

> **C. Garros**¹, L. Vial¹, M. Chacon¹, X. Allene¹, L. Gardes¹, I. Rakotoarivony¹,
T. Erwin², J. Bouyer¹, T. Balenghien¹, D. Glaszmann¹

¹ Cirad, Contrôle des maladies animales exotiques et émergentes, (UMR Cirad - Inra), Montpellier, France

² Cirad DSI, Montpellier, France

Despite the general acknowledge that taxonomy is primordial, the decline in taxonomy and skills base for identifying and describing biodiversity is drastically declining. This is particularly crucial when dealing with arthropod pests, nuisance or vector species. Besides, recent or on-going emergence or reemergence of vector-borne diseases in temperate areas regain interest to neglected or newly focused arthropods groups. Species identification is usually based on comparison with voucher or type specimens present in reference collection or done using an identification key. The recent development of DNA barcoding has also increased molecular species identification, especially for sibling species or species group, based on molecular polymorphism with its controversial. However, reference collection can be difficult to access and are generally not accessible online, and the quality of molecular data is difficult to check. This highlights the importance of reference collection and the need for a high standard dissemination among field workers, scientists and taxonomists. For arthropods of interest to animal health, few websites were available gathering information on taxonomy, epidemiology and sharing data such as pictures of morphological features and molecular sequences. Avabase is an online database (<http://avabase.cirad.fr/>) for vector arthropods of interest for animal health. It is a free tool available to any labs or institutes willing to share and disseminate their reference collection of arthropods. It gathers species sheets with up-to-date data on taxonomy and epidemiology and manages the collection of voucher specimens and DNA data. Today, the database presents data for the *Culicoides* collection available at Cirad. Soon, the historical collection of Ixodidae ticks collected by P.C. Morel and the complete fauna of *Glossina* flies will also be processed. We hope this online database will help sharing taxonomic expertise and knowledge as well as contribute and participate to the systematic review of important arthropod groups.