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A faunistic review of Polish whiteflies (Hemiptera: Aleyrodidae)

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ABSTRACT. The paper describes the history of the investigation of Aleyrodidae in Poland and summarizes both published and new data on the distribution of whiteflies. Eighteen species of whiteflies have hitherto been reported from the country.

KEY WORDS: whiteflies, Aleyrodidae, Hemiptera, Poland, new records.

INTRODUCTION

Over 30 publications containing data about Aleyrodidae have been published in Poland so far. The first information dates from the 20th century and concerns *Aleurochiton aceris* recorded consecutively by WOLFF (1910) from the environs of Chełmno and Bydgoszcz, SCHMIDT (1912) from the Słupsk area and WÜNN (1920) from the Białowieża Primeval Forest. Another three species (*Trialeurodes vaporariorum*, *Aleyrodes proletella* and the above-mentioned *Aleurochiton aceris*) were reported by RUSZKOWSKI (1933) in his paper on the noxious fauna of Poland. A noteworthy publication by HAUPT (1934) describes the whitefly species new to science – *Aleurochiton acerinus* found at Bielinek on the River Odra. It is hitherto the only species of Aleyrodidae which has its *locus typicus* in Poland.

After the Second World War SZULCZEWSKI (1958) published a brief article about the whiteflies of the Wielkopolski National Park, but the data he provided seem doubtful (KLIMASZEWSKI & SZELEGIEWICZ 1962). Significant advances in the studies of Poland's Aleyrodidae were the papers published later by KLIMASZEWSKI & SZELEGIEWICZ (1962), CHOJECKI & KLIMASZEWSKI (1967), and SZELEGIEWICZ (1965, 1972). SZELEGIEWICZ (1979) provided the summary of the state of knowledge of Aleyrodidae in his catalogue of

Poland's whiteflies that includes host plant records and distributional data. According to the catalogue, 12 species of whiteflies had been recorded from Poland until 1979, most of them from the Mazovian Lowland and the Lublin Upland (9 species from each region) and no species had been recorded from 9 faunistic regions of Poland. In 1990 KLIMASZEWSKI described 13 species of Aleyrodidae in the List of Animals of Poland.

The present paper is based on the works published after 1979 and two papers that were not considered by SZELEGIEWICZ (SZCZEPAŃSKI 1975, 1983). Nearly half of these articles contain new distributional data about Poland's whiteflies that relate, among other things, to the Raciborska Valley, the Białowieża Primeval Forest, Babia Góra Mount and some national parks (SZCZEPAŃSKI 1975, 1983; KLASA 1987, 1999, 2000; KLASA & PALACZYK 2003, 2008; KLASA & WOŹNICA 2009). Five other publications discuss the greenhouse pest species *Bemisia tabaci* and the results of its chemical control in Poland (ŁABANOWSKI 1991, 1994, 1999; ŁABANOWSKI & WEGIENEK 1992; ŁABANOWSKI & SOIKA 1999). After 1979 six species new for the fauna of Poland were recorded: *Bemisia obenbergeri* ZAHRADNIK, 1961 (as *Asterobemisia obenbergeri* ZAHR.) (KLASA 1987), *Neopealius rubi* TAKAHASHI, 1954 (BINK-MOENEN 1991), *Bemisia tabaci* (GENNADIUS, 1889) (ŁABANOWSKI 1991) and *Massilieurodes chittendeni* (LAING, 1928) (as *Dialeurodes chittendeni*) (SOIKA, ŁABANOWSKI 1998), *Bemisia paveli* (ZAHRADNIK, 1961) (as *Asterobemisia paveli*) (KLASA & PALACZYK 2009), and *Calluneyrodes callunae* (OSSIANNILSSON, 1947) (KLASA & PALACZYK, in press).

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MATERIAL AND METHODS

The present study is based on available data and the material (larvae and adults) collected in Poland from 1981 to 2011.Whitefly larvae were collected in the field together with leaves and then mounted in the laboratory. Microscope slides were made from adults and puparia, which were hardly recognizable on macroscopic examination. Standard methods for mounting Aleyrodidae specimens were used.

RESULTS

The list of localities of Aleyrodidae with the Universal Transverse Mercator (UTM) code according to faunistic regions is as follows:

Baltic Coast: Gdańsk-Wrzeszcz – CF42**,** Gdynia-Orłowo – CF44**,** Gdynia – Skarpa Redłowska – CF44.

Pomeranian Lakeland: Czarna Dąbrówka near Bytów – XA62, Głusko in Drawa NP – WU67, Jasień near Bytów – XA60, Szczecin – VV71, Zamrzenica on the Koronowo reservoir – XV92.

Masurian Lakeland: Krzywe (Wigry NP) – FE39, Ukta near Ruciane-Nida – EE34, Wigry – FE39.

Wielkopolska-Kujawy Lowland: Brody near Lwówek – WU81, Drzewce near Torzym – WT08, Gądków Wielki – VT18, Łagów near Świebodzin – WT19, Łomnica near Zbąszyn – WT69, near Lake Góreckie – Wielkopolski NP – XT29, Nowy Tomyśl – WT79 Toruń-Bielany – CD37, Torzym – WT08, Zbąszynek-Chlastawa – WT58.

Mazovian Lowland: Augustów near Kozienice – EC30, Czerwieńsk – DD50, Łomna near Warsaw – DD80, Ostrów Mazowiecka – ED55.

Podlasie: Goniądz – FE12, Tykocin – FD19, Wólka Piaseczna near Goniądz – FE12, Białowieża Forest, Białowieża National Park sections 192, 193, 255, 399 – FD94, Białowieża National Park: Park Pałacowy – FD94, Czerlonka – FD84, Hotel Zielony near Czerlonka – FD84.

Upper Silesia: Chałupki – CA03, Jastrzębie Zdrój – CA23, Katowice – CA57, Kędzierzyn-Koźle – CA08, Kobiór – CA54, Kuźnia Raciborska – CA06, Łaziska Średnie – CA45, Łężczok res. – CA05, Mikołów – CA45, near Błędowska Desert – CA98, Orzesze – CA55, Polska Cerekiew – BA98, Rybnik – CA25, Tworków – CA04.

Kraków-Wieluń Upland: Alwernia – CA94, Bobolice – CB90, Brzoskwinia near Zabierzów – DA04, Czerna near Krzeszowice – DA05, Częstochowa – CB62, Dolina Kluczwody – DA15, Dolina Kobylańska – DA15, Dolina Racławki res. – DA15, Gąszczyk near Częstochowa – CB62, Góra Birów at Podzamcze near Ogrodzieniec – CA98, Góra Zborów res. in Podlesice – CB90, Karniowice near Bolechowice – DA15, Kostkowice – CB90, Kraków – DA24, Kraków-Witkowice – DA25, Kryspinów – DA14, Lipowiec res. – CA84, Mirów – CB90, Niedźwiedzia Góra near Tenczynek – DA05, Niegowa – CB91, Ogrodzieniec – CA98, Parkowe res. in Złoty Potok – CB81, Pękowice near Kraków – DA24, Podzamcze – CA98, Rodaki – CB98, Rudno – CA95, Smoleń res. – DA08, Stromieście near Lelów – DB01, Tenczynek – DA05, Wąwóz Bolechowicki – DA15, Wąwóz Korytania in Ojców NP – DA16 , Wygiełzów – CA84, Zabierzów – DA15, Żary – DA15 , Złoty Potok – CB91, Zrębice – CB82.

