SYSTEMATICS ASSOCIATION PRESIDENT'S LECTURE

Robert Scotland, University of Oxford

DO HALF THE WORLD'S NATURAL HISTORY COLLECTIONS HAVE THE WRONG NAME AND WHAT CAN WE DO ABOUT IT?

The Linnean Society of London

6 pm, Thursday 26th November (followed by drinks reception)

Specimens of plants and animals preserved in museums are the primary source of verifiable data on the geographical and temporal distribution of organisms. Museum datasets are increasingly being uploaded to aggregated regional and global databases (e.g. the Global Biodiversity Information Facility - GBIF), for use in a wide range of analyses. Thus digitization of natural history collections is providing unprecedented information to facilitate the study of the natural world on a global scale. This utilizes information provided on specimen labels and assumes they are correctly identified. In this talk I will describe a recent study that evaluated the accuracy of names associated with 4,500 specimens of African gingers from 40 herbaria in 21 countries that demonstrates that 58% of the specimens had the wrong name prior to the recent taxonomic revision. A similar pattern of wrongly named specimens is also shown for Dipterocarpaceae and *Ipomoea* (morning glory). These results are placed in the context of the world's plant collections having more than doubled since 1970. The results show that more than 50% of tropical plant specimens, on average, are likely to be incorrectly named and we assume that the situation for insects is even worse leading to the extrapolation that half of the world's natural history collections may have the wrong name. The talk will describe one initiative 'foundation monographs' that attempts to accelerate and effectively overhaul the taxonomy of large groups of plants and conclude with a framework for making progress.

Zoë A. Goodwin, David J. Harris, Denis Filer, John R.I. Wood & Robert W. Scotland. **Widespread mistaken identity in tropical plant collections**. *Current Biology* [in press])