

# Do the impacts of alien invasive plants differ from expansive native ones? An experimental study on arbuscular mycorrhizal fungi communities

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## Supplementary material

**Table S3.** The results of discriminant analysis. The values of Wilks' *lambda*, partial Wilks' *lambda*, F to remove and p values for mycorrhizal community attributes and basic soil chemical parameters as a result of discriminant analysis for 'fallow' and 'valley' treatments. Standardized coefficients for canonical variables as a result of canonical discriminant analysis are also provided. Values for which discriminant functions are most weighted are given in bold. See the Materials and Methods for a description of variables.

| Fallow soil                    |                      |                              |                   |       |               |               |
|--------------------------------|----------------------|------------------------------|-------------------|-------|---------------|---------------|
| Character                      | Wilks' <i>lambda</i> | partial Wilks' <i>lambda</i> | F to remove value | p     | Root 1        | Root 2        |
| pH                             | 0.000035             | 0.522                        | 3.892             | 0.002 | 0.370         | -0.250        |
| N-NH <sub>4</sub> <sup>+</sup> | 0.000098             | 0.188                        | 18.359            | 0.000 | -0.175        | <b>-0.884</b> |
| The number of AMF spores       | 0.000042             | 0.436                        | 5.489             | 0.000 | 0.118         | <b>0.502</b>  |
| 16:1ω5 PLFA                    | 0.000054             | 0.343                        | 8.140             | 0.000 | -0.260        | 0.485         |
| P <sub>T</sub>                 | 0.000031             | 0.586                        | 3.000             | 0.012 | <b>0.934</b>  | 0.127         |
| P <sub>EX</sub>                | 0.000039             | 0.472                        | 4.759             | 0.001 | <b>-0.654</b> | 0.333         |
| K <sub>EX</sub>                | 0.00004              | 0.46                         | 4.986             | 0.000 | <b>-0.830</b> | -0.816        |
| Ca <sub>EX</sub>               | 0.000044             | 0.416                        | 5.963             | 0.000 | <b>1.274</b>  | <b>0.637</b>  |
| K <sub>T</sub>                 | 0.000026             | 0.697                        | 1.843             | 0.103 | -0.517        | <b>-0.725</b> |
| N-NO <sub>3</sub> <sup>-</sup> | 0.000026             | 0.711                        | 1.730             | 0.127 | 0.226         | -0.274        |
| Ca <sub>T</sub>                | 0.000025             | 0.746                        | 1.444             | 0.214 | -0.207        | 0.495         |
| The number of AMF species      | 0.000025             | 0.749                        | 1.425             | 0.222 | 0.370         | -0.080        |
| Eigenvalue                     |                      |                              |                   |       | 25.570        | 11.897        |
| Cumulative proportion          |                      |                              |                   |       | 0.533         | 0.782         |
| Valley soil                    |                      |                              |                   |       |               |               |
| P <sub>EX</sub>                | 0.00002              | 0.036                        | 109.471           | 0.000 | <b>-1.324</b> | -0.291        |

|                                |          |       |        |       |               |               |
|--------------------------------|----------|-------|--------|-------|---------------|---------------|
| P <sub>T</sub>                 | 0.000002 | 0.419 | 5.730  | 0.000 | 0.024         | -0.320        |
| 16:1ω5 PLFA                    | 0.000002 | 0.418 | 5.737  | 0.000 | -0.056        | -0.041        |
| K <sub>EX</sub>                | 0.000005 | 0.159 | 21.871 | 0.000 | 0.164         | <b>1.578</b>  |
| The number of AMF spores       | 0.000002 | 0.352 | 7.601  | 0.000 | -0.062        | -0.114        |
| pH                             | 0.000001 | 0.482 | 4.438  | 0.001 | 0.300         | 0.081         |
| Ca <sub>EX</sub>               | 0.000002 | 0.332 | 8.288  | 0.000 | 0.032         | <b>-1.393</b> |
| N-NO <sub>3</sub> <sup>-</sup> | 0.000002 | 0.436 | 5.338  | 0.000 | <b>-0.729</b> | 0.248         |
| N-NH <sub>4</sub> <sup>+</sup> | 0.000002 | 0.384 | 6.620  | 0.000 | -0.171        | <b>0.841</b>  |
| K <sub>T</sub>                 | 0.000001 | 0.705 | 1.726  | 0.129 | 0.093         | 0.035         |
| N <sub>T</sub>                 | 0.000001 | 0.600 | 2.750  | 0.019 | 0.272         | 0.329         |
| C <sub>ORG</sub>               | 0.000001 | 0.754 | 1.344  | 0.257 | 0.050         | 0.301         |
| Ca <sub>T</sub>                | 0.000001 | 0.780 | 1.166  | 0.349 | 0.185         | 0.557         |
| Eigenvalue                     |          |       |        |       | 112.966       | 17.972        |
| Cumulative proportion          |          |       |        |       | 0.772         | 0.895         |