



MEDREONET: "Surveillance network of Reoviruses, Bluetongue and African Horse Sickness, in the Mediterranean Basin and Europe"

WP 2: Regional surveillance of vectors.

Deliverable 2.2 Meeting. Strasbourg 17- 20 March 2009.

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OBJECTIVES OF THE MEETING

General objective:

To develop an identification tool to facilitate the morphological identification of Palearctic *Culicoides* species

Specific objectives:

- To define consensually the taxonomic units (groups, complexes, and sibling species)
- To present the first draft of the identification key (currently on French fauna)
- To discuss and validate the diagnostic characters for the main Palearctic species

GENERAL CONCLUSIONS

- Phylogeny of the different subgenus species is still a pending task.
- A permanent link between morphological and molecular taxonomy is needed.
- The use of Obsoletus group and Obsoletus complex categories has been agreed.
- Intermediate morphological forms (i.e.: variation in wings patterns) increase difficulty in taxonomy.
- There is a high need of effective connectivity and confident sources of information about *Culicoides*.
- The multi access key has been presented and terminology and characters (wings, spermathecae, eyes, palps, antennae and legs) have been reviewed.

RECOMMENDATIONS

- Morphological studies combined with DNA Barcoding analysis are proposed (C. Garros will be the coordinator).
- A list of the Western Europe *Culicoides* species will be developed (J.C. Delecolle, B. Mathieu, C. Garros and R. Meiswinkel will be the coordinators)
- Recommendations to authors about terminology and mat. & met. details about identification of *Culicoides* species will be given (D. Werner will be the coordinator)
- When possible, sequencing and incorporation of the sequences to Genebank is recommended.
- Multicenter studies covering large scale populations for *Culicoides* phylogeny are suggested to be conducted (N. Pages will be the coordinator)
- Intraspecific polymorphisms measured by morphometrics and molecular methods are needed (i.e. *Obsoletus* complex).

RECOMMENDATIONS

- Improvement of the multi access key is in progress:

Interface

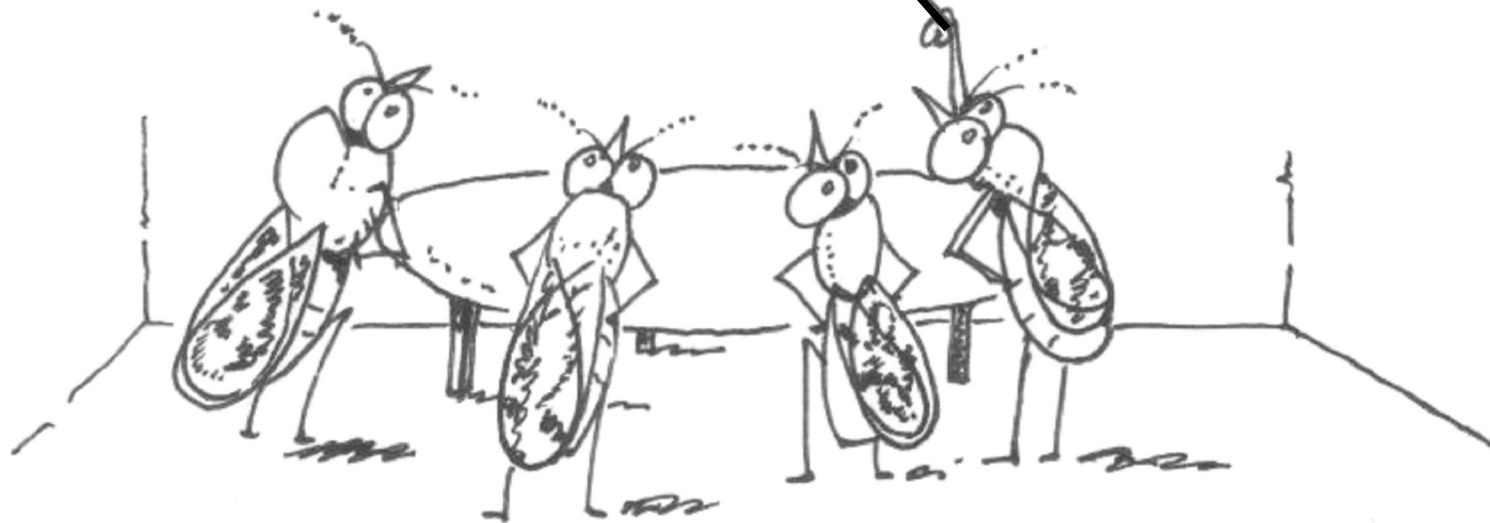
Weight of the different characters

Missing species will be progressively included

Different filters will be added: species per country,
common/rare species...

Male genitalia will be also included.

- Exchange of *Culicoides* species either for phylogenetics or taxonomic studies is highly encouraged.
- A newsletter will be used for updating information about MedReoNet and other issues (meetings, recent findings, etc.) (T. Balenghien will be the editor)



This is a new complex...what we call a Beerphylic complex...not dangerous after 8 pm!!