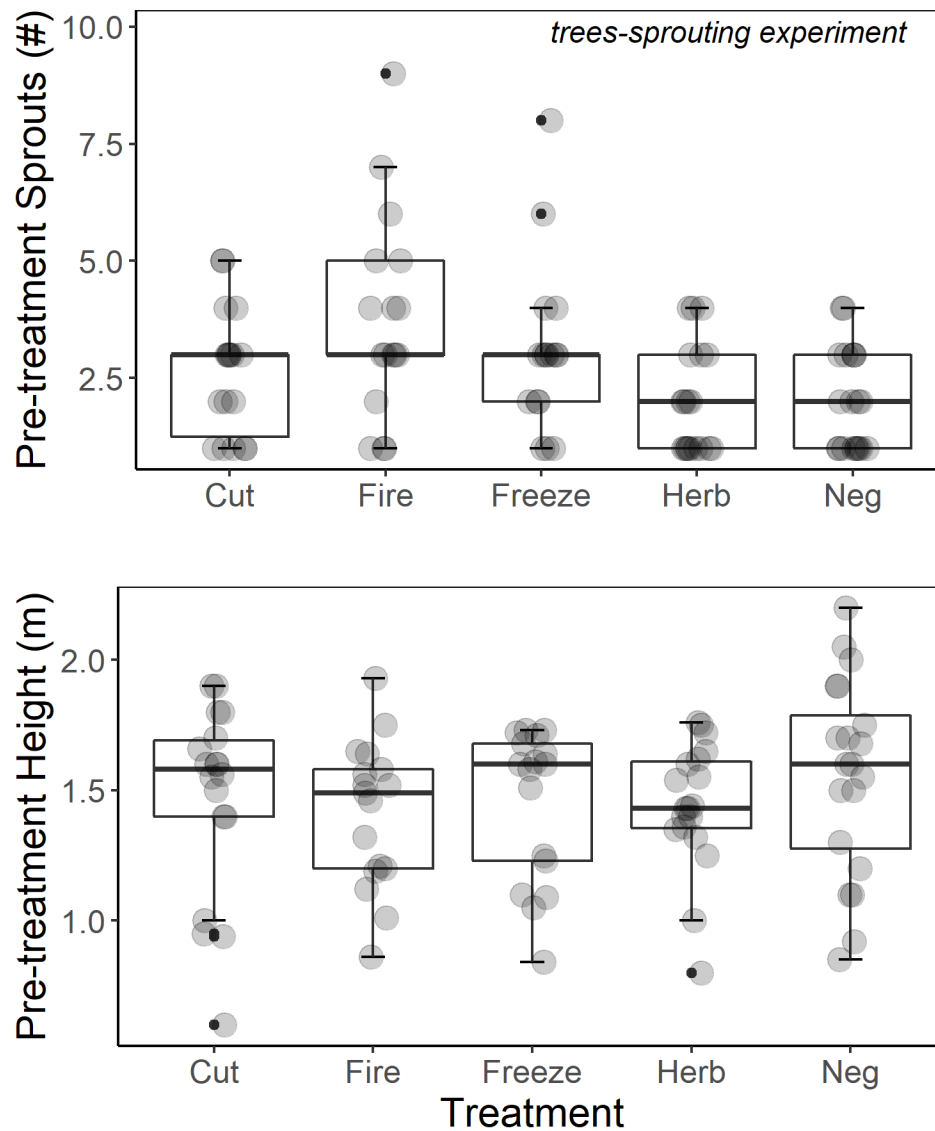
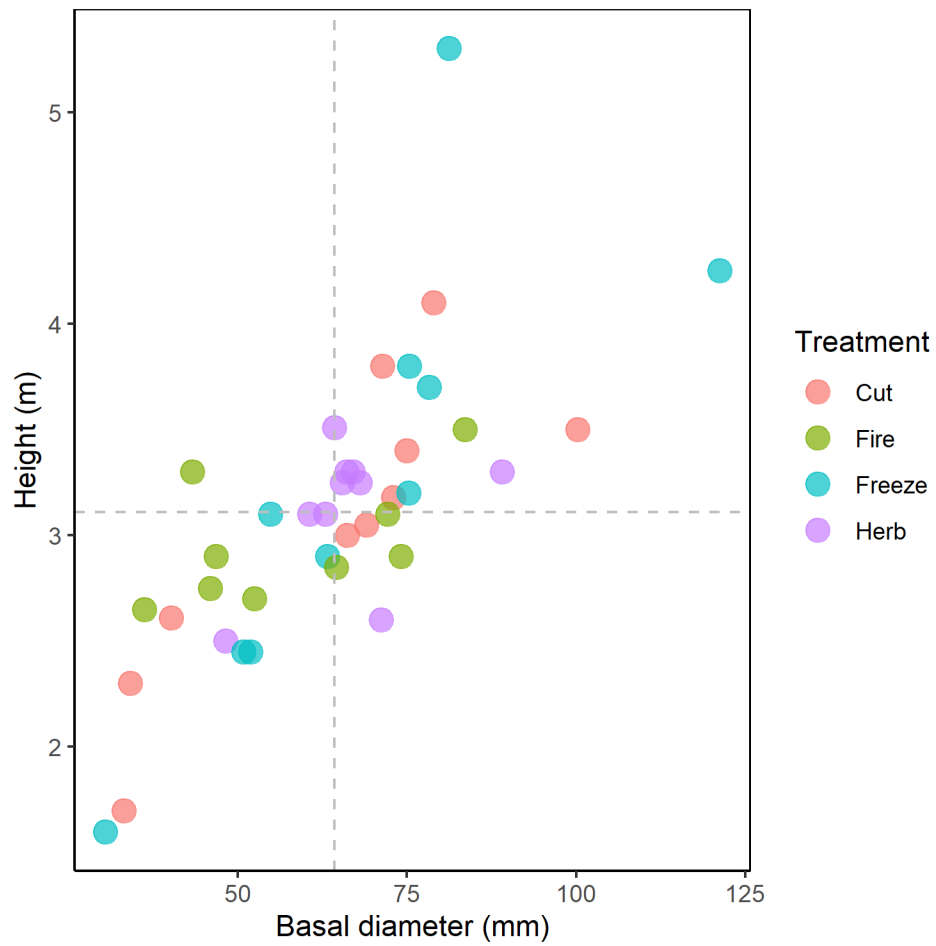


