

## Book review

**BOLTON, B., ALPERT, G., WARD, P.S. & NASKRECKI, P. 2006: Bolton's catalogue of ants of the world: 1758-2005. – Harvard University Press, Cambridge, MA, CD-ROM. [USD 49.95, €46.10; ISBN 0-674-02151-7]**

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"Bolton's Catalogue of Ants of the World: 1758-2005" represents another milestone in ant systematics. Not only is it a 10-year update of BOLTON's (1995) "A New General Catalogue of the Ants of the World", but it also incorporates WARD & al.'s (1996) "A Bibliography of Ant Systematics" and moves from a paper-based paradigm to an electronic one. It adds 1,800 new ant names and 1,500 new references, bringing the totals to 21,109 names and 9,708 references, and provides 70,996 links between these names and references. The included information is of the highest quality and includes numerous additions and corrections to the original catalogue and bibliography. It's a most welcome and valuable resource.

The Catalogue comes on a CD complete with all data and an access program. Installation couldn't be easier although a fairly modern computer system is needed (Windows 2000 or XP, Mac OS X 10.3.9 or better). It can even be run directly from the CD without installing anything on the local computer, although performance does suffer slightly.

The Catalogue is centred around valid names, available names and selected unavailable names (mainly those proposed as infrasubspecific) for the entire family Formicidae. It provides an essentially complete taxonomic history of every name ever proposed, both extant and fossil. Type locality and selected distribution information is included for each species, as well as type species for each genus-group name and type genus for family-group names. The status of names (valid, invalid and unavailable) is colour coded in lists of names and shown as text on detail screens.

Searching for information is deceptively easy given the richness of the options provided. Both taxa and references are available through alphabetic lists, with options to sort these by species name or genus + species (for taxa) and by author or year of publication (for references). Lists of genus-group names can include genera, subgenera or both, and family-group name lists can include subfamilies, tribes or both. There is also the option to build queries for taxa using a combination of taxon name, author, year of description, type locality and other selected details and for references using author, year, title words and journal. When working with species lists there is an option to restrict the list to the species belonging to the currently selected genus. Searching is straight forward, flexible, easy and convenient.

Screens are simple while presenting a wealth of information. For example, each genus page contains information on the type species, references, synonyms of the genus, species currently placed in the genus as well as species formerly placed in the genus but no longer belonging to it. Extensive use of hyperlinks gives the feel of a rich web site and navigation is very intuitive (but there is no "back" button, so it can sometimes be tricky to get back to recently visited pages). The system "feels" very natural and was clearly designed by someone who uses it in their daily work.

While the Catalogue is easy to use, the interface is not particularly flexible. For example, it is not possible to hide information that isn't needed or to resize panels. There is also no tree view of the classification, resulting in navigation of the hierarchy being through linked lists. While this is small point, tree views are a natural (and common) way to view taxonomic classifications.

A more serious limitation is the lack of printing and exporting facilities. The only way to transfer information out of the Catalogue is through Cut-and-Paste of individual data items, a tedious process at best. There is also no obvious way to get at the underlying raw data and no way to add local data (for example additional references).

Overall data quality is high and very few errors were detected. There is the odd incorrect page number and some of the reference notes contain meaningless information such as "See NONTAX". There are also some cases where comments attached to a reference are a little confusing. For example, under *Temnothorax andrei* there is a reference to a Bolton publication with the comment "Combination in *Temnothorax*", followed by a reference to a Ward publication with the comment "Junior synonym of *andrei*; first combination in *Temnothorax*." At first glance this would suggest that Ward is treating *T. andrei* as a junior synonym of itself, and that he was the first to propose the combination *T. andrei*. In fact the Ward reference comment refers to *T. ocellatus*, a junior synonym of *T. andrei*. Thus while the reference belongs here (as it relates to a junior synonym of *T. andrei*) the comment is inappropriate in this context.

To sum up, this new "Catalogue" contains an absolute wealth of high quality information presented using a simple, assessable system that stays out of the way and lets you get to the information you're after. If you work with ant names, you need this CD.

### References

- BOLTON, B. 1995: A new general catalogue of the ants of the world. – Harvard University Press, Cambridge, MA, 504 pp.  
WARD, P.S., BOLTON, B., SHATTUCK, S.O. & BROWN, W.L. 1996: A bibliography of ant systematics. – University of California, Berkeley and Los Angeles, 417 pp.