Małopolska Upland: Chęciny – DB62, Chęciny-Dobrzączka – DB62, Czaple Małe – CA27, Czaple Wielkie – CA27, Góry Pieprzowe res. – EB51, Ispina in Niepołomicka Forest – DA55, Krzywopłoty – DA08, Krzyżanowice – CA04, Mnichów near Jędrzejów – DB51, Pińczów – DA69, Skorocice res. – DA78, Szczepanowice – DA37, Wroni Dół res. – DA58.

Świętokrzyskie Mountains: Biały Gościniec road in Świętokrzyski NP – DB93, Łysica – DB93, Skarpa Zapusty near Cząstków – EB03, Świślina Rzeki – EB04.

Lublin Upland: Chełm – FB76, Rejowiec Fabryczny – FB56, Załucze Stare (Poleski NP) – FB59.

Roztocze: Bukowa Góra in Roztocze NP – FB30, Czarny Wygon in Roztocze NP – FB41, Hubale res. – FB51, "Międzyrzeki" conservation district in Roztocze NP – FA49, Piaseczna Góra (Roztocze NP) - FB30, Potok Senderki – FB40, Wola Wielka near Narol – FA77, Zamość – FB52, Zwierzyniec – FB30.

Sandomierz Lowland: Markowizna near Sokołów Małopolski – EA77, Wojnicz near Tarnów – DA83.

Western Sudetes: Suszyna – XR09.

Eastern Sudetes: Kletno res. in Śnieżnik Massif – XR36.

Western Beskid Mountains: Bochnia – DA53, Cieszyn – CA21, Czantoria – CA30, Dzięgielów – CA31, Górki Wielkie near Skoczów – CA41, Krościenko on the River Dunajec – DV57, Jasieniec near Ustroń – CA40, near Śmietanowa Glade (Babia Góra range) – CV99, Ogrodzona – CA31, Poręba Wielka – DV39, Rycerka – CV68, Ustroń Jaszowiec – CA40, Wisła – CA40, Wysokie – DA60, Zosiakowa Glade – Babia Góra range – CV99.

Orawa-Nowy Targ Basin: Baligówka near Czarny Dunajec – DV16.

Eastern Beskid Mountains: Kąty near Nowy Żmigród – EV39.

Tatra Mountains: Dolina Olczyska – DV26, Kuźnice (Tatra NP) – DV25, Molkówka – DV26.

Abbreviations: AK – Anna Klasa, F – female.

LIST OF SPECIES

Aleurochiton acerinus HAUPT, 1934

Distribution and ecology

The species occurs in Europe, except Scandinavia; more common in southern parts of Europe (MARTIN et al. 2000). Monophagous on *Acer campestre*. Hibernates as a puparium; bivoltine.

Distribution in Poland: Pomeranian Lakeland (HAUPT 1934), Lower Silesia (KLASA & WOŹNICA 2009), Upper Silesia, Western Beskid Mountains (KLASA 1987), Eastern Beskid Mountains (SZELEGIEWICZ 1972).

New records

Sandomierz Lowland: Wojnicz near Tarnów: 30.04.1987 and 5.03.1995, numerous

winter puparia on *Acer campestre*, leg. B. Wiśniowski; **Eastern Beskid Mts.**: Kąty near Nowy Żmigród, 4.07.2002, adults and summer pupal cases on *A. campestre*, leg. AK.

Aleurochiton aceris (MODEER, 1778)

Distribution and ecology

The species occurs in Europe (SZELEGIEWICZ 1979), in Poland only on *Acer platanoides*, common. Hibernates as a puparium; bivoltine. A typical woodland species.

Distribution in Poland: Baltic Coast, Pomeranian Lakeland, Masurian Lakeland, Wielkopolska-Kujawy Lowland, Mazovian Lowland, Białowieża Primeval Forest, Upper Silesia, Kraków-Wieluń Upland, Małopolska Upland, Lublin Upland, Western Sudetes, Western Beskid Mountains, Pieniny Mountains (SZELEGIEWICZ 1979), Bieszczady Mountains (KLASA 2000), Lower Silesia (KLASA, WOŹNICA 2009), Eastern Beskid Mountains (KLASA & PALACZYK 2008).

New records

All records are on *Acer platanoides*. **Pomeranian Lakeland**: Jasień near Bytów, 28.06.1983, numerous puparia, leg. AK; **Masurian Lakeland**: Wigry National Park: Krzywe, 7.09.2010, 69 puparia on 9 leaves (up to 22 puparia per leaf), leg. AK; **Wielkopolska-Kujawy Lowland**: Toruń-Bielany, 6.12.1997, several puparia, leg. J. Buszko; Torzym, 1.09.1983, several puparia, leg. AK; Zbąszynek-Chlastawa, 26.09.2009, a single winter puparium, leg. J. Partyka; Nowy Tomyśl, 25.09.2009, from 1 to 13 winter puparia on 7 leaves, leg. J. Partyka; Brody near Lwówek, 27.09.2009, 3 winter puparia, leg. J. Partyka; Łagów near Świebodzin, 10.04.2010, a single winter puparium, leg. K. Chwistek; **Mazovian Lowland**: Augustów near Kozienice, 15.03.2002, several winter puparia, leg. AK; **Upper Silesia**: Jastrzębie Zdrój, 14.08.1981, numerous winter puparia, leg. W. Celary; Katowice 9.10.1981, numerous winter puparia, leg. AK; **Kraków-Wieluń Upland**: Brzoskwinia near Zabierzów, 23.09.2003, several winter puparia, leg. A. Sołtys; Czerna near Krzeszowice, 14.09.2003, several winter puparia, leg. A. Sołtys; Gąszczyk near Częstochowa, 3.01.1998, several winter puparia, leg. AK; Karniowice near Bolechowice, 30.07.2003, adults and several summer puparia, leg. AK; Kryspinów, 4.12.1997, several winter puparia, leg. A. Palaczyk; Parkowe res. in Złoty Potok, 17.09.2003 and 12.07.2002, several winter puparia, leg. A. Sołtys, AK; Niedźwiedzia Góra near Tenczynek, 23.09.2003, numerous winter puparia, leg. A. Sołtys; Wąwóz Bolechowicki, 15.07.2002, several winter puparia, leg. AK; Góra Birów at Podzamcze near Ogrodzieniec, 18.04.2009, 2 winter puparia, leg. AK; Kraków-Witkowice, 23.08.2009, 3 summer pupal cases and 10 winter puparia on 8 leaves, leg. AK; Żary 10.10.2009, numerous winter puparia, leg. AK; **Małopolska Upland**: Czaple Małe 29.10.2000, a few winter puparia, leg. AK; Krzyżanowice, 14.07.1998, several summer puparia, leg. AK;

