**RESULTS**

The phylogenetic tree is represented in Figure 1.

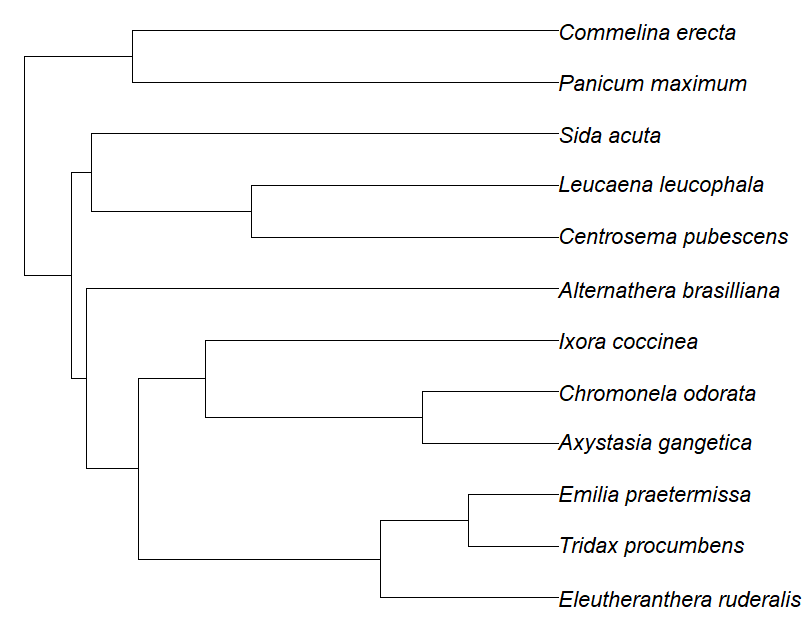


Figure 1: Phylogenetic tree showing the evolutionary relationships between the plants in the study.

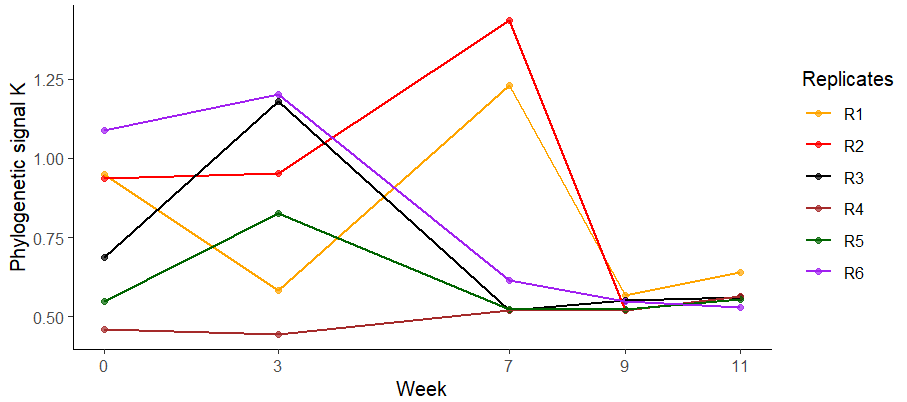


Figure 2: Phylogenetic signal (Bloomberg K values) of plants at each survey week. Week 0 is a pre-spray, while weeks 3-11 are post-sprays.

There was no significant difference (t= - 0.52, p>0.1) in the phylogenetic signal between week 0 and 1. This indicates that the spray of herbicide had no significant implication on the plant community structure, despite the high reduction in plant cover following the herbicide spray.

