



Julien Barataud (2025) *Acoustique des sauterelles, grillons et courtilières de France, Belgique, Luxembourg et Suisse*

Éditions Biotope – Muséum national d'histoire naturelle, 592 pp.
ISBN 9782366623536

It has been a long time since a European publication focused on bioacoustics of Orthoptera only. Since Heller (1988), Ragge & Reynolds (1998) and Roesti & Keist (2009) no more books with a (regional) European overview of the songs of grasshoppers has been presented. And I think in terms of size and conciseness it has not yet been surpassed in earlier publications.

Considering its size, this book is by far not meant as a field guide. Merely it is meant as a reference book, to study at home.

The book focusses on the Ensifera of France, Belgium, Luxemburg and Switzerland and really deepens the knowledge compared to earlier publications. All 110 species are covered by a well-illustrated 2-5 pages of information, showing many

characteristics of their song, such as yearly and daily periodicity, dependence of temperature. Songs are represented by a combination of oscillograms and spectrograms, but also by a QR code, leading to sound examples, available online. Of course, where present, different song types are described and diagnostic characters are given, both in text, but frequently also in nice scatter diagrams showing clear delimitations of species for certain aspects of their songs. Distribution, ecology and a picture of species and habitat complement the bioacoustic information of the species involved.



The book also comprises an identification key for the songs of the species. This may seem tricky, but in fact is quite useful to focus on a smaller set of species, when trying to identify an unknown sound. It will be easier to compare what you heard or recorded with the descriptions and sound recordings presented through the book.

To be able to identify the songs by Ensifera from other animal groups, Julien provides a chapter on examples of other species of Orthoptera, and other vertebrate and insect groups that may be confused with Ensifera.

Being written in French, meant for the francophone part of Europe, it will not be easy for any European to be used as a tool to identify species by their song or study bioacoustics of this group. This is complicated by the fact that Barataud has used a slightly different terminology for basic song characters. Especially the term syllable is used differently than both Ragge & Reynolds (1998), but recently also Baker & Chesmore (2020) propose and is widely used in scientific publications. Yet, the elaborate illustrations and online sound examples will help many people interested to understand the song characters of the treated species.

The book also comprises chapters on the recording techniques and general sound producing aspects of Ensifera, in aid of potential new researchers or naturalists.

All in all a book worth for anyone focusing on Ensifera or Orthoptera songs. Yet, it supposedly also adds to the identification capacity of bat researchers for other species they encounter acoustically. Finally, it is potentially important when identifying sounds in passive acoustic monitoring as a tool in assessing biodiversity and biodiversity changes.

Luckily, Julien has made a large part of his collection of sound recordings freely available, not just with this book, but especially through xeno-canto.org. This will certainly help to develop AI tools for automatic species recognition. The value of the book nevertheless will remain as a well-substantiated reference work.

Baudewijn Odé

Baker E, Chesmore D (2020) Standardisation of bioacoustic terminology for insects. *Biodiversity Data Journal* 8.

Heller K-G (1988) Bioakustik der europäischen Laubheuschrecken. *Ökologie in Forschung und Anwendung* 1: 1-358.

Ragge D, Reynolds W (1998) *The Songs of the Grasshoppers and Crickets of Western Europe*. Harley Books, Colchester, 591 pp.

Roesti C, Keist B (2009) *Die Stimmen der Heuschrecken*. Haupt edition, 144 pp.

doi.xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx