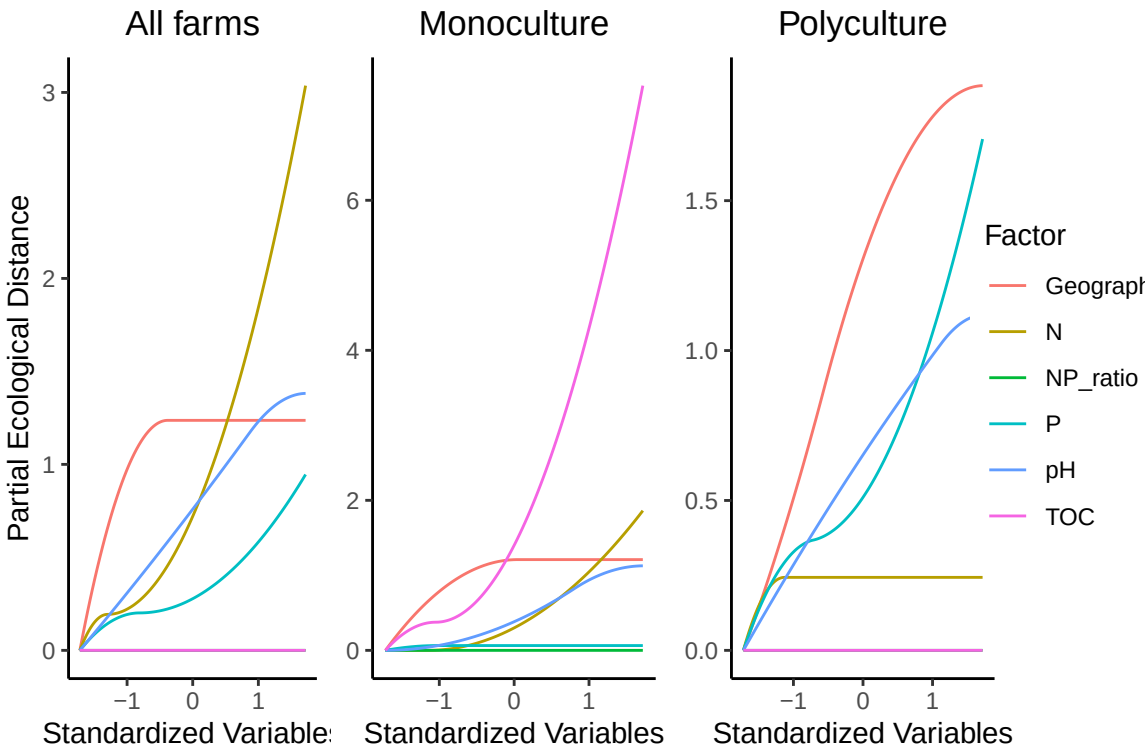


AMF FUNCTIONAL GROUP

```
##                   Predictors Coefficients
## 1                 Geographic    1.2367782
## 2                         pH    1.3819156
## 3                          P    0.9558133
## 4                        TOC    0.0000000
## 5                          N    3.0691521
## 6                  NP_ratio    0.0000000
## 7 Percent Deviance Explained   22.8850915
```

```
##                   Predictors Coefficients
## 1                 Geographic   1.20982959
## 2                         pH   1.12730054
## 3                          P   0.06412046
## 4                        TOC   7.61802794
## 5                          N   1.88468079
## 6                  NP_ratio   0.00000000
## 7 Percent Deviance Explained  31.77956552
```

```
##                   Predictors Coefficients
## 1                 Geographic     1.883742
## 2                         pH     1.118495
## 3                          P     1.723688
## 4                        TOC     0.000000
## 5                          N     0.243469
## 6                  NP_ratio     0.000000
## 7 Percent Deviance Explained    28.156667
```

