## **Supplementary Material**

### Data collection

1- Data collection: key words, clade (ordinal) metacharacters, Google Search terms, Google Search protocol, Google Search rarefaction curve.

#### search terms

The searched mammalian order terms are available in  $search_terms_latin.txt$  or  $search_terms_meta.txt$ . The file containing the meta names is the Latin name files but with replacing the latin suffixes ([ia—ata—ea—a]) by a joker character (\*) and by replacing the first letter by a upper/lower case meta character (e.g. [Aa]).

Ross Mounce data set.— I selected all the matrices containing at least one of the mammalian orders names from Ross Mounce GitHub cladistic — data/nexus<sub>f</sub>iles repository (accessed on the 02/12/2014).

*Graeme Lloyd.*— Selecting the downloadable matrices

Morphobank.— order

Google scholars.— 20 first results since 2010 with the following key words: order ("morphology" OR "morphological" OR "cladistic") AND characters matrix

paleontology phylogeny Why 20 first results? Because rarefaction curve, check supplemetaries

# Wrong Bionmial names and typos

I fixed the wrong bionomial names format (e.g. H. sapiens) into the correct ones (e.g. Homo sapiens) manually using the abreviation list in the concerned publications.

### Data structure

SUPPLEMENTARY RESULTS