

**Project Update: October 2013**

We have identified 134 of groundcovers species in the sampling sites. The highest species diversity index for groundcovers was found in Pranajiwa Hill (Figure 1).

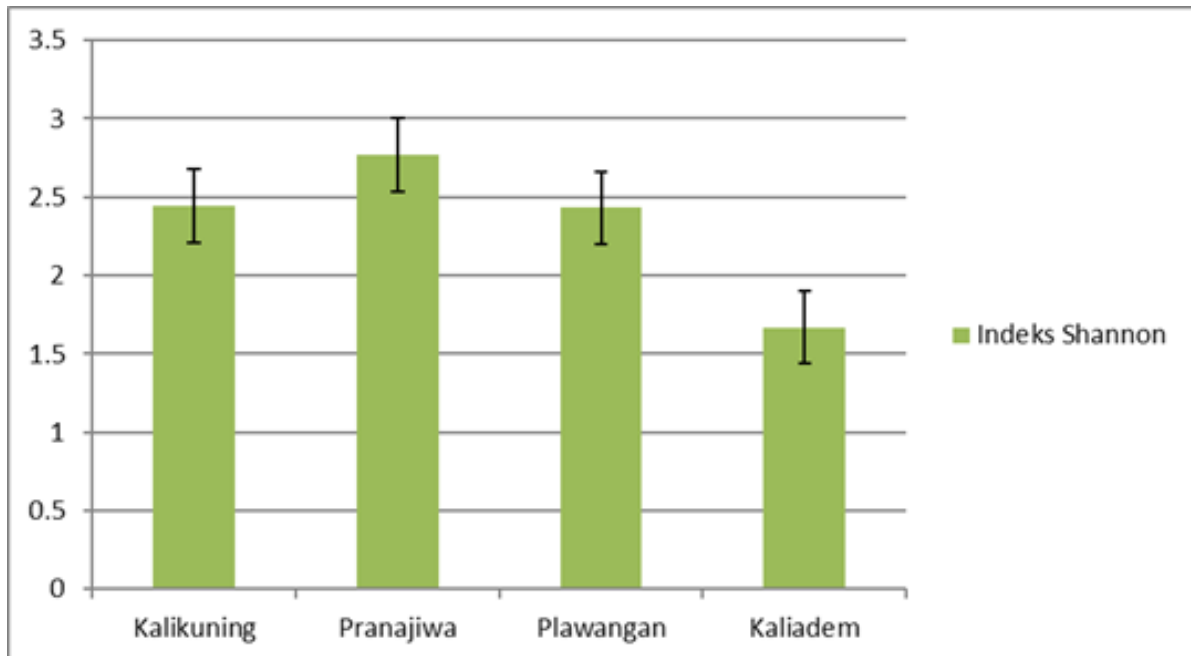


Figure 1. Shannon-Wiener Species diversity index for groundcovers species.

For tree species, we found 61 species in the sampling sites, with the highest diversity index was found in Plawangan Hill, with only slightest difference with Pranajiwa Hill (Figure 2).