Skorocice res., 25.09.1999 and 3.05.2007, several winter puparia, leg. AK; Pińczów 8.04.2011, a single winter puparium, leg. A. Sołtys-Lelek; Chęciny, 30.09.2007, a single winter puparium, leg. AK; **Świętokrzyskie Mts.**: Świętokrzyski National Park – Łysica, Biały Gościniec road (forest section 110/145), 9.11.2008, several puparia, leg. A. Subel; **Lublin Upland**: Poleski National Park - Załucze Stare, 18.07.2008, several summer pupal cases and 3 winter puparia, leg. AK; **Sandomierz Lowland**: Wojnicz near Tarnów, 1.11.1997 and 1.11.2002, several winter puparia, leg. B. Wiśniowski; **Eastern Sudetes**: Kletno res. 850 m, in Śnieżnik Massif, 24.09.2000, several winter puparia, leg. AK; **Western Beskid Mts.**: Ustroń Jaszowiec, 23.09.2009, 2 winter puparia, leg. J. Partyka; Wisła, 9.10.2010, over 20 winter puparia and 6 larvae, leg. J. Partyka; **Tatra Mts.**: Tatra National Park: Dolina Olczyska 900 m, 10.08.2008, between ten and twenty black, the third instar larvae (without wax), several winter puparia (with wax) and summer pupal cases, leg. AK, A. Palaczyk.

Aleurochiton pseudoplatani VISNYA, 1936

Distribution and ecology

The species occurs in Europe, except Scandinavia (MARTIN et al. 2000) and in Transcaucasia and Turkmenistan (Kopet-Dag) (SZELEGIEWICZ 1979). In Poland only on *Acer pseudoplatanus*. Hibernates as a puparium; bivoltine.

Distribution in Poland: Masurian Lakeland, Wielkopolska-Kujawy Lowland, Mazovian Lowland, Upper Silesia, Kraków-Wieluń Upland, Western Beskid Mountains, Pieniny Mountains (SZELEGIEWICZ 1979), Świętokrzyskie Mountains, Western Sudetes, Eastern Beskid Mountains, Tatra Mountains (KLASA & PALACZYK 2008), Lower Silesia (KLASA & WOŹNICA 2009), Bieszczady Mountains (KLASA 2000).

New records

All records are on *Acer pseudoplatanus*. **Pomeranian Lakeland**: Głusko in the Drawa National Park, 10.08.2010, several pupal cases and puparia, leg. E. Suchanek; **Wielkopolska-Kujawy Lowland**: Zbąszynek-Chlastawa, 26.09.2009, 3 puparia, leg. J. Partyka; Nowy Tomyśl, 25.09.2009, a single puparium, leg. J. Partyka; Łagów near Świebodzin, 10.04.2010, 7 puparia on 4 leaves, leg. K. Chwistek; **Upper Silesia**: Rybnik, 17.10.1981, several winter puparia, leg. A. Palaczyk; Katowice, 8.10.1981, numerous winter puparia, leg. A. Palaczyk; Polska Cerekiew, 15.09.1983, numerous dark-coloured puparia, leg. AK; **Kraków-Wieluń Upland**: Brzoskwinia near Zabierzów, 23.09.2003, several winter puparia, leg. A. Sołtys; Dolina Kluczwody, 9.07.2003, several puparia, leg. AK; Parkowe res. in Złoty Potok, 12.07.2002 and 24.10.2004, several puparia, leg. AK; Czerna near Krzeszowice, 14.09.2003, several puparia, leg. A. Sołtys; Góra Birów at Podzamcze near Ogrodzieniec, 18.04.2009, a single winter puparium, leg. AK; Kraków-

Witkowice, 23.08.2009, 8 summer pupal cases and 8 young larval stages on 3 leaves, leg. AK; Pękowice near Kraków, 31.08.2009, 2 winter puparia and numerous summer pupal cases, leg. AK; Zabierzów, 23.10.2009, 8 winter puparia, dry-ground forest, leg. A. Sołtys-Lelek; Smoleń res., 20.04.2010, 2 winter puparia, leg. AK ; **Małopolska Upland**: Czaple Małe, 29.10.2000, 2 winter puparia, leg. AK; **Świętokrzyskie Mts.**: Świętokrzyski National Park – Łysica: slope N, Biały Gościniec road (section 110/145), 9.11.2008, 2 puparia, leg. A. Subel; **Roztocze**: Roztocze National Park – Zwierzyniec and Bukowa Góra, 14.07.2008, several summer pupal cases, puparia and adults, leg. AK; Potok Senderki, 17.10.2009, 28 puparia on 7 leaves (up to 9 puparia per leaf), leg. J. Partyka; **Sandomierz Lowland:** Wojnicz near Tarnów, 1.11.2002, several winter puparia, leg. B. Wiśniowski; Niepołomicka Forest – Ispina, 20.09.2009, 7 winter puparia on 3 leaves, leg. AK**; Western Sudetes**: Suszyna, 2.05.2008, 9 dark-coloured and 4 light-coloured puparia, leg. A. Sołtys-Lelek; **Eastern Sudetes**: Kletno res. in Śnieżnik Massif, 24.09.2000, numerous puparia, leg. AK; 20.10.2007, 3 dark-coloured puparia, leg. J. Partyka; **Western Beskid Mts.**: Bochnia, 28.08.2009, 11 summer and 2 winter pupal cases, leg. A. Jirak; Ustroń – Jaszowiec 400 m, 23.09.2009, 2 dark-coloured puparia, leg. J. Partyka; Czantoria 990 m, 22.09.2009, a single puparium, leg. J. Partyka; Jasieniec near Ustroń, 10.10.2010, a single dark-coloured puparium, leg. J. Partyka; Wysokie, 5.05.2010, 8 winter puparia, leg. A. Palaczyk; **Tatra Mts.**: Kuźnice 1030 m, 22.10.2008, 2 dark-coloured puparia, leg. J. Partyka (Dolina Chochołowska near the PTTK hostel, at an altitude of 1148 m, no puparia were found in a sample of 25 leaves).

Aleuroclava similis (TAKAHASHI, 1938)

Distribution and ecology

The species occurs in the Palaearctic Region (Europe, Siberia, Maritime Territory of Russia, Japan) and the Nearctic Region: USA (Connecticut, New York, Rhode Island) (MARTIN et al. 2000). In Poland only on *Vaccinium vitis-idaea*. Hibernates as a puparium; univoltine.

