

Hoppers on Black Poplars – The Auchenorrhyncha fauna on *Populus nigra* in Norway

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The known distribution of *Populus nigra* and its associated 1st and 2nd degree monophagous Auchenorrhyncha in Norway is given, and their indicated range expansion is discussed. Four Auchenorrhyncha species new to the Norwegian fauna is presented (*Rhytidodus decimusquartus*, *Tremulicerus fulgidus*, *Kybos abstrusus*, and *Empoasca ossiannilssoni*) together with several new regional records. All specimens were collected during 2007–08, and were all collected from *P. nigra* (sens. lat.) (except for hibernating specimens).

Key Words: *Populus nigra*, Auchenorrhyncha, *Rhytidodus decimusquartus*, *Tremulicerus fulgidus*, *Kybos abstrusus*, *Empoasca ossiannilssoni*, Norway

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INTRODUCTION

The Auchenorrhyncha fauna (hoppers) of Norway is poorly known, and very few have worked with this group of insects in Norway since Ossiannilsson published his “The Auchenorrhyncha (Homoptera) of Fennoscandia and Denmark” (Ossiannilsson 1978, 1981, and 1983). An exception being H. Holgersen, who published several papers on the Norwegian Auchenorrhyncha fauna (e.g. Holgersen 1985, 1989). In his catalogue, Ossiannilsson (1983) lists 264 species from Norway and give their distribution based on modified (merged) Strand-regions (Strand 1943). Including Ossiannilssons publications and more recent ones, we now have 278 published Auchenorrhyncha species from Norway (including the four new published here) (Ossiannilsson 1978, 1981, 1983, Holgersen 1985, 1992, Raatikainen & Ylönen 1988, Hansen & Borgersen 1991, Olsen 1999, Hansen 2000).

In general, Auchenorrhyncha species in Europe show some degree of host selectivity and many species are associated with only one or a few host plants (Nickel 2003). The host plant is defined as species on which the oviposition and nymphal development takes place (Nickel 2003). Adult hibernation may take place on a different plant species, but this is for most species unknown (Nickel 2003). Diet breadth can be classified according to number of host plants used by a species (Jolivet 1998). 1st degree monophagy refers to phytophagous organisms having one host species, 2nd degree monophagy having one host genus, oligophagous organisms having one or a few host families, and finally polyphagous organisms having several host plant families (Jolivet 1998).

The distribution of black poplar *Populus nigra* in Norway is also poorly known, but several factors make this tree species interesting. It has a restricted and patchy distribution in Norway,