

Three leafhopper's species (Hemiptera: Cicadomorpha) new to Poland

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ABSTRACT. Three leafhopper's species (Hemiptera: Cicadomorpha) new to Poland.

This paper contains information about three leafhoppers species recorded in Poland for the first time: *Zygina nigratarsis* REMANE, 1994, *Acericerus ribauti* NICKEL et REMANE, 2002 and *Endria nebulosa* (BALL, 1900). Notes on their geographical distribution, biology and host plants are presented. The specimens has been caught during recent field studies conducted in the southern Poland – in the area of Upper Silesia and western part of Kraków-Wieluń Upland (Częstochowa).

KEY WORDS: Hemiptera, Cicadomorpha, Poland, new record.

INTRODUCTION

The fauna of the Fulgoromorpha and Cicadomorpha in Europe comprises about 2080 species of the Auchenorrhyncha (HOCH 2013). So far in the area of Poland 539 species of leafhoppers has been found (CHUDZICKA 2004, MUSIK et al. 2013, ŚWIERCZEWSKI & GĘBICKI 2003, TRILAR et al. 2006, GAJ et al. 2009, ŚWIERCZEWSKI & STROIŃSKI 2011a, 2011b, ŚWIERCZEWSKI & WALCZAK 2011a, 2011b, WALCZAK et al. 2012). The leafhoppers and planthoppers fauna of Poland has been fairly well but not evenly studied. Until now the highest number of species was recorded from Mazovian Lowland (NAST 1976, CHUDZICKA 1986), Upper-Silesia (NAST 1976, GĘBICKI 1979, WALCZAK & MUSIK 2012) and Kraków-Wieluń Upland (SZWEDO 2001, ŚWIERCZEWSKI & GĘBICKI 2004, ŚWIERCZEWSKI & WOJCIECHOWSKI 2009, WALCZAK 2011).

Zygina nigratarsis REMANE, 1994

Localities: Upper Silesia: Górki Śląskie: ul. Ofiar Oświęcimskich, N50°8'18", E18°22'11"; UTM: CA15 – on *Picea abies*, 29.VIII.2012, 1♂, leg. & det. Łukasz Junkiert; Dąbrowa Górnicza, Sikorka, N50°23'14", E19°17'25"; UTM:CA78 – on *Pinus sylvestris*, 13.X.2011, 2♂; Nowa Wieś, N50°27'15", E19°5'28"; UTM: CA69 – dry meadow, 26.IX.2012, 1♂1♀, leg. & det. Krzysztof Musik

This species is probably widespread in the European deciduous forest zone. In central part of Europe it has been recorded from France, Belgium, Luxembourg, Germany and Austria, in northern part – in Finland and Western Russia (SÖDERMAN et al. 2009). The species occurs in rather moist localities, floodplains of streams and rivers. Nymphs are feeding on *Prunus padus*, while adults migrate to coniferous trees for hibernation. It has one generation during year (NICKEL 2003).

Acericerus ribauti NICKEL et REMANE, 2002

Localities: Kraków-Wieluń Upland, Częstochowa (Wyczerpy-Aniołów): Aniołowski Park, N50°50'37", E19°08'43"; UTM: CB63 – on *Acer platanoides*, 30.IX.2011, 1♀, Częstochowa (Zawodzie): ul. Mirowska, N50°49'02", E19°09'07"; UTM: CB63 – on *Acer platanoides*: 16.VIII-3.IX.2012, ex larva 1♀, 31.VIII.2012, 7♂♂, 2♀♀, 1 larva; leg. & det. Marcin Walczak; Upper Silesia: Piekary Śląskie (Księża Góra), N50°23'51,8", E18°55'22,6"; UTM: CA58 - on *Acer platanoides* 01.IX.2011, 1♀, Piekary Śląskie: ul. Pokoju; N50°24'45", E18°57'38"; UTM: CA58 – on *Acer platanoides*: 07.IX.2012 1♀; Świerklaniec: N50°25'30", E18°56'55"; UTM: CA58 – forest edge: 12.VI.2013, 1♀, leg. & det. Krzysztof Musik

The species belongs to European chorological element, holotype has been caught just 11 years ago on *Acer campestre* in southern part of Germany (NICKEL & REMANE 2002). Recently it has been recorded also in Lithuania and Sweden (SÖDERMAN et al. 2009) and Moravia in Czech Republic (MALENOVSKÝ & LAUTERER 2012). The observations from Częstochowa indicates, that specimens have been collected from shady and rather moist complex, which is Aniołowski Park as well as in the lane of trees growing thorough the Mirowska street. It may denote that it is a mesohigrophilous species. *A. ribauti* is a second degree monophagous species feeding on *Acer* spp, hibernates as adult and is an univoltine species (NICKEL 2003).

Endria nebulosa (BALL, 1900)

Localities: Kraków-Wieluń Upland, Częstochowa: Kule, N50°49'56", E19°08'11"; UTM: CB63 – community: *Arrhenatheretum elatioris*, 1♂, 12.VII.2006; leg. & det. Marcin Walczak; Upper Silesia: Piekary Śląskie: ul. Grunwaldzka, N50°24'39,6", E18°57'36,6"; UTM: CA58 – *Calthion palustris*, 1♀, 11.VIII.2011, leg. & det. Krzysztof Musik.

According to the literature dealing with the chorology of planthoppers and leafhoppers some authors indicate that *E. nebulosa* may be a Nearctic species and its original range enfolded Canada, northern and central part of USA. It was probably accidentally introduced to Europe in first half of 20th century (ARZONE et al. 1986). In Europe for the first time it has been recorded from the territory of former BRD (REMANE 1961), former Czechoslovakia (OSSIANILSSON 1983) and former Union of Soviet Socialist Republics (EMELJANOV 1967), later from the northern European countries such as Denmark, Sweden, Finland, Estonia (SÖDERMAN et al. 2009) and recently from Austria (SCHLOSSER & HOLZINGER 2012). Based on the newest data it may be possible that *E. nebulosa* is a Holarctic species. It hasn't been recorded in Europe and the rest part of Palearctic for so long probably because of its hidden lifestyle (ARZONE et al. 1986, SÖDERMAN 2007). This species occurs in sandy localities on *Calamagrostis epigejos*, in Scandinavia also on *C. canescens* (SÖDERMAN 2007). *E. nebulosa* is probably oligotrophic and mesohigrophilous species. It is univoltine and it hibernates in egg stage (NICKEL 2003).

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STRESZCZENIE

Trzy nowe gatunki piewików (Hemiptera: Cicadomorpha) dla Polski

Praca zawiera informację o stwierdzeniu po raz pierwszy w Polsce trzech nowych skoczaków: *Zygina nigratarsis* REMANE, 1994, *Acericerus ribauti* NICKEL et REMANE, 2002 i *Endria nebulosa* (BALL, 1900). Przedstawiono uwagi na temat rozmieszczenia geograficznego, biologii i roślin żywicielskich. Okazy zostały odłowione podczas ostatnich badań terenowych prowadzonych w południowej Polsce – w obszarze Górnego Śląska i zachodniej części Wyżyny Krakowsko-Wieluńskiej (Częstochowa).