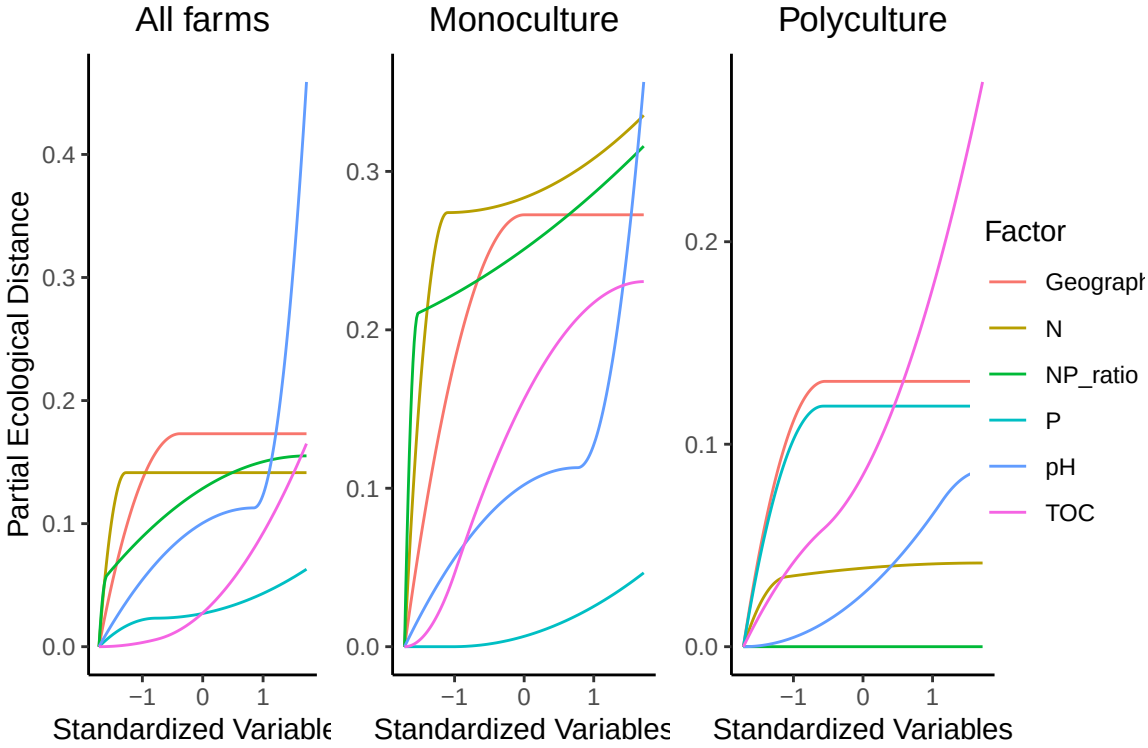

All farms
Monoculture
Polyculture
Partial Ecological Distance
Standardized Variables
Factor
Geograph
N
NP_ratio
P
pH
TOC

PLANT PATHOGENS

```
##                   Predictors Coefficients
## 1                 Geographic   0.17303963
## 2                         pH   0.47274494
## 3                          P   0.06349895
## 4                        TOC   0.16698209
## 5                          N   0.14142497
## 6                   NP_ratio   0.15507284
## 7 Percent Deviance Explained  18.08062300
```

```
##                   Predictors Coefficients
## 1                 Geographic   0.27261366
## 2                         pH   0.36540038
## 3                          P   0.04719992
## 4                        TOC   0.23047528
## 5                          N   0.33617783
## 6                   NP_ratio   0.31668991
## 7 Percent Deviance Explained  45.22521741
```

```
##                   Predictors Coefficients
## 1                 Geographic    0.1310442
## 2                         pH    0.0869251
## 3                          P    0.1188100
## 4                        TOC    0.2817226
## 5                          N    0.0413368
## 6                   NP_ratio    0.0000000
## 7 Percent Deviance Explained   18.6587415
```

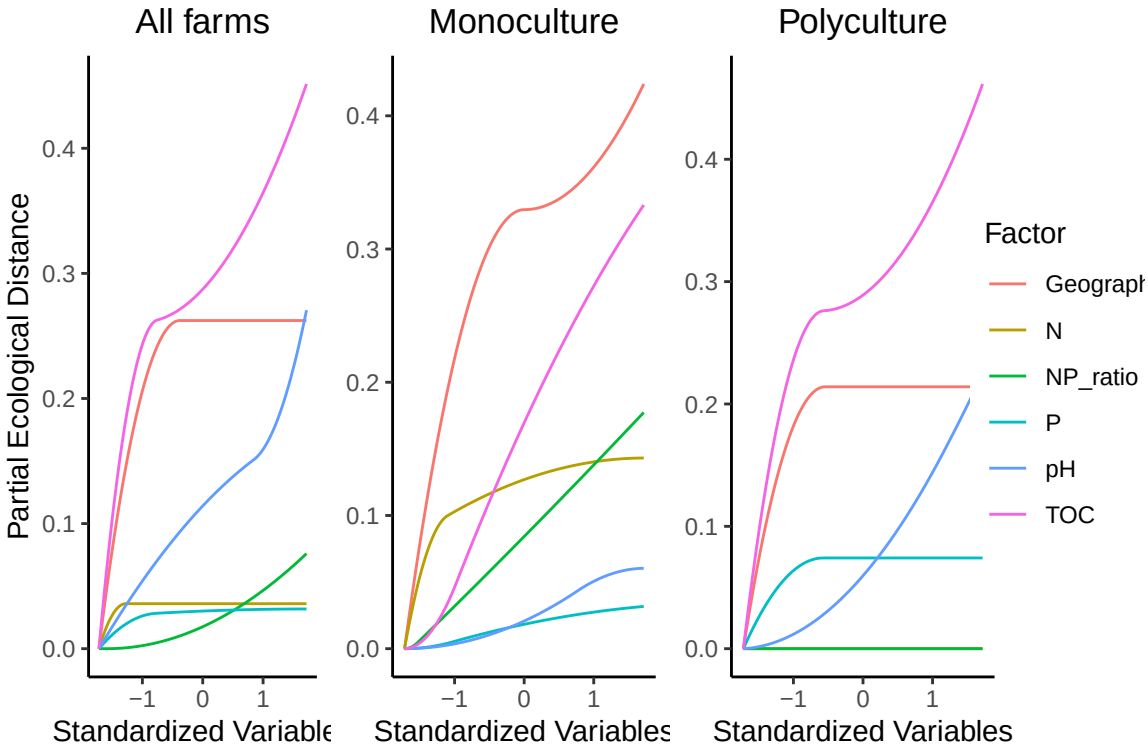


SAPROTROPHS

```
##                   Predictors Coefficients
## 1                 Geographic   0.26232202
## 2                         pH   0.27471883
## 3                          P   0.03174317
## 4                        TOC   0.45382871
## 5                          N   0.03596275
## 6                   NP_ratio   0.07680851
## 7 Percent Deviance Explained  31.73940496
```

```
##                   Predictors Coefficients
## 1                 Geographic   0.42580132
## 2                         pH   0.06034367
## 3                          P   0.03179665
## 4                        TOC   0.33436918
## 5                          N   0.14312819
## 6                   NP_ratio   0.17827246
## 7 Percent Deviance Explained  55.70667021
```

```
##                   Predictors Coefficients
## 1                 Geographic   0.21403226
## 2                         pH   0.22678401
## 3                          P   0.07414201
## 4                        TOC   0.46429541
## 5                          N   0.00000000
## 6                   NP_ratio   0.00000000
## 7 Percent Deviance Explained  38.69539243
```