Figure S1



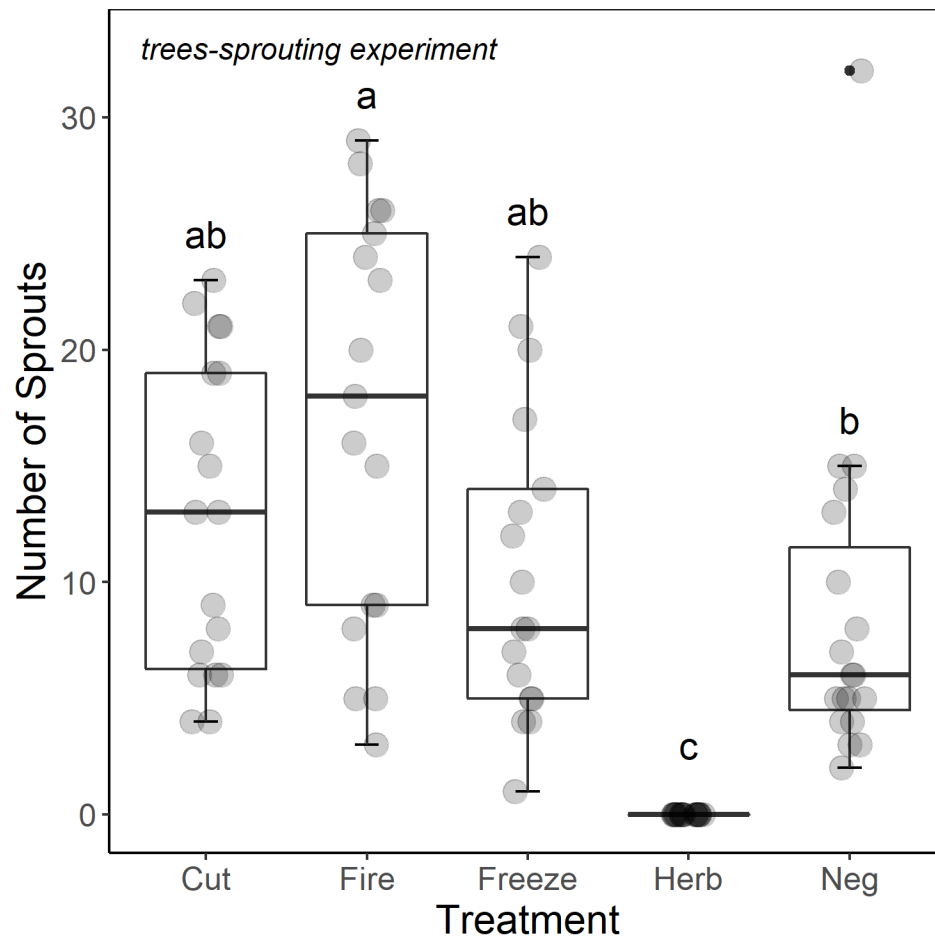
Pre-treatment number of sprouts and maximum sprout height from individual sprouting stumps of *Pyrus calleryana* trees in a grassland near Dayton, Ohio, USA (Stillwater Conservation Area; “trees-sprouting” site). Prior to the beginning of the experiment, these *P. calleryana* stems had experienced mowing from an industrial mower (“bush hog”) annually for several years and were sprouting.