Distribution in Poland: Baltic Coast, Masurian Lakeland, Mazovian Lowland, Podlasie, Lublin Upland, Western Beskid Mountains (SZELEGIEWICZ 1979), Upper Silesia (KLASA 1987).

New records

All records are on *Vaccinium vitis-idaea*. **Wielkopolska-Kujawy Lowland**: Gądków Wielki, 1.09.1983, several puparia, leg. AK; **Mazovian Lowland**: Ostrów Mazowiecka, 8.09.2010, 4 this year's puparia on 7 leaves and 9 last year's pupal cases (7 puparia were parasitized), up to 6 puparia per leaf, leg. AK; **Białowieża Primeval Forest**: Czerlonka, 24.07.2005, 4 last year's pupal cases, leg. AK; Zielony Hotel (near Czerlonka S), section

519d, 29.05.2010, 2 puparia, leg. AK; Białowieża National Park, section 193, 16.09.2010, 5 puparia and 3 last year's pupal cases on 4 leaves, leg. AK; **Upper Silesia**: near Pustynia Błędowska (Błędowska Desert), 1.05.1986, numerous puparia in pine forest, leg. AK; **Kraków-Wieluń Upland**: Częstochowa, 28.03.1986, numerous puparia, leg. A. Palaczyk; Rodaki, 18.04.2009, 41 puparia on 19 leaves, leg. AK; Ogrodzieniec, 9.05.2009, 8 puparia on 7 leaves, leg. AK; Góra Zborów res. in Podlesice, 9.05.2009, 16 puparia on 11 leaves, leg. AK; **Roztocze**: Roztocze National Park – Międzyrzeki conservation district, 16.07.2008, numerous last year's pupal cases, leg. AK.

Aleurolobus wunni (RYBERG, 1938)

Distribution and ecology

The species occurs in Europe, the Far East of Asia (Maritime Territory of Russia) (SZELEGIEWICZ 1979) and Turkmenistan (Kopet-Dag). Polyphagous on *Asarum europaeum*, *Lonicera nigra, L. xylosteum*, *Symphoricarpos albus*, *Vaccinium myrtillus*. Hibernates as a puparium; univoltine.

Distribution in Poland: Masurian Lakeland, Białowieża Primeval Forest, Kraków-Wieluń Upland, Lublin Upland, Western Beskid Mountains and Pieniny Mountains (SZELEGIEWICZ 1979), Baltic Coast, Eastern Beskid Mountains (KLASA & PALACZYK 2008).

New records

Masurian Lakeland: Wigry National Park: Krzywe, 7.09.2010, 18 puparia on 6 leaves of *Lonicera xylosteum* (from 1 to 7 per leaf), leg. AK; **Wielkopolska-Kujawy Lowland**: Gądków Wielki, 7.09.1983, numerous puparia on *Symphoricarpos albus*, leg. AK; **Kraków-Wieluń Upland**: Czerna near Krzeszowice, 14.09.2003, a single larva of the third instar (without wax) on *Asarum europaeum*, leg. A. Sołtys; Wąwóz Bolechowicki res., 15.07.2002, several puparia and 3 larvae of the third instar (without wax) on *S. albus*, leg. AK; Zabierzów, 23.10.2009, 6 puparia on *A. europaeum*, dry-ground forest, leg. A. Sołtys-Lelek; Smoleń res., 20.04.2010, 17 puparia on 7 leaves of *A. europaeum*, leg. AK; **Małopolska Upland**: Chęciny-Dobrzączka, 30.09.2007, several puparia on *L. xylosteum*, leg. AK.

Aleyrodes asari (SCHRANK, 1801)

Distribution and ecology

The species occurs in Europe: Albania, Austria, former Czechoslovakia, Germany, Hungary, Lithuania, Poland, Romania (MARTIN et al. 2000). Monophagous on *Asarum europaeum*. Hibernates as an adult.

Distribution in Poland: Wielkopolska-Kujawy Lowland, Kraków-Wieluń Upland,

Małopolska Upland, Lublin Upland, Western Beskid Mountains, Pieniny Mountains (SZELEGIEWICZ 1979), Upper Silesia (KLASA 1987), Bieszczady Mountains (KLASA 2000), Eastern Beskid Mountains (KLASA & PALACZYK 2008).

New records

Kraków-Wieluń Upland: Ojców National Park: Wąwóz Korytania, 31.08.2003, adults and abundant puparia on *Asarum europaeum*, leg. AK; **Western Beskid Mts.**: Rycerka, 17.08.1984, puparia and adults on *A. europaeum*, leg. AK.

Aleyrodes lonicerae WALKER,1852

Distribution and ecology

The species occurs in the Palaearctic Region (Europe, Central Asia, Siberia, the Far East of Asia) (SZELEGIEWICZ 1979). Polyphagous. Hibernates as an adult female.

Distribution in Poland: Baltic Coast, Masurian Lakeland, Wielkopolska-Kujawy Lowland, Mazovian Lowland, Białowieża Primeval Forest, Kraków-Wieluń Upland, Małopolska Upland, Lublin Upland, Western Beskid Mountains, Pieniny Mountains (SZELEGIEWICZ 1979), Upper Silesia (KLASA 1987), Bieszczady Mountains (KLASA 2000), Świętokrzyskie Mountains, Roztocze, Eastern Beskid Mountains, Tatra Mountains (KLASA & PALACZYK 2008), Lower Silesia (KLASA & WOŹNICA 2009).

New records

Pomeranian Lakeland: Jasień near Bytów, 28.07.1983, a single puparium on *Oxalis acetosella*, leg. AK; Czarna Dąbrówka near Bytów, 1.08.1983, several puparia on *Aegopodium podagraria*, leg. AK; **Masurian Lakeland**: Wigry National Park: Krzywe, 7.09.2010, several puparia, most often individually on *A. podagraria* and a single puparium on *Lonicera xylosteum*, leg. AK; **Wielkopolska-Kujawy Lowland**: Drzewce near Torzym, 5.08.1983, larvae on *Impatiens noli-tangere*, leg. AK; Brody near Lwówek, 27.09.2009, 4 puparia on *Rubus caesius*, leg. J. Partyka; **Białowieża Primeval Forest**: Białowieża National Park: section 399, 15.09.2010, several pupal cases and puparia on *A. podagraria*, near the gate to the BNP, leg. AK; section 193, individual pupal cases on *Trientalis europaea*, leg. AK; Pałacowy Park, 15.09.2010, several puparia with imagines and parasites (inside), and pupal cases on *A. podagraria*, leg. AK; section 255 near Sierchanowski Tryb, several puparia on *Circea lutetiana*, leg. AK; **Upper Silesia**: Mikołów: 17.10.1982, several puparia on *A. podagraria* and *Rubus* sp., leg. AK; 7.10.1983, puparia on *Rubus* sp., leg. AK; *Geum* sp., *O. acetosella*, *I. noli-tangere*, leg. AK; Łężczok res. near Racibórz, 17.06.1983, several puparia on *A. podagraria*, leg. AK; Kuźnia Raciborska, 27. 06.1983 several puparia on *T. europaea*, leg. AK; Tworków, 19.09.1983, puparia on *I. noli-tangere*, leg. AK; Orzesze, 18.07.1983, puparia on *I. noli-tangere* and *O. acetosella*, leg. AK

