

OR139*Trait-based characterisation of invasiveness in ants*Cleo Bertelsmeier, Sebastien Ollier, **Franck Courchamp**

In order to outdo the descriptive framework of species-specific responses to ecological processes and to endeavour better generalisations and projections, ecologists are increasingly moving from taxonomic-based approaches to those based on sets of ecological traits. One good illustration of a discipline where trait-based approaches are especially welcome is invasion biology. Although such information has been long sought after, one of the most frustrating issues remains the persisting lack of robust patterns of ecological traits of invasive species that might be used to identify them before they become invasive. Typically, a database of ecological traits of invasive and non-invasive species of similar ecology and/or taxonomy would be a very potent tool to answer this, and many other ecological questions, such as identifying the relationships between any given ecological characteristics. Ants are a very large group of species which ecology is becoming increasingly well known, albeit often by specialists. Recent approaches to gather this wealth of dispersed information, such as the Global Ant Database, or our Antprofiler database (www.antprofiler.org), provide opportunities to extract generalised features related to specific ecological traits or community responses. Here, we show how our dataset of ants provides very promising information with regards to, among other things, biological invasions. Preliminary analyses of 2200 ant species, including the 20 most invasive species, for 25 life history traits, already suggested that some life history traits could be good predictors of invasiveness. Notably, this approach enables us to classify the 200+ ant species that are exotic but not yet invasive into species likely to become invasive, and those that should remain mere exotics. We hope that this demonstration will stimulate specialists to join those who already have contributed in filling up Antprofiler, for the greater benefit of the scientific community.