Figure S2



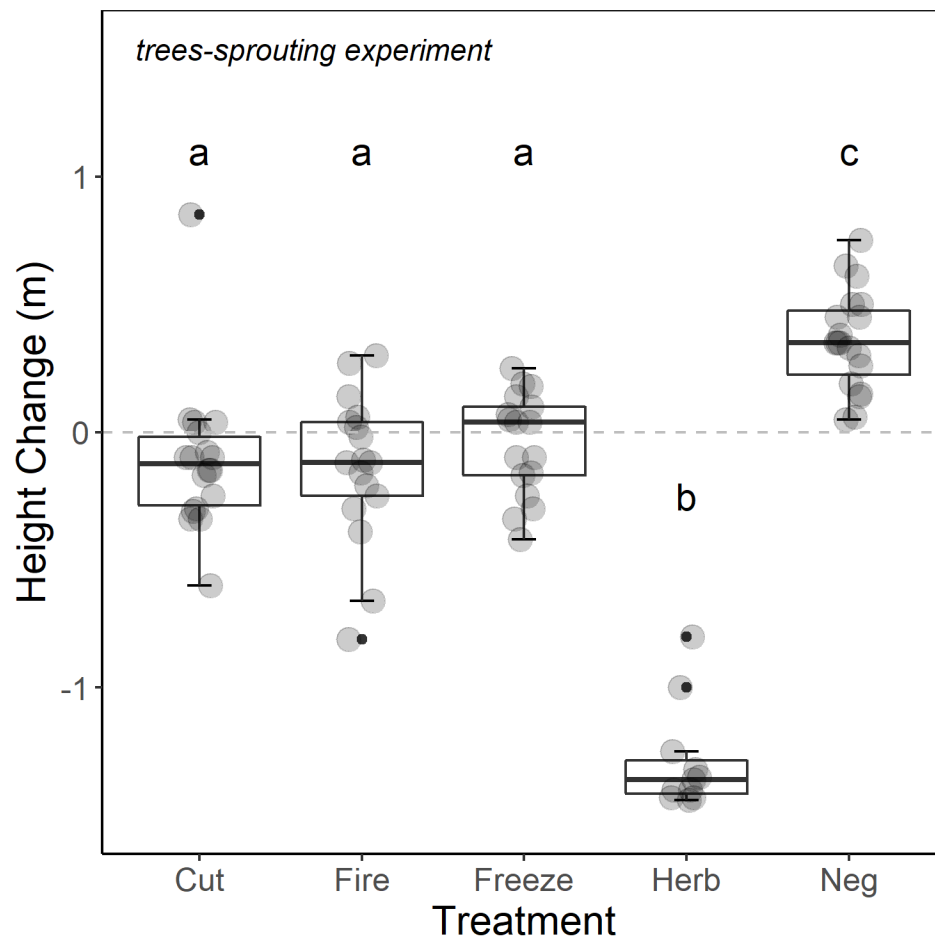
Pre-treatment metrics from *Pyrus calleryana* trees in a grassland near Dayton, Ohio, USA (Medlar Conservation Area; “trees-intact” site). Prior to the beginning of the experiment, these *P. calleryana* stems had never been cut or treated. Note mean values for tree height (horizontal) and basal diameter (vertical) are represented by dashed, grey, reference lines.

