Impact factors aren’t relevant to taxonomy

Sir — Evaluating research by means of ISI impact factors — those determined by the Institute for Scientific Information in Philadelphia — gives rise to obvious problems in the case of basic biodiversity research. Valdecasas et al. in Correspondence (Nature 403, 698; 2000) suggested that one cause is the low citation rate of taxonomic articles compared to other fields.

A more important reason, however, is the inapplicability of this index to basic biodiversity research on principle. The impact factor generally underestimates the number of citations because of the limited number of scanned journals. In fields such as molecular genetics, neuroscience or cancer research — where, as Bradford’s law states, most of the relevant work is published in a few core journals — this selection does not severely affect the comparability of impact factors.

However, Bradford’s law does not apply to taxonomy and other areas of basic biodiversity research. Generally, taxonomic papers contain details of nomenclature, which must be considered and discussed whether the paper is excellent or poor. Similarly, reports of flora and fauna records need to be debated in further studies before being accepted or rejected. Quality and relevance are independent parameters.

Therefore, it is impossible to classify taxonomic or ecology journals as more or less important. They can only be classified as of high or low quality, which does not affect the number of citations. Many natural history journals contain taxonomic or similar articles. The library of London’s Natural History Museum alone holds 11,000 serial titles.