



# LEDRA

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## LEafhopper Distribution Recording & AnalysIs

Newsletter of the Auchenorrhyncha Recording Scheme for Britain & Ireland

### Editorial

Welcome to the first issue of LEDRA, the newsletter for the revitalised Auchenorrhyncha\* Recording Scheme. It has been a long time since the recording scheme last produced a newsletter and a lot has happened in the meantime. This first issue is timed to coincide with the launch of the Recording Scheme's new website, which Tristan Bantock and I have been working on for the past year or so, the development of which has been made possible through generous support from the Open Air Laboratories (OPAL) grant scheme. Do have a look at the website. I hope you find it both informative and useful:

<http://www.ledra.co.uk/>

A word of explanation about the title of the newsletter is required. Many entomologists will know that *Ledra aurita*, sometimes known as the 'eared leafhopper' because of the unmistakable lateral projections on its head, is the largest leafhopper in Britain. Were it not for the New Forest Cicada, *Cicadetta montana*, it would be the largest of all the Auchenorrhyncha. It therefore seemed appropriate to use it as the Recording Scheme's 'flagship' species. The name of the genus also provides a convenient acronym for the main objective of the scheme: recording and analysing the distribution of leafhoppers and their allies in Britain and Ireland. Many thanks are due to Tristan Bantock for allowing me to use his excellent photo of this spectacular species on the newsletter header.

The purpose of the newsletter is to provide a forum for leafhopper enthusiasts to share their recording news, ask questions (e.g. about techniques), lodge requests (e.g. for information or specimens) and generally stimulate interest in recording this fascinating group of insects. Please send in your contributions at any time. Photographs enliven any article, no matter how short. So, feel free to include photos of live leafhoppers,

specimens, equipment, people demonstrating new techniques etc. Records of interesting or rare species are particularly welcome when accompanied by a photograph of the habitat in which the species was found; this provides an excellent way for others to develop a mental image of the right sort of habitat in which to search.

Please let me know if you publish anything concerning leafhoppers, even if it is only a short list of species mixed in with other insect groups. Future newsletters will include lists of recent relevant publications. You will find a list of papers and articles published since 2000 on the website.

My intention is to produce either one or two newsletters each year, depending upon the volume of contributions that I am sent. Newsletters will be downloadable from the Ledra website. An email alert will go out to everyone on the e-mailing list each time a new newsletter appears. I would welcome your feedback on both the newsletter and the website. Have you found them useful? Please send me your suggestions for how either could be improved in future.

Finally, best wishes for a productive 2011 field season!

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\*Many entomologists are unfamiliar with the term 'Auchenorrhyncha', a word that is difficult to pronounce and often mis-spelt (the correct spelling has two r's)! Not all taxonomists agree that this is a valid grouping or at what level it should sit in the taxonomic hierarchy. However, the conventional view is that the Auchenorrhyncha are a *series* within the Hemiptera-Homoptera. The group includes the leafhoppers, planthoppers, froghoppers (sometimes called spittlebugs), treehoppers and cicadas. For convenience, this list is often shortened to 'leafhoppers and their allies'.

## Significant recent developments

Looking back over the time elapsed since the last Recording Scheme newsletter and the last four years in particular, there are three developments that really stand out:

i) Many species have been recorded in Britain for the first time: some fourteen since 2000, approximately four percent of the total fauna, which now stands at 390 species. At current rates of discovery, it won't be long before we reach 400. There are probably several reasons for this recent acceleration in adding species to the list. Some have almost certainly been imported with their host plants by the ornamental and horticultural plant trade. Others will have arrived here independently from the near continent, often as part of a general northward shift within Europe, perhaps as a result of a climatic warming. Other discoveries are probably more the consequence of recent increases in recording effort that have uncovered species that have been here all the time but at very low densities.

The leafhopper *Zyginella pulchra*, a recent arrival which is now widespread in Britain



ii) In 2007, we managed to get seven species of leafhopper and planthopper added to the Biodiversity Action Plan (BAP) Priority List. These are now considered as high priorities for conservation action under the UK BAP. They were selected against a set of criteria based mainly on evidence of rarity, rapid recent decline and immediate threat. They are:

*Cicadetta montana* (New Forest Cicada)

*Doratura impudica*

*Euscellis venosus*

*Erotettix* (= *Macrosteles*) *cyane* (Pondweed leafhopper)

