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Ant global diversity: opening new possibilities in ant-biology.

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The study of global diversity patterns has been restricted to a few groups of organisms belonging to vertebrates or plants. Yet, insects represent the vast majority of living species. Our comprehension of biodiversity patterns, the processes that underpin them, and the future prospects for biodiversity, is thus largely incomplete. Here, we present the global diversity of the most diverse group of social insects, ants, with over 14000 described species. We compiled distribution data from over 7700 publications, which combined with museum records represents the core of the Global Ant Biodiversity Informatics (GABI) database. This work represents the first global assessment of the distribution of a diverse group of insects. The compilation of over a million records of ant species distribution allows us to solve important questions in biodiversity and conservation such as the identification of main diversity and endemism hotspots, or the importance of biological invasions across the world. Finally, I will briefly introduce some of the possibilities offered by this database in the study of social insects ecological and evolutionary questions. GABI will represent an important new tool for ant research and provide guidance for the development of global database for other insect groups as well.