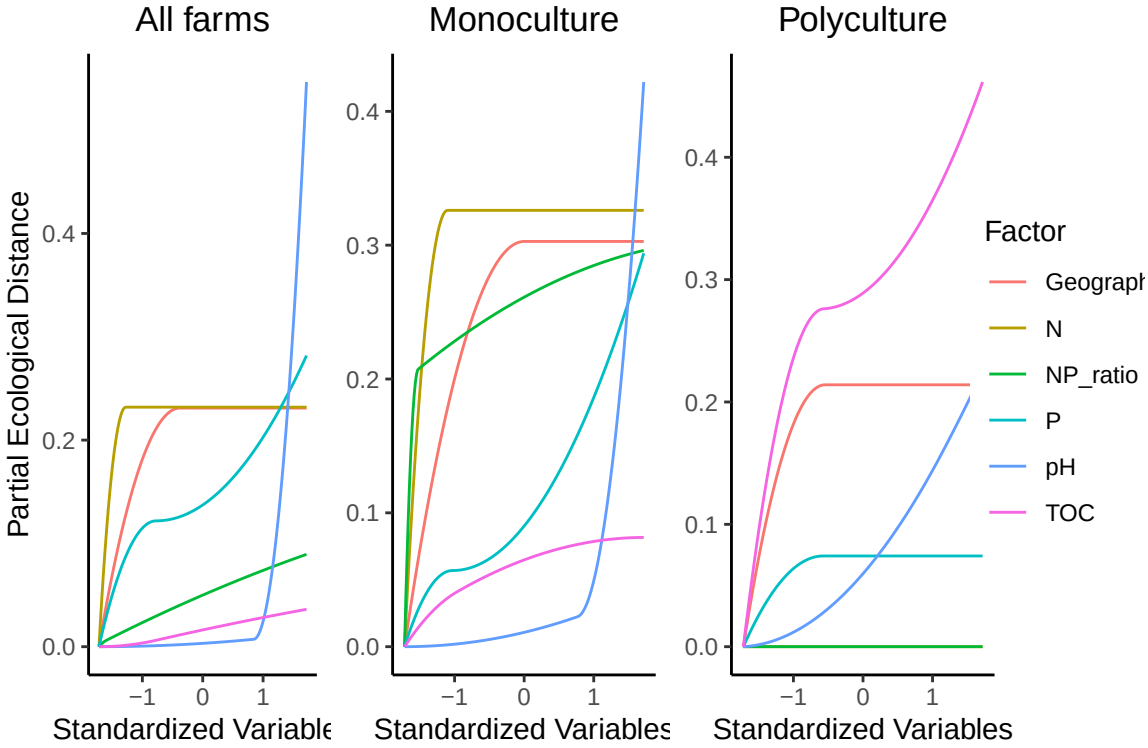


FUNGAL PARASITE

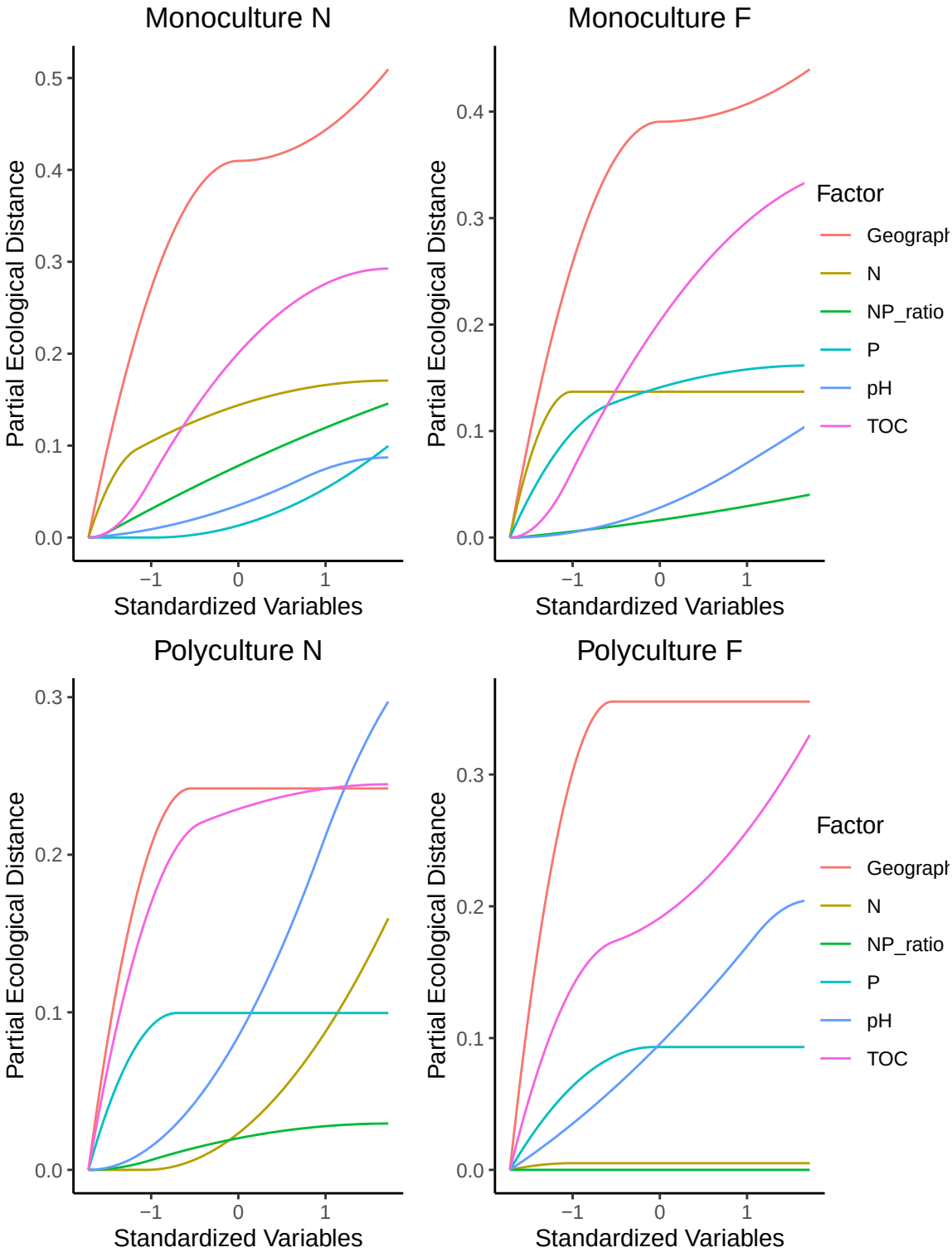
```
##                   Predictors Coefficients
## 1                 Geographic   0.23097088
## 2                         pH   0.56814033
## 3                          P   0.28403666
## 4                        TOC   0.03635634
## 5                          N   0.23186113
## 6                   NP_ratio   0.08975036
## 7 Percent Deviance Explained  17.91610620
```