Kraków-Wieluń Upland: Tenczynek, 26.09.2003, several puparia on *O. acetosella*, leg. A. Sołtys; Kraków-Witkowice 23.08.2009, several adults on *A. podagraria*, leg. AK; Pękowice near Kraków, 30.08.2009, 10 pupal cases on *R. caesius*, leg. AK; Żary, 10.10.2009, between ten and twenty pupal cases and several puparia, 2 freshly-hatched imagines on *A. podagraria*, leg. AK; Dolina Racławki res., 19.10.2009, a single pupal case on *Rubus* sp., leg. AK; Zabierzów, 23.10.2009, several puparia and between ten and twenty pupal cases on *A. podagraria*, 2 pupal cases on *R. plicatus,* leg. A. Sołtys-Lelek; **Małopolska Upland**: Szczepanowice, 29.10.2000, pupal cases, puparia and adults on *Rubus* sp.; Skorocice res., 25.09.1999, between ten and twenty puparia on *Rubus* sp., leg. AK; Chęciny-Dobrzączka, 30.09.2007, several puparia on *A. podagraria*, leg. AK; **Góry Świętokrzyskie**: Świślina Rzeki, 11.10.2008, between ten and twenty puparia on Rubus sp., leg. AK, A. Palaczyk; Świętokrzyski National Park – Klonów protection area – section 260, 12.10.2008, 4 pupal cases on *Crepis paludosa*, leg. AK; **Wyżyna Lubelska**: Poleski National Park – Załucze Stare, 18.07.2008, numerous puparia on *A. podagraria*, leg. AK; Rejowiec Fabryczny, 18.10.2009, 4 puparia na *Rubus* sp., leg. J. Partyka; Wojnicz near Tarnów, 1.11.2002, several puparia on *R. caesius*, leg. B. Wiśniowski; **Kotlina Sandomierska**: Niepołomice Forest – Ispina: 28.08.2009, 2 puparia on *R. caesius*, leg. A. Jirak; 20.09.2008, 2 puparia on *Heracleum spondylium*, 2 – on *C. lutetiana* and a single puparium on *Bidenas tripartitus*, leg. AK; 38 puparia on *Rubus* sp. (up to 8 on a single leaf), leg. AK; **Western Beskid Mts**.: Cieszyn, 21.09.1981, puparia on *Angelica sylvestris*, leg. M. Spasińska; Dzięgielów and Ogrodzona, 24.09.1981, puparia on *A. podagraria* and *Salvia glutinosa*, leg. M. Spasińska; Babia Góra – near Polana Śmietanowa, 780 m, and Zosiakowa Polana, 850 m, 18.09.2004, several puparia on *O. acetosella* in a fir forest, leg. AK; **Gorce Mts**. – Poręba Wielka, 18.11.2008, several pupal cases and adults on *Campanula trachelium*, leg. AK; Krościenko on the River Dunajec, 13.09.2009, 2 puparia on *R. caesius*, leg. A. Palaczyk; **Tatra Mts.**: Molkówka 1000 m, 20.08.2005, several puparia on *O. acetosella*, leg. AK.

Aleyrodes proletella (LINNAEUS, 1758)

Distribution and ecology

The species occurs in the Palaearctic, Afrotropical, Oriental, Australian, Pacific, Neotropical and Nearctic Regions (MARTIN et al. 2000). In Poland on *Brassica oleracea*, *Chelidonium majus*, *Euphorbia amygdaloides*, *Pyrola chlorantha*. Frequent in ruderal vegetation on *Chelidonium majus*. Hibernates as a female adult; polyvoltine.

Distribution in Poland: Baltic Coast, Wielkopolska-Kujawy Lowland, Mazovian Lowland, Białowieża Primeval Forest, Upper Silesia, Kraków-Wieluń Upland, Małopolska Upland, Lubelska Upland, Western Beskid Mountains, Orawa-Nowy Targ Basin, Pieniny Mountains (SZELEGIEWICZ 1979), Lower Silesia (KLASA & WOŹNICA 2009),

Świętokrzyskie Mountains, Roztocze, Western Sudetes (KLASA & PALACZYK 2008), Bieszczady Mountains (KLASA 2000).

New records

All records are on *Chelidonium majus*. **Baltic Coast**: Gdynia-Skarpa Redłowska, 9.09.1983, puparia and pupal cases, leg. AK, Gdańsk-Wrzeszcz, 14.05.2010, imagines and eggs, leg. J. Partyka; **Pomeranian Lakeland**: Jasień near Bytów, 28.07.1983, numerous puparia and adults, leg. AK; Czarna Dąbrówka near Bytów, 1.08.1983, puparia, leg. AK; Szczecin, 26.04.2009, eggs, leg. J. Partyka; Zamrzenica on the Koronowo reservoir, 17.07.2010, numerous puparia and larvae of younger stages, leg. A. Jirak; Głusko in Drawa National Park, 10.08.2010, numerous puparia, leg. E. Suchanek; **Masurian Lakeland**: Wigry National Park: Wigry, 7.09.2010, several adults, leg. AK; Ukta near Ruciane-Nida, 9.09.2010, numerous puparia, leg. J. Partyka; **Wielkopolska-Kujawy Lowland**: Gądków Wielki, 7.09.1983, numerous puparia, leg. AK; Wielkopolski National Park – near Lake Góreckie 17.04.2009, eggs, leg. J. Partyka; Zbąszynek-Chlastawa, 26.09.2009, colonies of young larvae, leg. J. Partyka; Łomnica near Zbąszyn, 26.09.2009, numerous puparia, leg. J. Partyka; Brody near Lwówek, 27.09.2009, numerous larvae in all stages of development and adults, leg. J. Partyka; **Mazovian Lowland**: Czerwieńsk, 21.11.2009, imagines, leg. J. Partyka; Łomna near Warszawa, 24.11.2009, several imagines, leg. AK; Ostrów Mazowiecka, 8.09.2010, numerous adults, leg. AK; **Podlasie**: Tykocin, 26. 06. 2003, several adults and eggs, leg. AK; Wólka Piaseczna near Goniądz, 28. 06. 2003, adults and larvae, leg. AK; Goniądz, 3.12.2009, adults, leg. J. Partyka; **Białowieża Primeval Forest**: Białowieża National Park – Pałacowy Park, 17.09.2010, larvae in all stages of development and adults, leg. AK; **Upper Silesia**: Łężczok res. near Racibórz, 5.10.1982, puparia and adults, leg. AK; Mikołów, 10.04.1983, adults, leg. AK; Kobiór, 24.04.1983, adults, leg. AK; Kędzierzyn-Koźle, 26.06.1983, puparia and adults, leg. AK; Kuźnia Raciborska, 27.06. 1983, puparia and adults, leg. AK; **Kraków-Wieluń Upland**: Dolina Kobylańska, 8.07.2003, puparia and adults, leg. AK; Podzamcze near Ogrodzieniec, 18.04.2009, several adults and eggs, leg. AK; Staromieście near Lelów, 19.04.2009, several adults and eggs, leg. AK; Alwernia, 26.04.2009, eggs, leg. AK; Rudno, 26.04.2009, several adults and eggs, leg. AK; Wygiełzów, 26.04.2009, eggs, leg. AK; Lipowiec res., 26.04.2009, eggs, leg. AK; Pękowice, 12.09.2009, numerous adults and all larva stages, leg. AK; Zrębice, 10.10.2009, numerous larvae, leg. J. Partyka; Mirów, 20.04.2010, not numerous adults, leg. AK; Smoleń res., 20.04.2010, several adults, leg. AK; **Małopolska Upland**: Góry Pieprzowe res., 8. 06. 2004, numerous puparia, leg. AK; Mnichów near Jędrzejów, 19.09.2010, numerous adults, eggs and several young larvae, leg. A. Palaczyk; Skorocice res. near Busko Zdrój, 12.07.1998, 2 FF and several puparia, leg. AK; Chęciny, 30.09.2007, larvae in different development stages, leg. AK; **Lublin Upland**: Poleski National Park – Załucze

