

Preserve specimens for reproducibility

The description of a new species without a preserved type specimen has always been permitted (T. Pape *et al. Nature* 537, 307; 2016) — but it should not become the norm. Original specimens allow testing of the hypotheses that underlie descriptions and so ensure reproducibility — an obligation and cornerstone of the scientific method.

It is taxonomic convention when describing a new species to deposit type specimens in a publicly accessible collection. This allows independent re-examination, reinterpretation and re-evaluation (*Nature* 535, 323–324; 2016). Although photographs can point to possible undescribed species and help to document biodiversity, they are open to misinterpretation (and also to manipulation).

Photographs alone should remain the exception, used only when specimens cannot be preserved for technical, legal or conservation reasons. Properly vouchered specimens are otherwise essential in biodiversity research, just as “laboratory notebooks and records must be available for independent review” in the experimental sciences (C. G. Begley *et al. Nature* 525, 25–27; 2015).

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