You will recall that it is more than a year ago since we produced a multi-attribute key to Cladonias using the Lucid software package. Unfortunately, for many the software proved difficult, and in some cases impossible, to load and run. Recently, we have been experimenting with building the equivalent type of key using Excel and the result is attached. The result looks like and runs in the same way as Lucid and uses exactly the same data as the earlier version. I have to thank Nigel Chadwick for all his efforts in writing the macros that make it fly.   
  
When you run the key you will be asked to 'Enable Editing' unless you have saved the key under a new name, and then 'Enable Macros'. You will be presented with the Copyright page in Word. Close this window as usual. The Excel spreadsheet showing the raw data will be displayed. This cannot be amended. To start the Key press the big green box marked Filter Tool. You will be presented with a screen that looks almost identical to the Lucid key. Working from left to right click on the Group, Characters and States that are appropriate to your specimen and the list of Taxa shown on the right will be filtered appropriately. You can close or move the Filter Tool window at any time to examine the raw data. This is useful in two contexts:   
  
1) To check the definitions of technical terms. Cells with a small red triangle in the top right corner in the first three rows of the spreadsheet contain definitions. Move the mouse over the cell and the definition will appear.   
  
2) When there are a small number of possible taxa remaining it is possible to scroll across the spreadsheet to look for differences between the remaining taxa.   
  
You can restart the Filter Tool at any time. Note if you want to START AGAIN with a FULL LIST OF TAXA press the Clear All Filters button on the Filter Tool window.   
  
  
So how does this compare with Lucid?   
  
Firstly, it uses exactly the same data as the Lucid key and therefore has the same issues regarding missing data as that key has. Currently, links to text descriptions, distribution maps and pictures have not been included but could be incorporated. It also lacks some of the finer data selection tools in Lucid. HOWEVER, Lucid has proved difficult / impossible for many to install and run, whereas this should run on any platform capable of running any version of Excel. It also makes us independent of Lucid software development.   
  
I would welcome any comments you may have. It should work on all versions of Excel but your feedback would be welcome.   
  
Les Knight