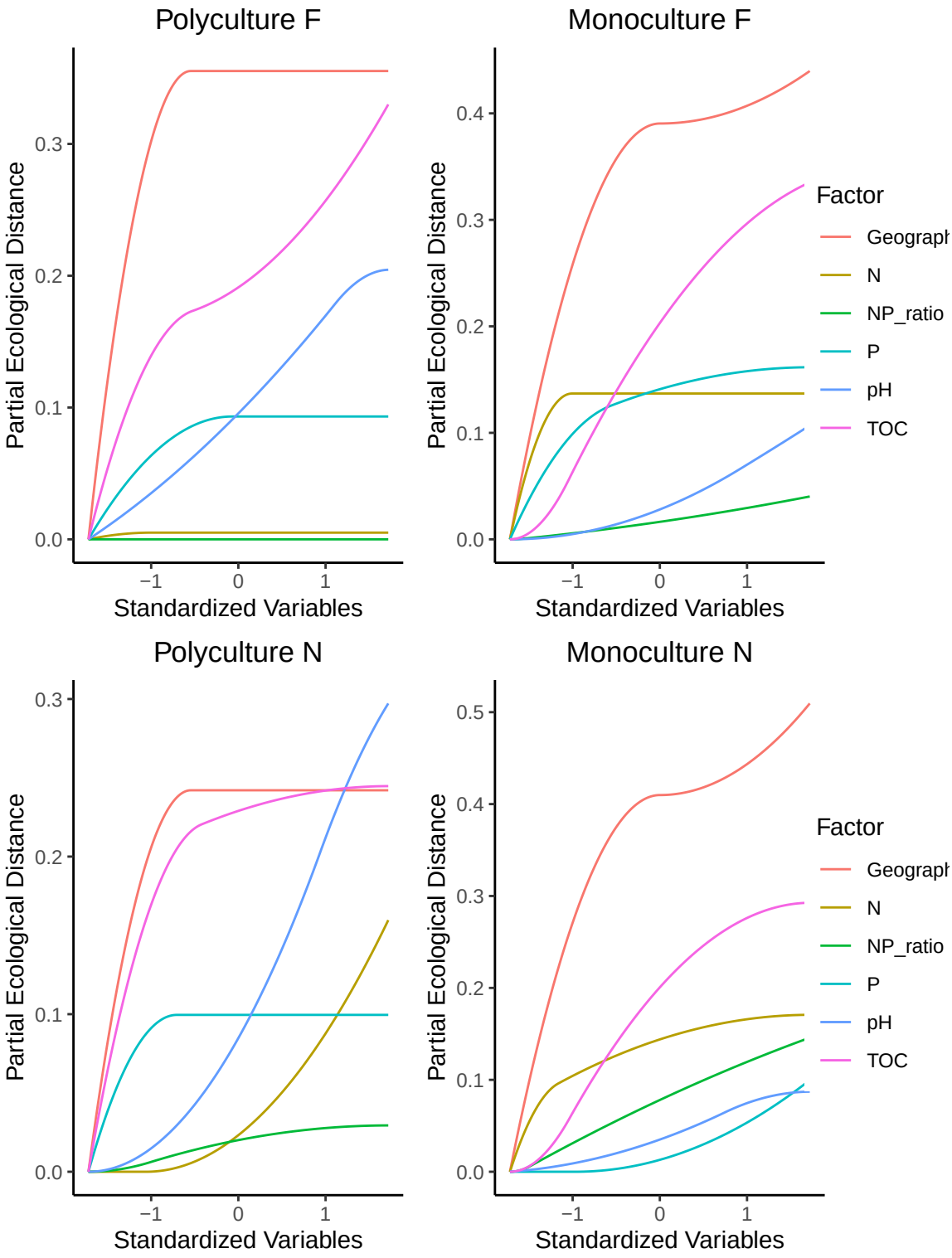
```
##                   Predictors Coefficients
## 1                 Geographic   0.30280038
## 2                         pH   0.43630198
## 3                          P   0.29692870
## 4                        TOC   0.08163616
## 5                          N   0.32603574
## 6                   NP_ratio   0.29629935
## 7 Percent Deviance Explained  36.39304479
```

```
##                   Predictors Coefficients
## 1                 Geographic   0.18866106
## 2                         pH   0.15598472
## 3                          P   0.16703628
## 4                        TOC   0.24263087
## 5                          N   0.08973029
## 6                   NP_ratio   0.00000000
## 7 Percent Deviance Explained  15.42002246
```