Figure S3



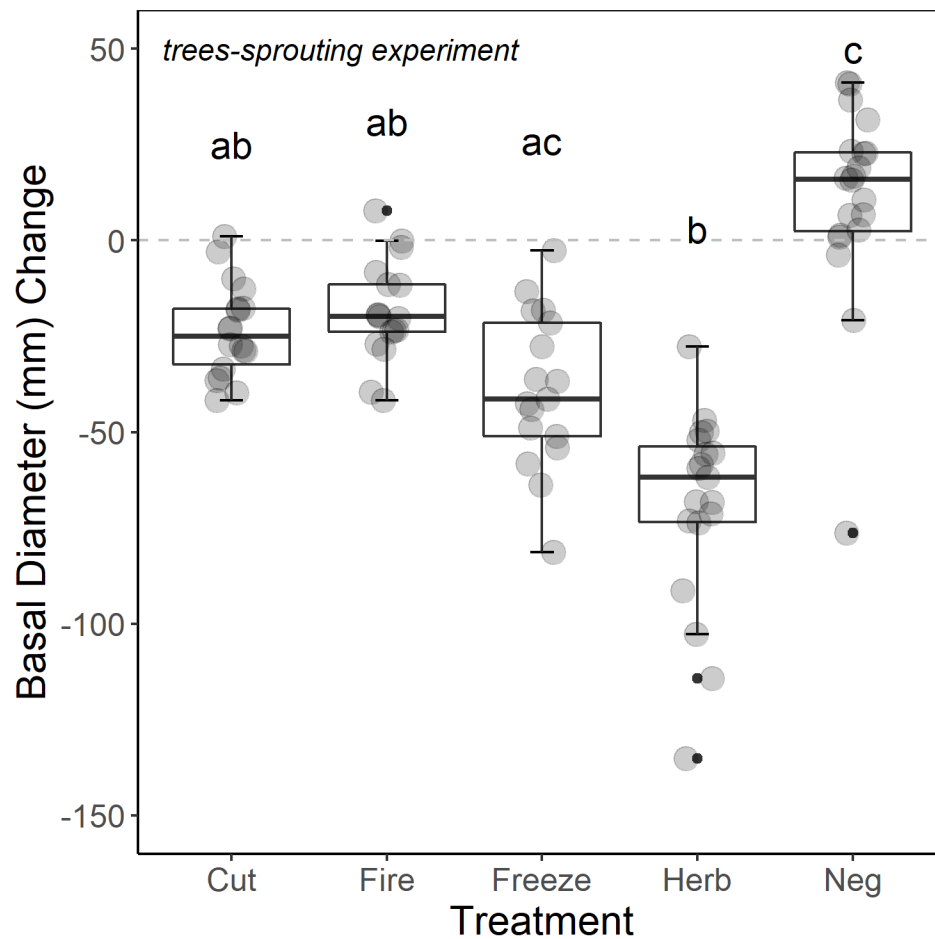
Final number of sprouts of *Pyrus calleryana* from individual stumps in a grassland near Dayton, Ohio, USA. Prior to the beginning of the experiment, these *P. calleryana* stems had experienced mowing from an industrial mower (“bush hog”) annually for several years and were sprouting. In the negative control (Neg) these sprouts were not cut or treated. In all other treatments, these sprouts were cut, and either no treatment was applied (Cut) or stumps were burned (Fire), frozen with liquid nitrogen (Freeze) or treated with herbicide (Herb). The centerline of the box plot is the median final number of sprouts one year following the treatment applications. A Kruskal-Wallis test indicated a strong overall effect of treatment ( $p < 0.001$ ) and letters represent statistically significant differences indicated by pairwise *post-hoc* comparisons (all  $p < 0.001$ ).

