**STable 5.**  A) Phyla and B) Classes significantly different across season at FDR adjusted *P* values < 0.05 (\*), < 0.01 (\*\*),and <0.001 (\*\*\*). Letters indicate Tukey’s test with the same letter indicating no significant difference at *P* < 0.05.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2015 |  |  |  | 2016 |  |  |  |
| 1. Phylum | Spring | Mid | Fall | *P* value | Spring | Mid | Fall | *P* value |
| Ascomycota | a | b | a | < 0.001\*\*\* | a | c | b | 0.002\*\* |
| Mortierellomycotina | b | a | a | < 0.001\*\*\* | b | a | a | 0.02\* |
| Chytridiomycota | a | b | b | 0.002\*\* | a | a | a | 0.44 |
| Glomeromycotina | b | b | a | < 0.001\*\*\* | b | b | a | < 0.001\*\*\* |
| Basidiomycota | a | ab | b | 0.04\* | a | a | a | 0.98 |
| Unidentified | b | a | b | 0.008\*\* | c | a | b | < 0.001\*\*\* |
| 1. Class |  |  |  |  |  |  |  |  |
| Sordariomycetes | b | a | a | 0.03\* | c | a | b | < 0.001\*\*\* |
| Mortierellomycotina\_cls\_Incertae\_sedis | b | a | a | < 0.001\*\*\* | b | a | a | 0.03\* |
| Glomeromycetes | b | b | a | 0.01\* | b | b | a | < 0.001\*\*\* |
| Orbiliomycetes | a | a | a | 0.18 | a | b | a | < 0.001\*\*\* |
| Dothideomycetes | a | b | c | < 0.001\*\*\* | a | b | ab | 0.004\*\* |
| Pezizomycotina\_cls\_Incertae\_sedis | a | a | a | 0.51 | a | a | a | 0.079 |
| Leotiomycetes | a | a | a | 0.18 | a | b | a | 0.004\*\* |
| Eurotiomycetes | a | a | a | 0.12 | a | b | a | <0.001\*\*\* |
| 1. Genera |  |  |  |  |  |  |  |  |
| Mortierella | b | a | b | 0.012\* | a | a | a | 0.7 |
| Leptosphaeria | a | b | b | <0.001\*\*\* | a | a | a | 0.6 |
| Nectria | a | a | a | 0.6 | b | a | b | 0.002\*\* |
| Exophiala | a | a | a | 0.6 | b | b | a | 0.001\*\*\* |
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