Stare, 18.07.2008, 2 puparia, leg. AK; Chełm, 18.10.2009, numerous larvae, leg. J. Partyka; **Roztocze**: Roztocze National Park: Bukowa Góra, 15.07.2008, eggs and larvae, leg. AK and Czarny Wygon, 14.07.2008, larvae and adults, leg. AK; Potok Senderki, 17.10.2009, numerous larvae and adults, leg. J. Partyka; Wola Wielka near Narol, 17.10.2009, numerous puparia and adults, leg. J. Partyka; Zamość, 16.10.2009, eggs, puparia and adults, leg. J. Partyka; Hubale res., 12.07.2008, numerous puparia, leg. AK; **Sandomierz Lowland**: Markowizna near Sokołów Małopolski, 1.11.2008, numerous puparia and adults, leg. J. Partyka.

Bemisia carpini (KOCH, 1857)

Distribution and ecology

The species occurs in the Palaearctic Region (MARTIN et al. 2000). Polyphagous. Hibernates as a puparium; univoltine.

Distribution in Poland: Baltic Coast, Masurian Lakeland, Świętokrzyskie Mountains (KLASA & PALACZYK 2008), Wielkopolska-Kujawy Lowland, Mazovian Lowland, Białowieża Primeval Forest, Kraków-Wieluń Upland, Lublin Upland, Western Beskid Mountains, Pieniny Mountains (SZELEGIEWICZ 1979), Lower Silesia (KLASA & WOŹNICA 2009), Upper Silesia (KLASA 1987), Małopolska Upland (TOŃCZYK et al. 2010), Bieszczady Mountains (KLASA & PALACZYK, in press).

New records

Baltic Coast: Gdynia-Orłowo, 22.04.1988, several puparia on *Rubus* sp., leg. AK; **Pomeranian Lakeland**: Jasień near Bytów, 7.08.1983, 2 puparia on *Tilia cordata*, leg. AK; **Mazovian Lowland**: Łomna near Warszawa, 24.11.2009, 80 puparia on 17 leaves of *Corylus avellanae* (5 per leaf on average), leg. AK; **Białowieża Primeval Forest**: Białowieski National Park: section 192, 16.09.2010, 3 puparia on *Carpinus betulus*, leg. AK; section 314 – near a bypass road, 16.09.2010, numerous puparia on *C. avellana* (up to 10 on a single leaf), leg. AK; **Kraków-Wieluń Upland**: Niegowa 8.09.2005, 5 puparia on *Rubus hirtus*, *Pino-Quercetum*, leg. A. Sołtys; Góra Birów in Podzamcze near Ogrodzieniec, 28.03.2009, 5 puparia on *C. avellana*, mixed forest, leg. AK; Kostkowice, 19.04.2009, 2 puparia on *C. avellana*, dry-ground forest, leg. AK; Dolina Racławki res., 19.10.2009, several puparia on *Rubus* sp., leg. AK; Bobolice, 20.04.2010, 18 puparia on 15 leaves of *C. avellana*, leg. AK; **Małopolska Upland**: Czaple Małe, 29.10.2000, a few puparia on the leaves of *C. avellana*, leg. AK; Czaple Wielkie, 29.10.2000, a single puparium on *Acer pseudoplatanus*, leg. AK; Wroni Dół res., 4.05.2007, several puparia on *Rubus* sp., leg. AK; Skorocice res., 25.09.1999, puparia on *Rubus* sp., leg. AK; Chęciny-Dobrzączka, 30.09.2007, a single puparium on *C. avellana,* leg. AK; **Sandomierz Lowland**: Wojnicz near Tarnów, 1.11.2002, not numerous puparia on *Rubus caesius* and 4 puparia on *Ulmus glabra*, leg. B. WIŚNIOWSKI; Markowizna, 1.11. 2008, a single puparium

on *A. pseudoplatanus*, leg. J. Partyka; Niepołomicka Forest – Ispina: 28.08.2009, a single puparium on *R. caesius*, leg. A. Jirak; 20.09.2009, a single puparium on *C. avellana*, leg. AK; **Western Sudetes**: Suszyna, 2.05.2008, 2 puparia on *A. pseudoplatanus*, leg. A. Sołtys-Lelek; **Eastern Sudetes**: Kletno res., 24.09.2000, several puparia on *A. pseudoplatanus*, leg. AK; **Western Beskid Mts.**: Górki Wielkie near Skoczów, 10.10.2010, 3 puparia on a single leaf of *T. cordata*, leg. J. Partyka; **Orawa-Nowy Targ Basin**: Baligówka near Czarny Dunajec, 19.09.2004, 2 puparia on *Vaccinium myrtillus*, leg. AK.

Bemisia obenbergeri (ZAHRADNIK, 1961)

Distribution and ecology

Distributed mainly in southern Europe (MARTIN et al. 2000). In Poland very rare, known from Upper Silesia, only (KLASA 1987). In Poland on *Thymus* sp. Hibernates as a puparium; bivoltine.

Bemisia paveli (ZAHRADNIK, 1961)

Distribution and ecology

The species occurs in Moravia (type-locality), Germany, Hungary, Romania, Spain and Israel (MARTIN et al. 2000). In Poland collected on *Veronica chamaedrys*, *V. spicata* (*Scrophulariacae*), *Nepeta pannonica, Origanum vulgare, Thymus pulegioides* (*Lamiaceae*), *Euphorbia cyparissias* (*Euphorbiaceae*), *Sarothamnus scoparius* (*Fabaceae*). Hibernates as a puparium; bivoltine (KLASA & PALACZYK 2009).