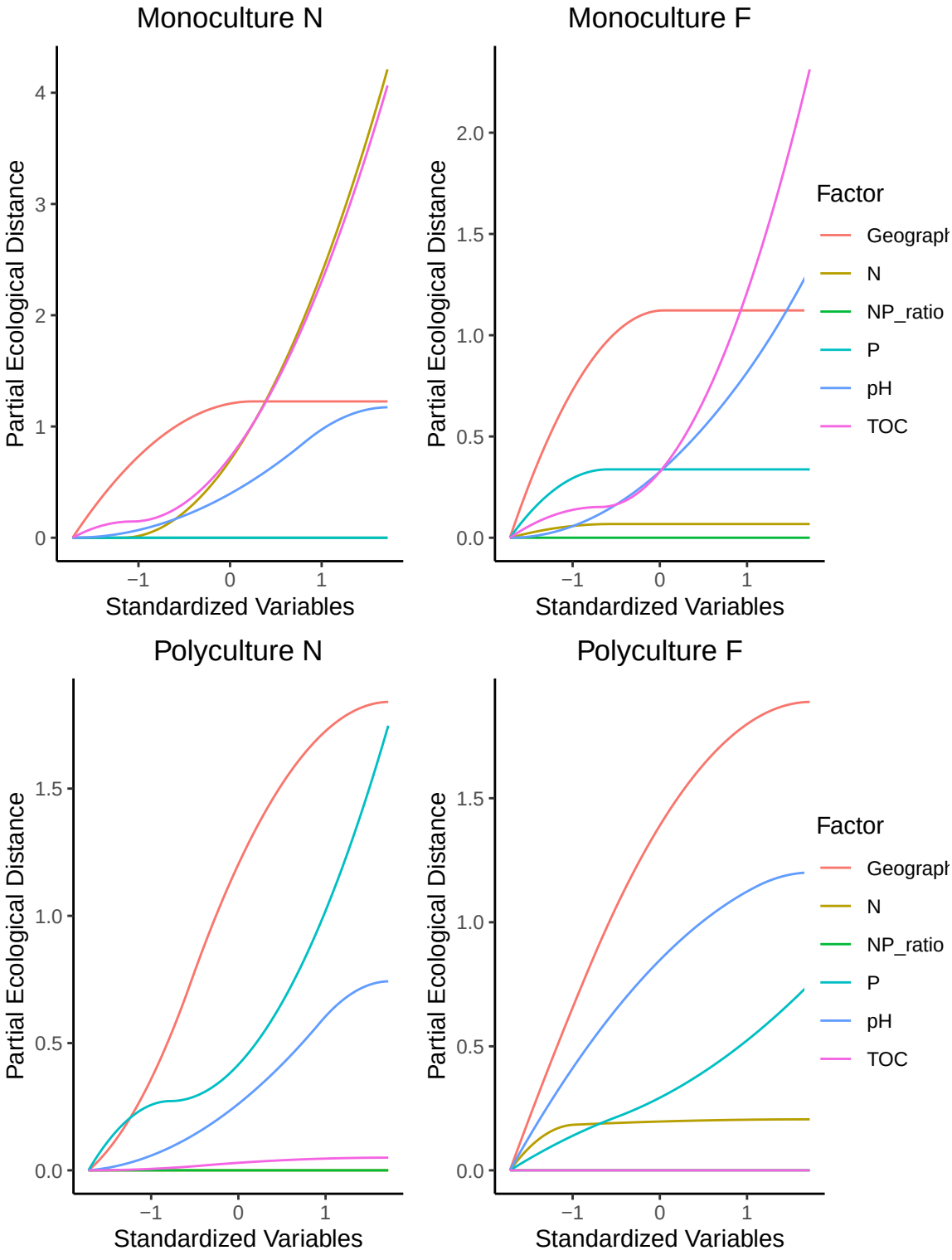


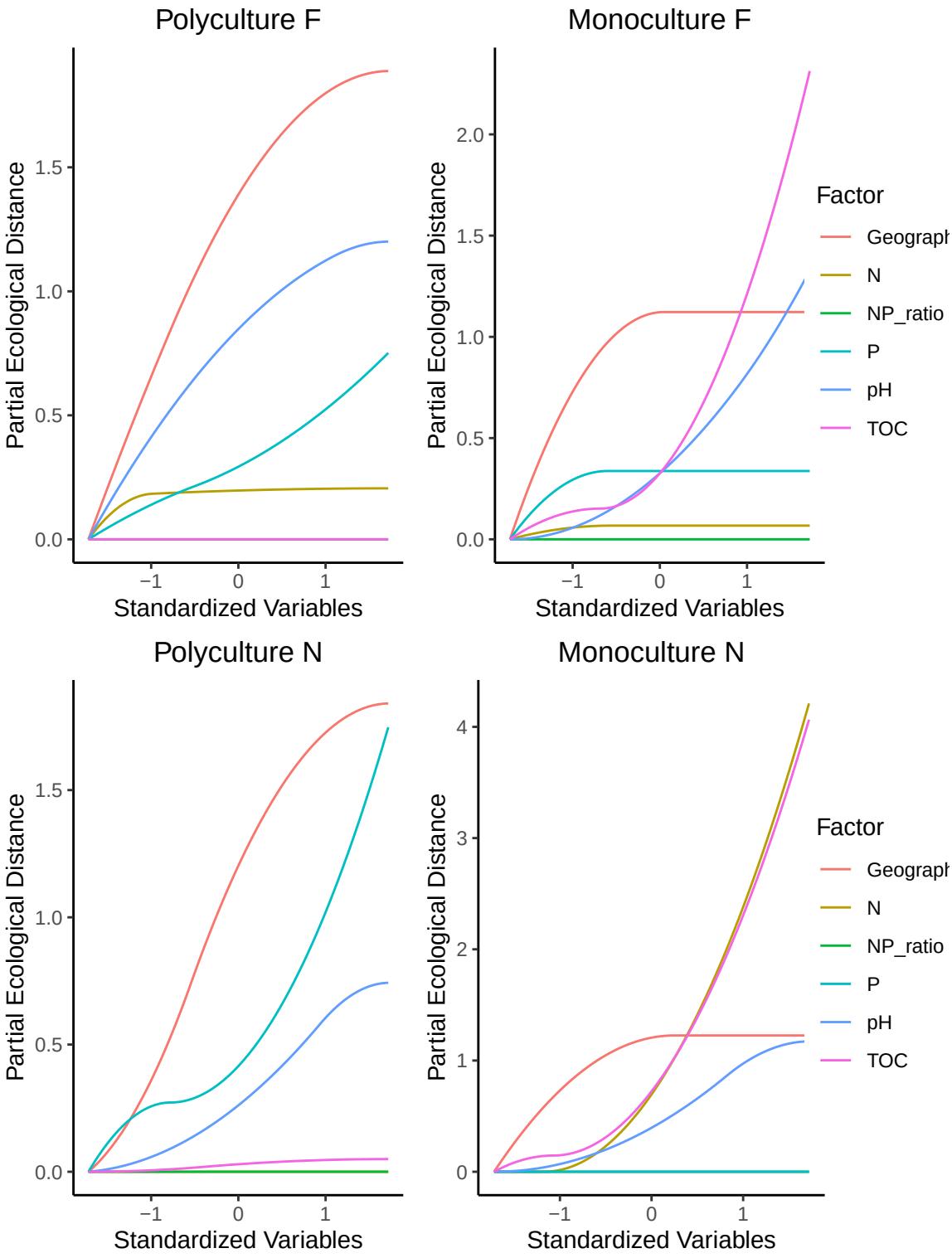
All Fungi FTBL Groups




Polyculture F
Monoculture F
Polyculture N
Monoculture N
Partial Ecological Distance
Standardized Variables
Factor
Geograph