Figure S4



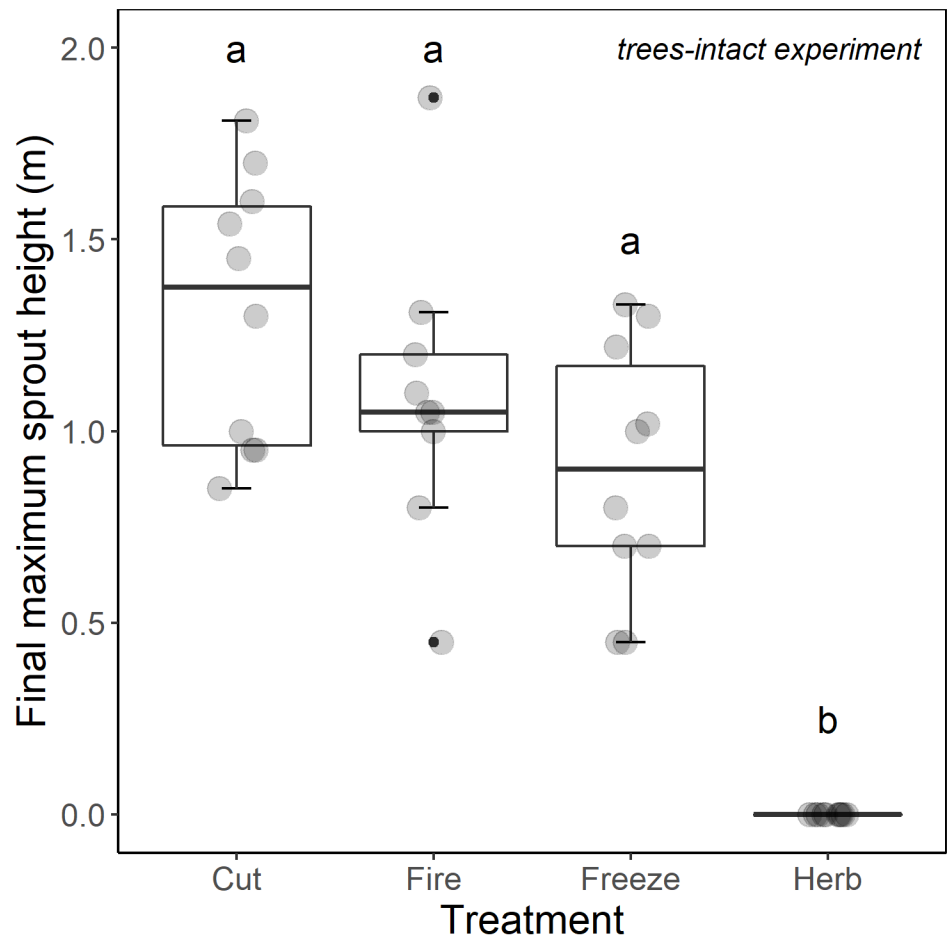
Change in sprout height of *P. calleryana* from individual stumps one year after cutting and treatments in a grassland near Dayton, Ohio, USA. Prior to the beginning of the experiment, these *P. calleryana* stems had experienced mowing from an industrial mower ("bush hog") annually for several years and were sprouting. In the negative control (Neg) these sprouts were not cut or treated. In all other treatments, the maximum height was measured, then the sprouts were cut, and either no treatment was applied (Cut) or stumps were burned (Fire), frozen with liquid nitrogen (Freeze) or treated with herbicide (Herb). The centerline of the box plot represents the median change in maximum sprout height from the pre-treatment survey to the final survey that occurred one year following the treatment applications. Repeated Measures Analysis of Variance indicated a highly significant effect of treatment ( $p < 0.001$ ) and letters above the boxes represent statistically significant differences indicated by *post-hoc* pairwise comparisons tests (all  $p \leq 0.05$ ). Note the dotted horizontal reference line at 0.