Distribution in Poland: Kraków-Wieluń Upland, Małopolska Upland (KLASA & PALACZYK 2009), Pieniny Mountains, Bieszczady Mountains (KLASA & PALACZYK, in press).

New records

Świętokrzyskie Mts.: Świętokrzyski National Park – Skarpa Zapusty near Cząstków, 11.10. 2008, 5 winter puparia and 4 summer pupal cases on *Origanum vulgare*, leg. AK; **Roztocze**: Roztocze National Park – Czarny Wygon, 14.07.2008, 11 pupal cases and puparia on *Veronica chamaedrys*, leg. AK; Piaseczna Góra, 14.07.2008, 5 puparia on *O. vulgare*, leg. AK.

Bemisia tabaci (GENNADIUS, 1889)

Distribution and ecology

This cosmopolitan species occurs in all the warmer parts of the world; in Europe usually under glass in areas with a continental climate (MARTIN et al. 2000). Polyphagous.

Distribution in Poland: Wielkopolska-Kujawy Lowland (ŁABANOWSKI, WEGIENEK 1992), Mazovian Lowland (ŁABANOWSKI 1994).

New records

Kraków-Wieluń Upland: Kraków, 4.12.2008, 16 larvae in all developmental stages on *Euphorbia pulcherrima*, at home, leg. AK.

Calluneyrodes callunae (OSSIANNILSSON, 1947)

Distribution and ecology

It is known from Sweden, Finland, Czech Republic and Portugal (MARTIN et al. 2000). In Poland only on heather *Calluna vulgaris*; hibernates as a puparium. Recently recorded from the Orawa-Nowy Targ Basin (KLASA & PALACZYK, in press).

Neopealius rubi TAKAHASHI, 1954

Distribution and ecology

The species occurs in Bulgaria, Finland, France, Hungary, Poland, Sweden, Turkey, Russia and Japan (BINK-MOENEN 1991, MARTIN et al. 2000). Polyphagous. Hibernates, probably as an adult.

Distribution in Poland: Mazovian Lowland (BINK-MOENEN 1991), Lower Silesia (KLASA & WOŹNICA 2009).

New records

Kraków-Wieluń Upland: Pękowice near Kraków 24.08.2009, 5 puparia on *Rubus caesius*, leg. AK, A. Sołtys-Lelek.

Massilieurodes chittendeni (LAING, 1928)

Distribution and ecology

This species is known from several European countries (MARTIN et al. 2000) and the United States of America (JENSEN 2001). It was introduced to Poland together with its host plants – evergreen rhododendrons *Rhododendron* spp. It has been recorded from the Wielkopolska-Kujawy Lowland, Mazovian Lowland and Małopolska Upland (KLASA et al. 2003).

Pealius quercus (SIGNORET, 1868)

Distribution and ecology

The species occurs in Europe and elsewhere in the Palaearctic Region: Transcaucasia (SZELEGIEWICZ 1979). Polyphagous. Hibernates as a puparium; univoltine.

Distribution in Poland: Baltic Coast, Masurian Lakeland (KLASA & PALACZYK 2008), Wielkopolska-Kujawy Lowland, Mazovian Lowland, Białowieża Primeval Forest, Kraków-Wieluń Upland, Małopolska Upland, Lublin Upland, Roztocze, Western Beskid Mountains, Pieniny Mountains (SZELEGIEWICZ 1979), Upper Silesia (KLASA 1987), Świętokrzyskie

Mountains, Western Sudetes (KLASA & PALACZYK 2008), Bieszczady Mountains (KLASA & PALACZYK, in press).

New records

Wielkopolska-Kujawy Lowland: Brody near Lwówek, 27.09.2009, a single puparium on *Aesculus hippocastanum*, leg. J. Partyka; **Białowieża Primeval Forest**: Białowieża National Park – section 192, 16.09.2010, 6 puparia on *Carpinus betulus*, leg. AK; **Kraków-Wieluń Upland**: Gąszczyk near Częstochowa, 3.01. 1998, several winter puparia on *C. betulus* and *Corylus avellana*, leg. AK; Parkowe res.: 12.07.2002 and 24.10.2004, puparia on *Fagus sylvatica* and *C. avellana*, and 19.04.2009, 2 puparia on *F. sylvatica* and 2 on *Tilia cordata*, leg. AK; Góra Birów in Podzamcze near Ogrodzieniec, 28.03.2009, 2 puparia on *C. avellana*, mixed forest, leg. AK; Krzywopłoty, 15.04.2009, 2 puparia and a pupal case on *Quercus rubra*, leg. A. Jirak; Kostkowice, 19.04.2009, several puparia on *Q. sesilis* and on *C. betulus*, dry-ground forest, leg. AK; Dolina Racławki res., 19.10.2009, several puparia individually on *F. sylvatica* and *C. betulus*, leg. AK; Żary, 19.10.2009, several puparia on *C. avellana*, leg. AK; Zabierzów, 23.10.2009, individual puparia on *C. betulus* and *T. cordata*, dry-ground forest, leg. A. Sołtys-Lelek; Smoleń res., 7 puparia on *F. sylvatica*, leg. AK; Bobolice, 20.04.2010, individual puparia on *F. sylvatica* and *C. avellana*, leg. AK; Góra Zborów res., 20.04.2010, between ten and twenty puparia on *T. platyphyllos*, leg. AK; **Małopolska Upland**: Czaple Małe, 29.10.2000, from 1 to 3 puparia on *Q. robur*, from 1 to 5 puparia on *C. avellana*, leg. AK; Chęciny, 30.09.2007, several puparia on *C. betulus* and *C. avellana*, leg. AK; **Świętokrzyskie Mts.**: Świętokrzyski National Park – Łysica, Biały Gościniec road (section 110/145), 9.11.2008, individual puparia on *F. sylvatica*, leg. A. Subel; **Roztocze**: Potok Senderki, 17.10.2009, individual puparia on *Q. robur,* several puparia on *F. sylvatica* and *C. betulus*, between ten and twenty puparia on *C. avellana*, leg. J. Partyka; Wola Wielka near Narol, 17.10.2009, between ten and twenty puparia singly on *F. sylvatica* and several puparia on *C. betulus*, leg. J. Partyka; **Sandomierz Lowland**: Niepołomicka Forest – Ispina, 20.09.2009: a single puparium on *C. avellana*; 4 puparia on *C. betulus*; 5 puparia on *T. cordata*, leg. AK; **Western Sudetes**: Suszyna, 2.05.2008, individual puparia on *F. sylvatica* and on *C. betulus*, leg. A. Sołtys-Lelek.