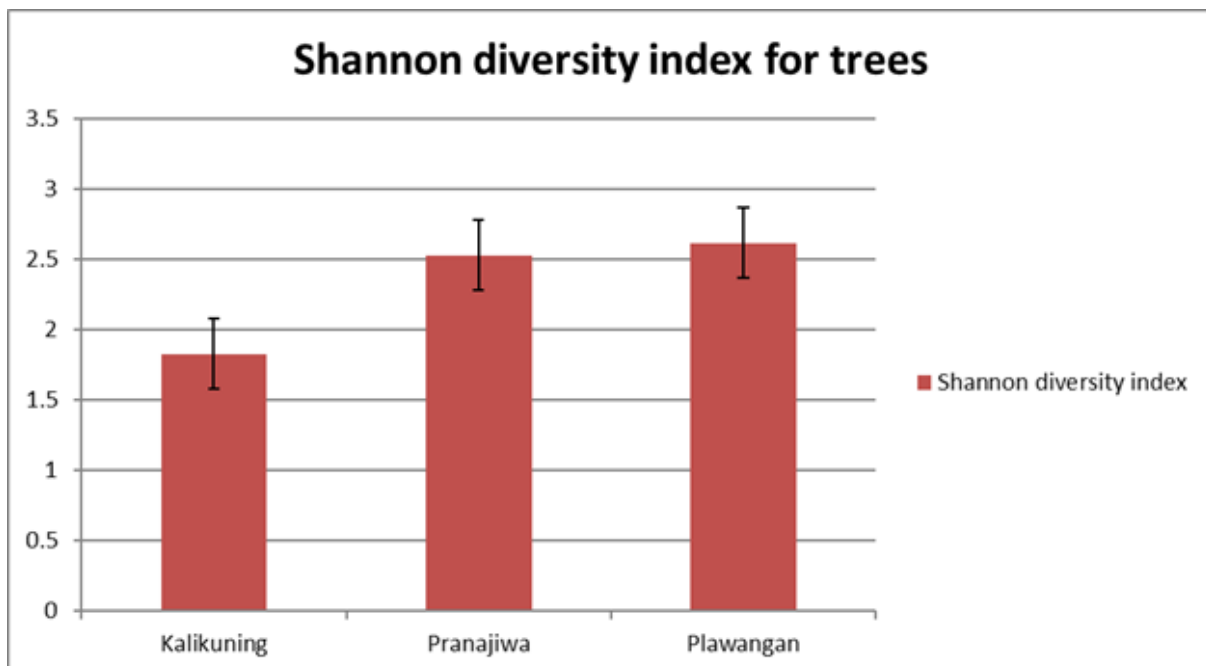


Figure 2. Shannon-Wiener diversity index for trees.

We have also identified 12 exotic species that are potentially invasive or has been known as invasive in elsewhere, namely:

1. *Melastoma affine*
2. *Blumea lacera*
3. *Crassocephalum crepidioides*
4. *Chromolaena odorata*
5. *Ageratum conyzoides*
6. *Ageratina riparia*
7. *Polygala paniculata*
8. *Borreria alata*
9. *Stachytarpetta jamaicensis*
10. *Lantana camara*
11. *Cyperus rotundus*
12. *Acacia decurrens*

We test whether the abundance of *Acacia decurrens* (no 12) in the sampling sites would reduce the number of other species or reducing species diversity. We calculated Spearman bivariate correlation and we display the distribution of *Acacia decurrens* abundance in NMS ordination analysis using PRIMER –E software ver. 6 (Figure 3 and 4).