N
NP_ratio
P
pH
TOC

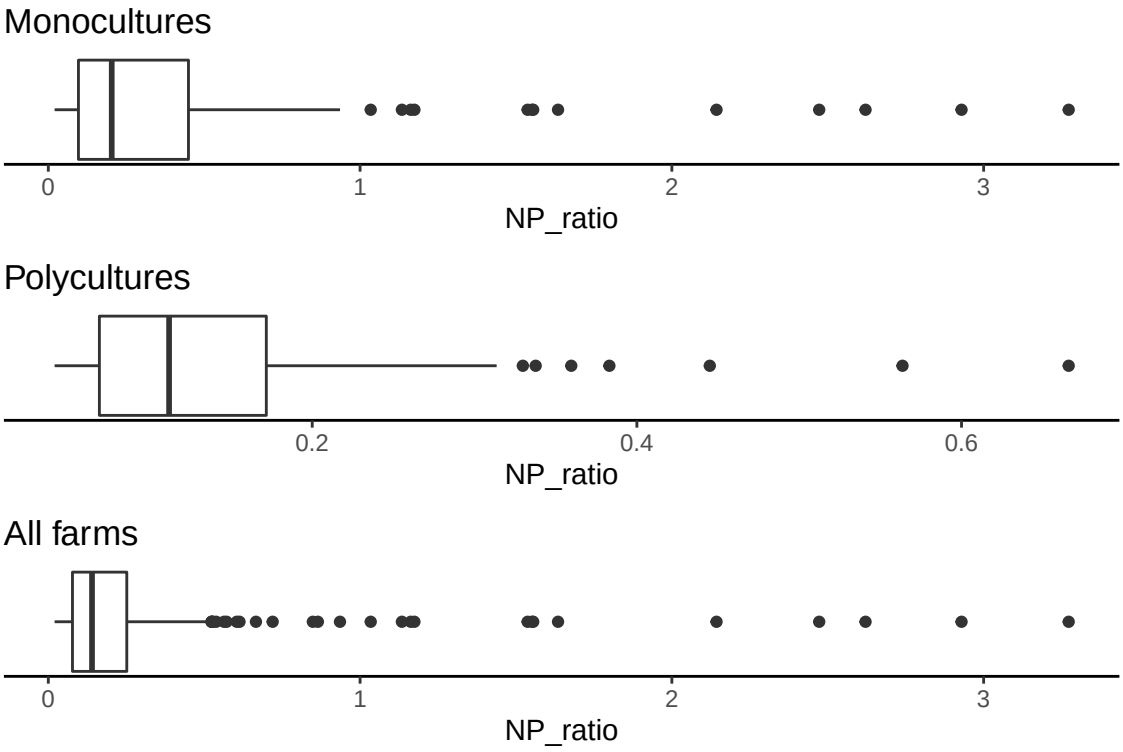
AMF FTBL Groups




Polyculture F
Monoculture F
Polyculture N
Monoculture N
Partial Ecological Distance
Standardized Variables
Factor
Geograph
N
NP_ratio
P
pH
TOC