Siphoninus phillyreae (HALIDAY, 1835)

Distribution and ecology

The species occurs in the Palaearctic, Afrotropical, Oriental, Australian, Pacific, Neotropical and Nearctics Region (MARTIN et al. 2000). Polyphagous.

Distribution in Poland: Wielkopolska-Kujawy Lowland, Mazovian Lowland (SZELEGIEWICZ 1979), Upper Silesia, Western Beskid Mountains (KLASA 1987).

New records

Upper Silesia: Mikołów, 17.08.2003, puparia, pupal cases and adults on *Crataegus* sp., leg. AK; **Kraków-Wieluń Upland**: Złoty Potok, 16.09.2003, a single pupal case on *Crataegus* sp., *Pino-Quercetum*, leg. A. Sołtys; **Sandomierz Lowland**: Wojnicz near Tarnów, 14.10.2003, numerous puparia and adults on *Fraxinus excelsior*, leg. B. Wiśniowski.

Trialeurodes vaporariorum (WESTWOOD, 1856)

Distribution and ecology

A cosmopolitan species, less common in tropical Asia; in northern countries most often found in greenhouses (MARTIN et al. 2000). Polyphagous.

Distribution in Poland: Masurian Lakeland, Wielkopolska-Kujawy Lowland, Mazovian Lowland, Białowieża Primeval Forest, Kraków-Wieluń Upland, Lublin Upland, Orawa-Nowy Targ Basin (SZELEGIEWICZ 1979), Upper Silesia (KLASA 1987).

New records

Upper Silesia: Mikołów: 11.08.1983, numerous puparia and adults on *Solanum lycopersicum*; 16.10.1982, puparia on *Phaseolus vulgaris*, *Euphorbia peplus*, *Urtica dioica*, *Sambucus nigra*, leg. AK; Kuźnia Raciborska, 27.06.1983, several puparia on *Impatiens noli-tangere*, leg. AK, Łaziska Średnie, 17.08.1983, numerous puparia on *Euphorbia* sp., leg. AK, Kędzierzyn-Koźle, 15.09.1983, puparia and adults on *Euphorbia* sp., leg. AK; Chałupki, 19.09.1983, numerous puparia on *Euphorbia peplus*, leg. AK; **Western Beskid Mts.**: Cieszyn, 30.09.1982, eggs and puparia on *Chrysanthemum* sp., *Gerbera* sp., in glasshouse, leg. M. Spasińska.

CONCLUSIONS

Whiteflies are distributed mainly in the tropical and subtropical regions. The world list of Hemiptera contains about 1 600 whitefly species, some 60 of which have so far been recorded in Europe (excluding the European part of Russia). In Poland, 18 whitefly species have so far been found, and it is expected that several new ones that occur in neighbouring countries and Scandinavia (e.g. those living on heather *Erica* spp. and ivy *Hedera helix*) may be discovered. The estimated number of Aleyrodidae in Poland is between 20 and 25.

The paper presents new data on 15 species of Aleyrodidae from 20 faunistic regions of Poland, including the Sandomierz Lowland (8), the Pomeranian Lakeland (4) and the Kraków-Częstochowa Upland (4). Currently, most of these hemipteran species are known to occur in the Kraków-Częstochowa Upland (14) (see Table).

Table. Distribution of whiteflies (*Aleyrodidae*) in the faunistic regions of Poland.
Abbreviations: + – literature data, ◙ – confirmed data, ● – new records, ? – doubtful data.

Species	Faunistic regions																					
	Baltic Coast	Pomeranian Lakeland	Masurian Lakeland	Wielkopolska-Kujawy Lowland	Mazovian Lowland	Podlasie	Białowieża Primeval Forest	Lower Silesia	Upper Silesia	Kraków-Wieluń Upland	Małopolska Upland	Świętokrzyskie Mts.	Lublin Upland	Roztocze	Sandomierz Lowland	Western Sudetes	Eastern Sudetes	Western Beskid Mts.	Orawa-Nowy Targ Basin	Eastern Beskid Mts.	Bieszczady Mts.	Pieniny Mts	Tatra Mts.
Aleurochiton acerinus		○						○	○						●			○		◙			
Aleurochiton aceris	○	◙	◙	◙	◙		○	○	◙	◙	◙	●	◙		●	○	●	◙		○	○	○	●
Aleurochiton pseudoplatani		●	○	◙	○			○	◙	◙	●	◙		●	●	◙	●	◙		○	○	○	◙
Aleuroclava similis	○		○	●	◙	○	●		◙	●			○	●				○					
Aleurolobus wunni	○		◙	●			○			◙	●		○					○		○		○	
Aleyrodes asari				○					○	◙	○		○					◙		○	○	○	
Aleyrodes lonicerae	○	●	◙	◙	○		◙	○	◙	◙	◙	◙	◙	○	●			◙		○	○	○	◙
Aleyrodes proletella	◙	●	●	◙	◙	●	◙	○	◙	◙	◙	○	○	◙	●	○		○	○		○	○	
Bemisia carpini	◙	●	○	?	◙		◙	○	○	◙	●	○	○		●	●	●	◙	●		○	○	
Bemisia paveli									○														
Bemisia obenbergeri										○	○	●		●							○	○	
Bemisia tabaci				○	○					●													
Calluneyrodes callunae																			○				
Massilieurodes chittendeni				○	○						○												
Neopealius rubi					○			○		●													
Pealius quercus	○		○	◙	○		◙		○	◙	◙	◙	○	◙	●	◙		○			○	○	
Siphonius phillyreae				?	○				◙	●					●			○					
Trialeurodes vaporariorum			○	○	○		○		◙	○			○					●	○				
Total number	**7**	**6**	**9**	**11**	**12**	**2**	**8**	**7**	**12**	**14**	**10**	**7**	**9**	**6**	**8**	**5**	**3**	**12**	**4**	**6**	**8**	**9**	**3**

Comment: The list of faunistic regions does not include the Trzebnickie Hills from where whiteflies have not been recorded.

Of the 18 species of whiteflies inhabiting Poland, 15 are indigenous and 3 are alien (*Bemisia tabaci, Trialeurodes vaporariorum* and *Massilieurodes chittendeni*). The majority of native whiteflies are forest species that live mainly on trees and broadleaved shrubs. Five species – *Aleyrodes proletella*, *A. asari*, *Bemisia paveli, B. obenbergeri* and *Calluneyrodes callunae* – forage exclusively on herbaceous plants and small shrubs. Monophagous species, including 3 of the genus *Aleurochiton*, *Aleuroclava similis*, *Aleyrodes asari*, *B. obenbergeri* and *Calluneyrodes callunae,* make up a relatively large proportion of Poland's whiteflies, but in other regions of the Palaearctic some of these species are oligo- or polyphagous.

The northern range limits of several whitefly species pass across Poland: *Aleurochiton acerinus, A. pseudoplatani*, *Bemisia paveli, B. obenbergeri* and *Aleyrodes asari*.

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