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