G-test, Chi2 Test

Data are counts, without a normal distribution

Data is measured, you can calculate mean and SD

Two distinct sets of data:

experiment and control

 T –test

Data are counts, without a normal distribution

Three or more groups of data

 Multi-way G-test, Chi2 Test,

 or other non-parametric test

Data is measured, you can calculate mean and SD

 one factor ANOVA

 two or more factors multi-way ANOVA

Multiple measurements across a gradient (e.g. time)

 correlation or regression analysis

 reduce the variables to a single index (e.g. diversity

Multiple measures on each individual or sample site

 index), and use one of the above tests.

 multivariate tests