Figure S5



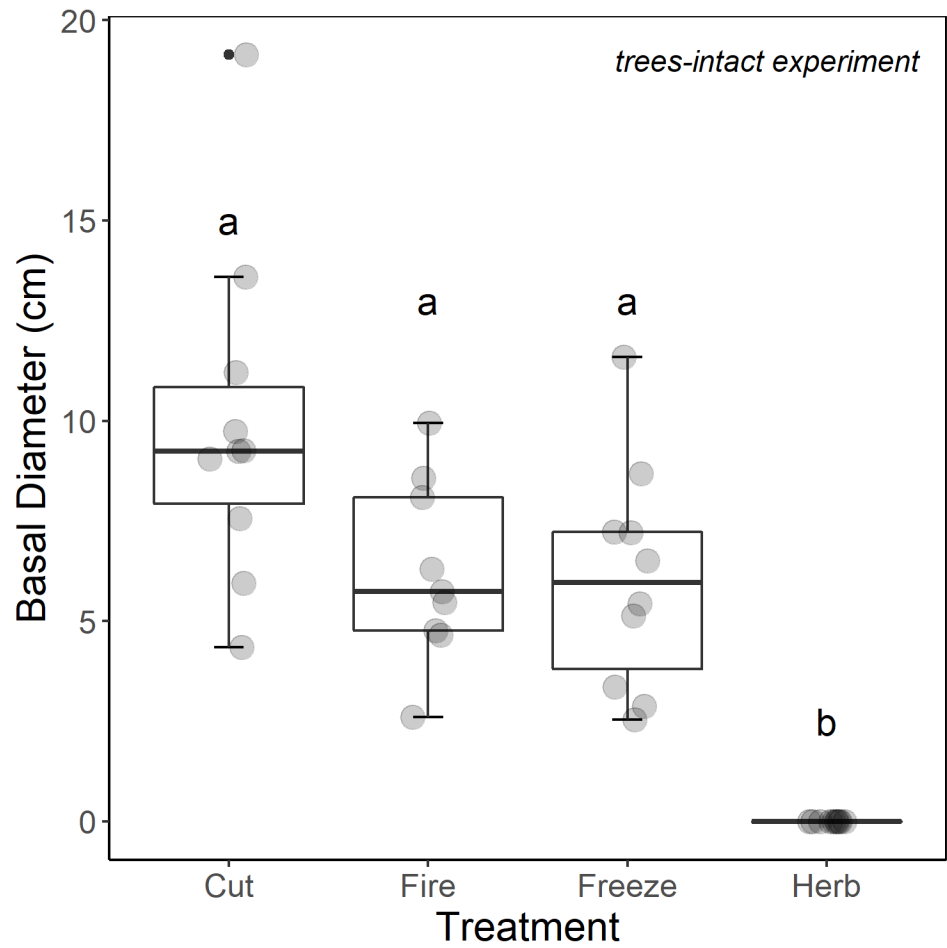
Change in the sum of sprout basal diameter of *P. calleryana* from individual stumps in a grassland near Dayton, Ohio, USA. Prior to the beginning of the experiment, these *P. calleryana* stems had experienced mowing from an industrial mower (“bush hog”) annually for several years and were sprouting. In the negative control (Neg) these sprouts were not cut or treated. In all other treatments, the basal diameter of all sprouts was measured, then the sprouts were cut, and either no treatment was applied (Cut) or stumps were burned (Fire), frozen with liquid nitrogen (Freeze) or treated with herbicide (Herb). The center-line of the box plot represents the median change in the sum of sprout basal diameter from the pre-treatment survey to the final survey that occurred one year following the treatment applications. Repeated Measures Analysis of Variance indicated a highly significant effect of treatment ( $p < 0.001$ ) and letters above the boxes represent statistically significant differences indicated by *post-hoc* pairwise comparisons tests (all  $p \leq 0.05$ ). Note the dotted horizontal reference line at 0.

Figure S6



Final maximum sprout height from individual *Pyrus calleryana* stumps in a grassland near Dayton, Ohio, USA. Prior to the beginning of the experiment, these *P. calleryana* stems had never been cut or treated and were medium-sized trees. In all treatments, trees were cut at the base and either no treatment was applied (Cut) or stumps were burned (Fire), frozen with liquid nitrogen (Freeze) or treated with herbicide (Herb). The centerline of the box plot is the median. A Kruskal-Wallis test indicated a strong overall effect of treatment ( $p < 0.001$ ) and letters represent statistically significant differences indicated by pairwise *post-hoc* comparisons (all  $p < 0.001$ ).

Figure S7



Final summed basal diameter from individual *Pyrus calleryana* stumps in a grassland near Dayton, Ohio, USA. Prior to the beginning of the experiment, these *P. calleryana* stems had never been cut or treated and were medium-sized trees. In all treatments, trees were cut at the base and either no treatment was applied (Cut) or stumps were burned (Fire), frozen with liquid nitrogen (Freeze) or treated with herbicide (Herb). The centerline of the box plot is the median. A Kruskal-Wallis test indicated a strong overall effect of treatment ( $p < 0.001$ ) and letters represent statistically significant differences indicated by pairwise *post-hoc* comparisons (all  $p < 0.001$ ).