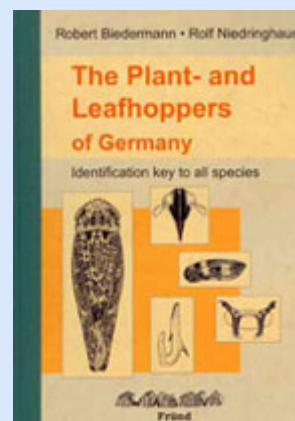
*Chlorita viridula*

*Eurysa douglasi*

*Ribautodelphax imitans*

The raised status of these species should help to secure funds to take positive conservation action for their benefit. This effect is evident already in that DEFRA have funded a small project to establish the habitat requirements of *Doratura impudica* and Pond Conservation have added *Erotettix cyane* to the list of species specifically targeted by their Million Ponds Project. Reports on these projects and developments with the other BAP species will follow in subsequent newsletters.

iii) The last few years have seen a significant expansion in the number of identification aids for this group of insects. Firstly, *The Leafhoppers and Planthoppers of Germany* by Robert Biedermann and Rolf Niedringhaus, originally published in German but now translated into English, has provided a modern user-friendly key that is rapidly becoming the standard work for identifying species in this group. All species are illustrated with excellent line drawings of the whole insect and relevant parts such as genitalia. Although focused on a different geographical region and therefore containing many species that are not (yet) found in Britain and Ireland, the number of species 'missing' from a British perspective is surprisingly small (around 20).



Secondly, the *British Bugs* website <http://www.britishbugs.org.uk/> now provides an online identification guide to many Auchenorrhyncha (and Heteroptera) in Britain. Although not yet comprehensive in its species coverage, the photo gallery has become an indispensable adjunct to any formal identification key, allowing one to check specimens against stunningly good photographs of whole insects. In addition to the photographs, each species account has some tips on separating the species in question from other similar ones, habitat, distribution and seasonal phenology.

## Future plans

I am expecting that the newsletter format will evolve as people submit ideas for features that might be of interest to them or others. Please send me your suggestions. In the meantime however, the following is a list of the type of material that future newsletters might contain:

- unusual records (rare species, atypical habitats or hostplant associations, locations outside known range etc.), particularly ones that might not be considered worth publishing in one of the standard journals
- habitat descriptions (and photos) for important species
- distribution maps of selected species
- conservation news
- equipment and techniques (collecting, dissection, photography)
- recent literature
- draft/test identification keys
- reviews (of books, important papers)
- announcements and reports of workshops and field meetings
- requests (for information, specimens, records, advice on techniques)

## Submitting records to the Recording Scheme

I am always pleased and grateful to receive records of any species in virtually any format for the Recording Scheme database. However, some formats are more convenient than others! I currently operate MapMate (my CUK is 7q2), so receiving records as sync files is certainly the easiest and least onerous method. Alternatively, I have created a specially formatted recording form (in Excel) that can be downloaded from the website. This contains all the current species names as well as those used in the RES Handbooks. If contributors have already computerised data in some other format, I can usually cope with that as well.

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## Recent literature

Full lists of publications on leafhoppers since 2000 can be found on the website, but here are those published in the last year:

- Badmin, J.S. (2010) Overwintering biology of nymphs of *Issus coleoptratus* (Hemiptera: Issidae). *British Journal of Entomology and Natural History*, 23, 39-44.
- Badmin, J.S. & Witts, T. (2010) Cord-grass planthopper *Prokelisia marginata* (Hemiptera: Delphacidae) sweeps into Kent. *In Practice*, September 2010, 16-17.
- Bantock, T., Botting, J. & Barnes, S. (2010) *Zygina nivea* (Hemiptera: Cicadellidae) new to Britain. *British Journal of Entomology and Natural History*, 23, 235-236.
- Bleicher, K., Orosz, A., Cross, J.V., & Marko, V. (2010) Survey of leafhoppers, planthoppers and froghoppers (Auchenorrhyncha) in apple orchards in south-east England. *Acta Phytopathologica et Entomologica Hungarica*, 45, 93-105.
- Denton, J. (2010) *Pediopsis tiliae* (Germar) (Hemiptera: Cicadellidae) in Middlesex. *British Journal of Entomology and Natural History*, 23, 51.
- Jones, R.A. & Hodge, P.J. (2010) Further records of *Asiraca clavicornis* (Fabr.) (Hemiptera: Delphacidae) on London and Thames Estuary brownfield sites. *British Journal of Entomology and Natural History*, 23, 205-206.
- Ramsay, A.J. (2010) *Oncopsis appendiculata* (Hemiptera: Cicadellidae) new to Britain. *British Journal of Entomology and Natural History*, 23, 171-174.
- Salmon, M.A. (2010) The Coleoptera and Hemiptera of Brownsea Island. Part 2: additions and corrections. *Entomologist's Gazette*, 61, 243-250.
- Stewart, A.J.A. & Kirby, P. (2010). Hemiptera. In *Silent Summer: The state of wildlife in Britain and Ireland* (ed N. Maclean), pp. 512-530. Cambridge University Press, Cambridge.



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*Dryodurgades antoniae*, a new species to Britain, feeds on broom