

# *Ledra aurita* (Linnaeus, 1758) (Hem., Cicadellidae) rediscovered in Norway

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The remarkable leafhopper *Ledra aurita* (Linnaeus, 1758) has been rediscovered in Norway. Three specimens were captured at light at Ø, Hvaler: Asmaløy (EIS 12) in July-Aug. 1995. An unpublished record from AK, Frogn: Drøbak (EIS 28) from August 1949 is also presented. In Norway the species has previously only been recorded from Ø, Hvaler: Kirkøen (EIS 20) in last century and again in 1915. Biology and distribution are briefly discussed. Due to the sparse and local distribution in Norway, the species should, until further notice, be included in the national red list, most probably with the category endangered (E).

## INTRODUCTION

The homopterans is a poorly investigated group in Norway, and very few contributions have been made in the latest decades. The perhaps most remarkable representative of this order in the Norwegian fauna is *Ledra aurita*, the only representative of the subfamily Ledrinae in Norway (Ossiannilsson 1981). The imagines are easily recognized by two huge earshaped processes on the dorsal side of thorax, from which the species has got its Norwegian vernacular name: «øresikade» The present account deals with new Norwegian records of this species. Localities and EIS-grid numbers presented in the text are given in accordance with Økland (1977, 1981).

## THE NORWEGIAN RECORDS

*L. aurita* was first recorded by T. Helliessen when he as a youth spent the summers at Hvaler in Østfold (Ø) (Warloe 1922, Holgersen 1944, 1945). A single specimen is present in the collections of Stavanger Museum and labeled «Hvaler, Helliessen» and probably collected around 1860-70. T. Münster collected a single juvenil on *Quercus* 26 April 1915 and later two imagines 21 Aug. 1915 at Ø, Hvaler: Kirkøen. According to Warloe (1922) Münster collected the specimens by beating them down from oaks at Prestegaardslien at Kirkøen. All specimens are kept in the collections at the Zoological Museum in Oslo, together with a single specimen from AK, Frogn: Drøbak (EIS 28) collected 7 Aug. 1949 by B. Christiansen.

A single specimen of *L. aurita* was captured at light at Ø, Hvaler: Asmaløy, Huser (EIS 12), 28 July 1995, by O. Sørlibråten. Between 1-31 Aug. the same year two more specimens were collected at light on the same locality by the junior author. This locality is partly covered with deciduous forest including stands of oak (*Quercus* sp.), but lime (*Tilia cordata*), aspen (*Populus tremulae*) and alder (*Alnus glutinosa*) are also abundant in the area, together with a smaller pine-forest (*Pinus sylvestris*) on sandy ground. Bushes and well developed pasture fields with a variety of herbs are present in the open and more exposed areas.

All the hitherto known Norwegian records including EIS- and UTM-coordinates are given in Table 1.

## BIOLOGY AND DISTRIBUTION

*L. aurita* is associated with deciduous trees, preferably oak (*Quercus* sp.) and hazel (*Corylus avellana*) (Ehnström & Walden 1986), but may also be found on (*Alnus glutinosa*) and poplar (*Populus* spp.) (Holgersen 1944, Ossiannilsson 1981). The distribution covers most of Central and Southern Europe and reaches eastwards into China (Ossiannilsson 1981, Ehnström & Walden 1986). The species is recorded from Denmark, but not from Finland. In Sweden it is recorded from Skåne (Sk), Blekinge (Bl), Öland (Öl), Gotland (Gtl), Västergötland (Vs) and Östergötland (Ös) (Ossiannilsson 1981).

son 1981, Ehnström & Waldén 1986). It has, however, not been recorded from Västergötland since 1829, and from Östergötland since 1948. In Sweden the species is considered vulnerable and is present in the National Swedish red list with category 2, i.e. vulnerable (Ehnström et al. 1993). The main threats are supposed to be thinning and removal of cutting debris, together with forestation of fields and meadows. In Norway the picture is probably more acute due to the more restricted distribution and the fact that the species is only recorded from one single locality the last 50 years. The species should therefore be given category endangered (E) until further notice.

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## SAMMENDRAG

### *Ledra aurita* (Linnaeus, 1758) (Hem., Cicadellidae) gjenfunnet i Norge

Den karakteristiske øresikaden *Ledra aurita* (Linnaeus, 1758) er gjenfunnet i Norge. Tre eksemplarer ble fanget på lys på Ø, Hvaler: Asmaløy (EIS 12), juli-

august 1995. Samtidig angis også et upublisert funn fra AK, Frogn: Drøbak (EIS 28), august 1949. Arten er tidligere kun funnet på Ø, Hvaler: Kirkøen (EIS 12) i forrige århundre og igjen i 1915. Biologi og utbredelse er kort kommentert. Grunnet artens sterkt begrensede utbredelse i Norge foreslås den inntil videre inkludert i den nasjonale rødlisten høyst sannsynlig med kategorien truet (E).

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**Table 1.** Localities with EIS- and UTM (ED-50)-coordinates where *Ledra aurita* (Linnaeus, 1758) has been recorded in Norway. The following abbreviations have been used: StMu=Stavanger Museum, ZMO=Zoological Museum of Oslo.

Locality	Reg.	EIS	Municipality	UTM 32V	Date	N	Leg.: (ex coll.)
«Kirkøen, Hvaler»	Ø	?12	Hvaler	PL??	?1860-70	1	T. Helliesen (StMu)
Prestegaardslien, Kirkøen	Ø	+12	Hvaler	PL1645	26 April 1915	juv.	T. Münster (ZMO)
Prestegaardslien, Kirkøen	Ø	12	Hvaler	PL1645	21 Aug. 1915	2	T. Münster (ZMO)
Huser, Asmaløy	Ø	12	Hvaler	PL1148	28 July 1995	1	O. Sørli-bråten (priv.)
Huser, Asmaløy	Ø	12	Hvaler	PL1148	1-31 Aug. 1995	2	B.M. Fjellstad (ZMO)
Drøbak	AK	28	Frogn	NM9215	7 Aug. 1949	1	B. Christiansen (ZMO)