Species distance information

For the first set of measures (on the **Taxdisc** tab), the **Taxonomy** button gives a choice of whether the *distances* among species (or whatever the variables represent) are provided by a tree structure (•Taxonomy) or a direct distance matrix among species (•Resemblance). The latter then requires a *Variable resemblance* matrix to be specified (perhaps one calculated among species on the basis of their traits, if this is to be a functional rather than taxonomic-based distinctness index). The former requires a *Variable information* sheet – usually an aggregation file of the type seen near the start of Section 11 – which needs to be in the workspace before **Analyse>DIVERSE** is run (if only one such file has been read in, it will be the default). This is a look-up table which gives a taxonomic (or other) tree of all species, allowing the routine to calculate species distances internally (these are not actually output but could be so, if needed, by **Analyse>Similarity** when the active window is the aggregation worksheet, as seen in Section 5). For the second set of measures (the **Phylogenetic** tab in the DIVERSE dialog), the **Taxonomy** button offers only the option to input a *Variable info*. worksheet because the PD measures (Φ^+ and $S \Phi^+$) <u>can only</u> be computed from a species tree and not from a triangular matrix of between-species distances.