



**Figure S3:** Box plot showing the effects of herbicide application and cutting frequency on Shannon diversity of grass specialist leafhopper. Most of the leafhopper species (28 out of 36) preferred grass as food source. The Shannon diversity of “grass specialist” leafhopper species was lower under three cuts/year ( $t = -3.34$ ;  $P = 0.001$ ) and with herbicide altered plant composition (forb rich:  $t = -3.25$ ;  $P = 0.002$ , graminoid rich:  $t = 2.33$ ;  $P = 0.023$ ). We found no design effects on forb-preferring leafhoppers.