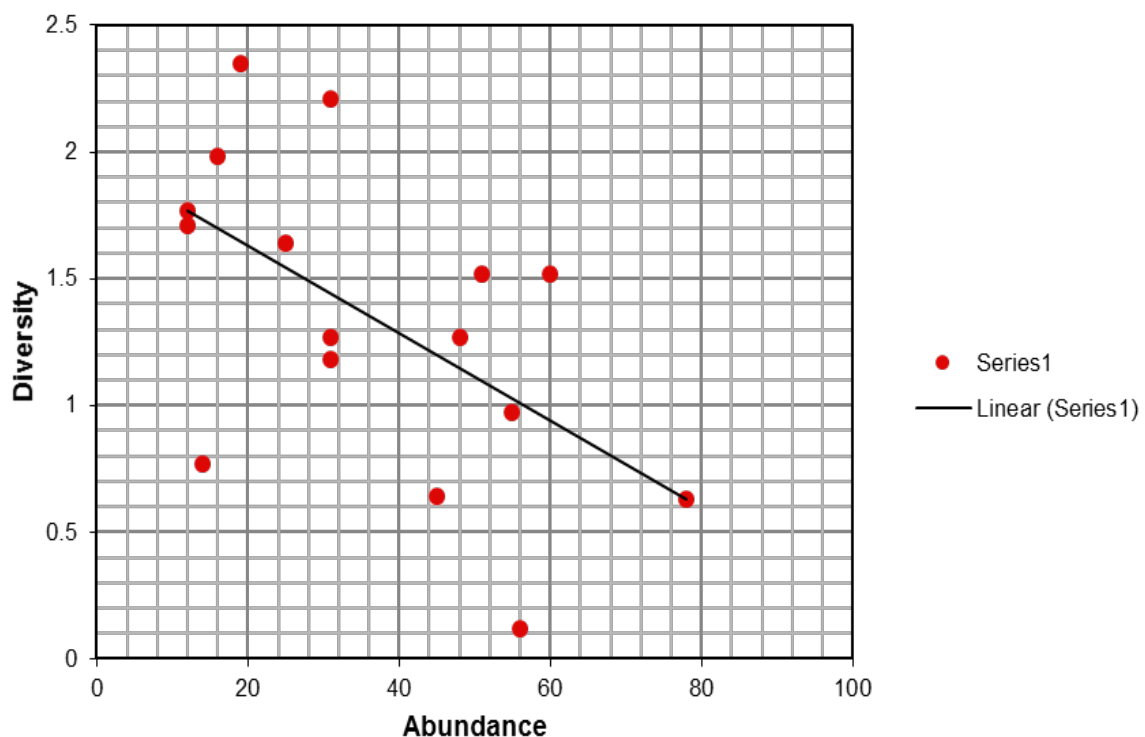


Figure 3. Correlation of *Acacia decurrens* abundance with Shannon-Wiener Species diversity index (Spearman's rho = -0,581)

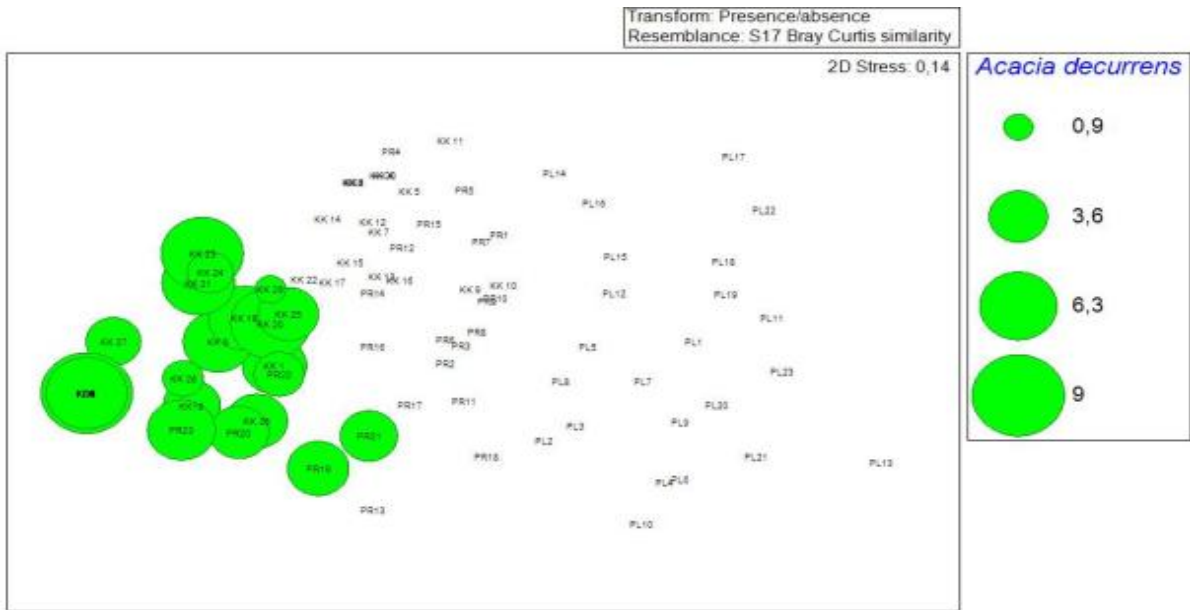


Figure 4. the distribution of *Acacia decurrens* abundance in each plots in sampling sites

From the analysis, we conclude that *Acacia decurrens*, an exotic species from Australia potential to be invasive as indicated by its dominance and distribution. Importantly, as observed in the sampling sites, *Acacia decurrens*'s dominance reducing species diversity.