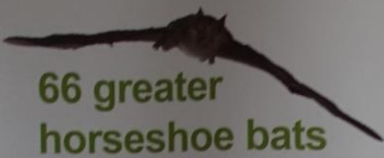


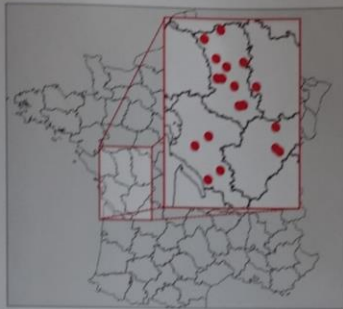
Metabarcoding for the parallel identification of bats and their preys : focus on the greater horseshoe bat

Orianne Tournayre¹, Maxime Galan¹, Jean-Baptiste Pons², Eric Pierre¹, Maxime Leuchtman³, Dominique Pontier^{2,4†}, Nathalie Charbonnel^{1†}

Galan et al 2017. BioRxiv doi: <https://doi.org/10.1101/155721>. Submitted in *Molecular Ecology Resources*



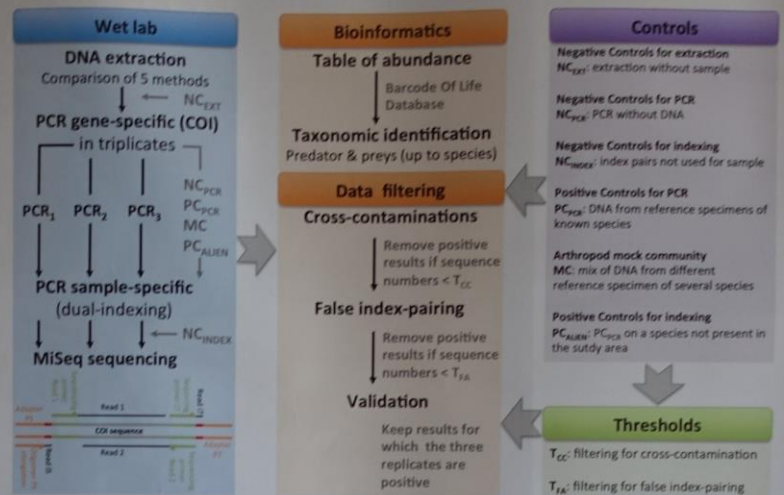
66 greater horseshoe bats
1 pellet/individual



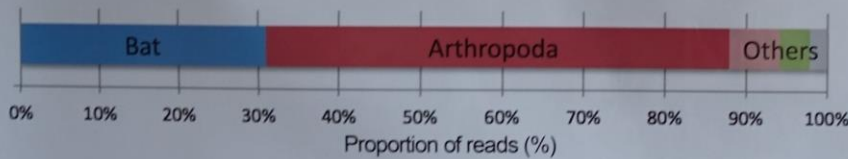
12 localities
In Western France

Rigorous protocols

3 PCR replicates, positive and negative controls, several filters



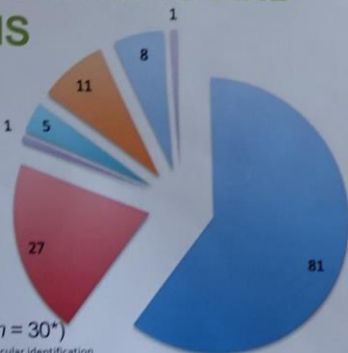
SUCCESSFUL DNA AMPLIFICATION OF BATS AND THEIR ARTHROPOD PREYS



- Greater horseshoe bat
- Arthropoda (Bold similarity > 97%)
- Arthropoda unclassified (Bold similarity score < 97%)
- Others (Blood meals, plants, fungi, ...)
- Unclassified

A DIVERSIFIED DIET, DOMINATED BY LEPIDOPTERANS AND DIPTERANS

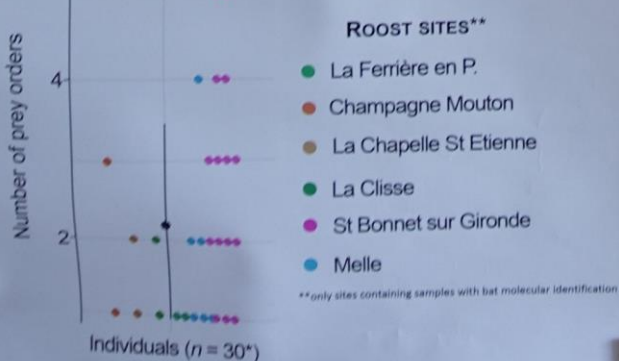
- Lepidoptera
- Diptera
- Trichoptera
- Neuroptera
- Coleoptera
- Hymenoptera
- Orthoptera



...AND WHICH INCLUDES 16 PEST SPECIES



WITH A HIGH VARIABILITY BETWEEN SITES AND INDIVIDUALS



orrianne.tournayre@supagro.fr; maxime.galan@inra.fr

- INRA, Center for Biology and Management of Populations, Montferrier sur Lez, France
- LabEx EcoFect, Ecoevolutionary Dynamics of Infectious Diseases, Villeurbanne, France
- Nature Environnement 17, Surgères, France
- University Lyon 1, CNRS, Biometry and Evolutionary Biology Laboratory, Villeurbanne, France

† equal author contributions