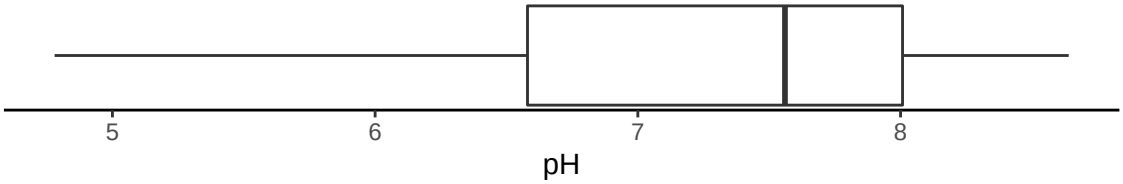
Box Plots of environmental range

NP Ratio

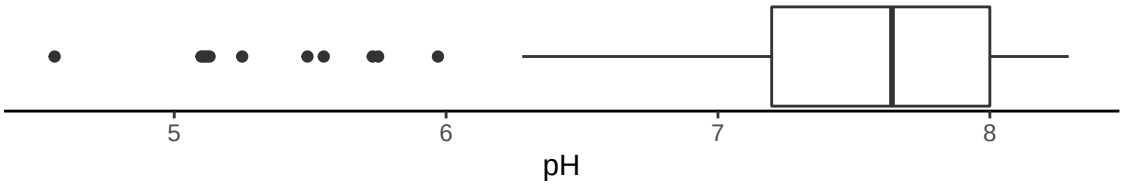


pH

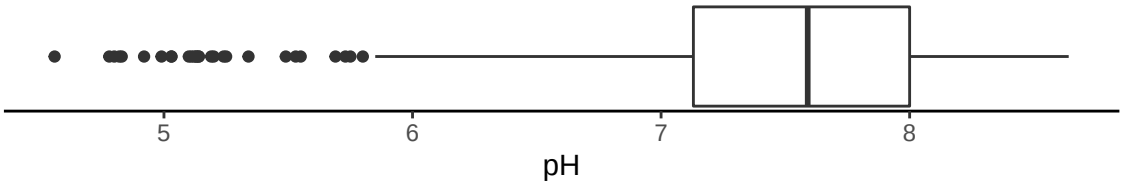
Monocultures



Polycultures

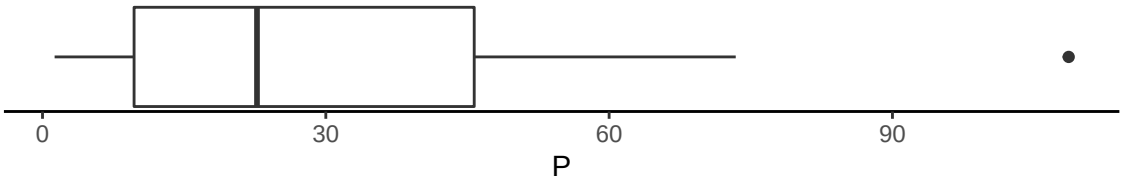


All farms

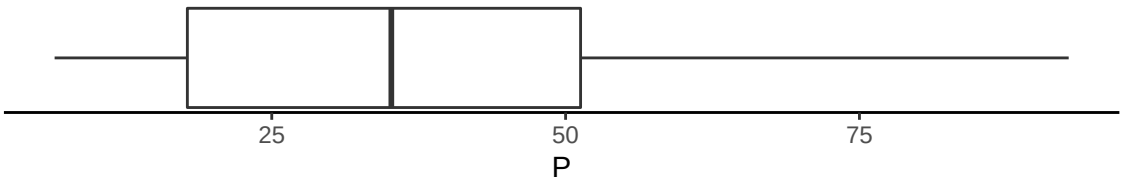


P

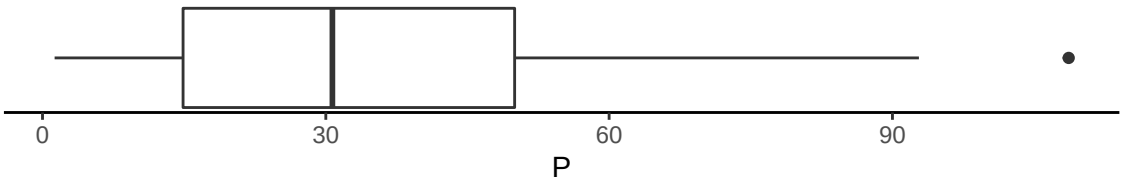
