Establishment and range expansion of some new Heteroptera (Hemiptera) in Norway

Frode Ødegaard & Anders Endrestøl

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In this paper we present new records of three species of Heteroptera previously not recorded in Norway: Deraeocoris lutescens, Chilacis typhae and Heterogaster urticae. We assume that the populations of these species are established in Norway quite recently. We also present data indicating further range expansions of two other newly arrived species, Labops sahlbergii and Heterotoma planicornis. Many species of Heteroptera are associated with anthropogenic habitats such as ruderal fields that are common in urban areas. This makes Heteroptera as a group particularly exposed for unintended introductions to new areas. We assume that D. lutescens, H. planicornis, C. typhae and H. urticae have been introduced with ornamental plants or semi-natural vegetation. However, it is often difficult to assess whether a new species is found as a result of natural range expansion or as a result of human assisted introduction, processes that are not mutually exclusive. Further monitoring of these species should be carried out, in order to document their range dispersal as well as their potential ecological impacts.

Keywords: Chilacis typhae, Deraeocoris lutescens, Heterogaster urticae, Heteroptera, introduced species, range expansion

Frode Ødegaard, Norwegian Institute for Nature Research, Tungasletta 2, 7485 Trondheim, Norway E-mail: frode.odegaard@nina.no

Anders Endrestøl, Natural History Museum, University of Oslo, Pb 1172 Blindern, 0318 Oslo, Norway E-mail: anders.endrestol@nhm.uio.no

INTRODUCTION

Since the publication of the catalogue of the Hemiptera-Heteroptera of Norway (Coulianos 1998), several papers on species new to Norway as well as new regional records of Heteroptera have been published. These contributions have increased our knowledge on faunsitics of Norwegian Heteroptera, and most of the new records probably represent earlier undiscovered native populations as the Heteroptera are a rather poorly collected group in Norway. On the other hand, a large proportion of new insect records in

Norway represent range expansions of recently established populations (Semb-Johansson 1988, Ødegaard & Ligaard 2000). Earlier publications on Norwegian Heteroptera have not paid very much attention to changes in species composition over time.

Alien species represent one of the five major threats to the biodiversity on Earth (Wilcove et al. 2000). This is also a relevant situation in our country since as many as 2483 species are defined as introduced to Norway according to the recently published Norwegian Black List (Gederaas et