Bubble plots of single variables

The above MDS draws on all 174 species (with more abundant species given greater weight) but only some species will be responsible for creating the observed gradient – others will be largely 'noise'. The behaviour of a single species over the sites can best be seen by a bubble plot (**Graph> Special**), in which circles are drawn at each point, of size related to the counts at that site. The secondary data sheet here is therefore the (transformed) data matrix itself, Square root.

On the MDS, 2-d nMDS B-C, take **Graph>Special>Main**>(Bubble✓Bubble plot)>(Worksheet: Square root) & (Variables: Abra prismatica), which is the default – alphabetically the first species, but well worth plotting! Taking **OK** now produces a bubble plot for this species, with a scale key (in square root abundance units) which goes down to a vanishingly small bubble for a zero count. Sometimes, for species which are not ubiquitous, it can be helpful to be reminded of where these zero counts are on the plot, by reinstating a label at all points. A useful trick here is to define a new factor which contains just the '+' sign for all samples, plotted at a smaller than default size – with Data font>Size: 50 perhaps, under **Labels on the Samp. labels & symbols** tab. Alternatively, on this same dialog, leave (Labels✓Plot) turned off, but instead use the **Special>Main**>Bubble dialog to (✓Add Values to labels). This is not recommended in this case because there are a number of samples falling close to each other, and especially since square root values with several decimal places will then be added to the plot (this option is best reserved for bubble plots on original scales where it is important to pick out the precise variable value at some points of the ordination).