Monocultures



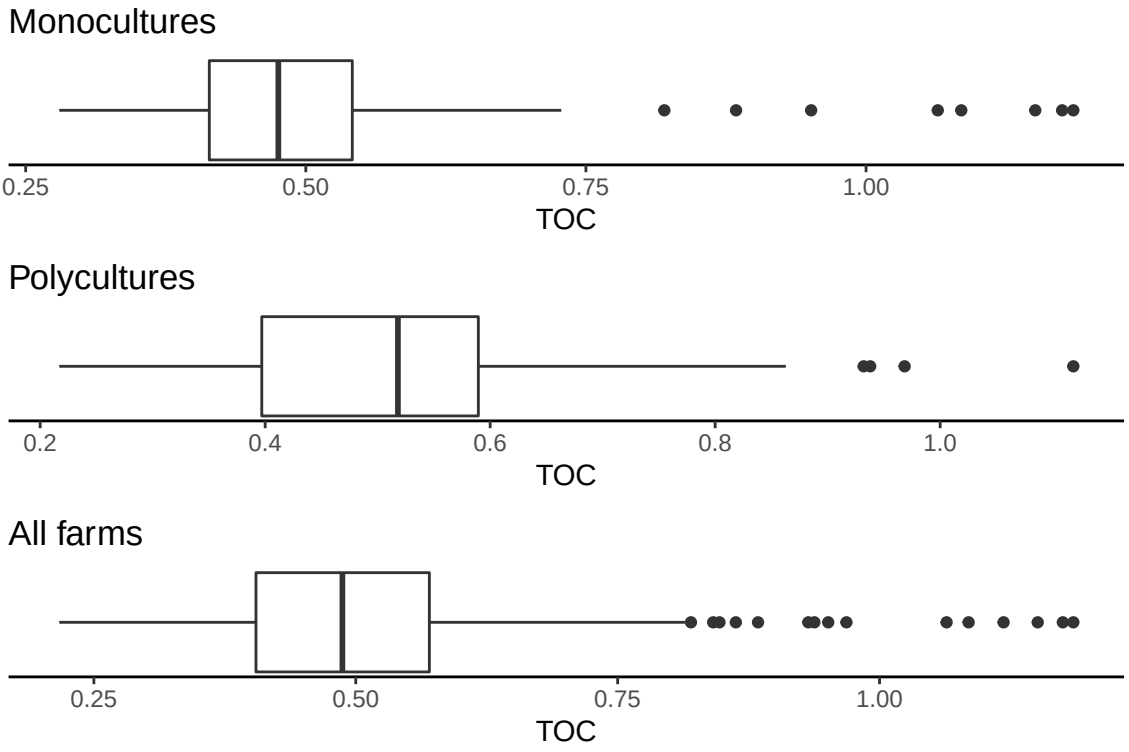
Polycultures



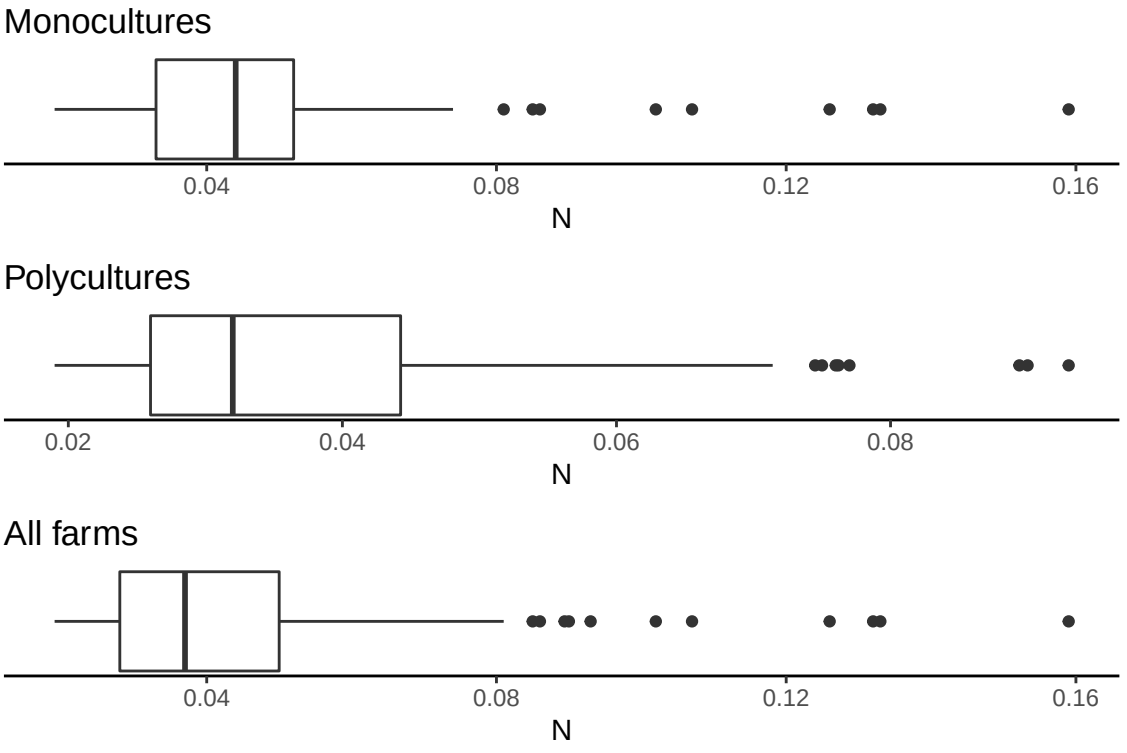
All farms



TOC


Monocultures
0.25
0.50
0.75
1.00
TOC
Polycultures
0.2
0.4
0.6
0.8
1.0
TOC
All farms
0.25
0.50
0.75
1.00
TOC

N


Monocultures
0.04
0.08
0.12
0.16
N
Polycultures
0.02
0.04
0.06
0.08
N
All farms
0.04
0.08
0.12
0.16
N