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ADDITIONAL NOTES ON THE APHID FAUNA OF THE EMILIA ROMAGNA REGION IN ITALY

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Barbagallo S., Pollini A. - Additional notes on the aphid fauna of the Emilia Romagna region in Italy

The aphid fauna of the Emilia Romagna region in the northeastern part of the Italian peninsula is composed of 408 known aphid taxa at the specific or subspecific taxonomic levels. Data on field collections are presented for each listed taxon, and available relevant regional literature is cited. Of the 408 taxa, 323 appeared in our checklist published in 2011, and 85 additional species (List A) are presented here. Further collection data for 130 of the species in the published checklist (List B) are also included.

KEY WORDS: aphid fauna, Emilia Romagna region, Italy

INTRODUCTION

The first annotated checklist of the aphid fauna of the Tuscany and Emilia Romagna regions of Italy was published a few years ago (BARBAGALLO *et al.*, 2011). The checklist contained 324 taxa at the specific or subspecific taxonomic levels for Emilia Romagna¹. Subsequent aphid collections (2012-2014) have significantly increased the number of aphids surveyed for this region. We have gathered a number of additional taxa previously listed for the region and reported in the literature but not directly examined by us, or they have now been collected from additional host plants or localities. The present study thus provides newly acquired faunistic data on aphids from Emilia Romagna and updates the checklist of species, thereby improving the regional knowledge for this group of sap-feeding insects, their host plants, and local distributions. Emilia Romagna (22 451 km²) is one of the richest areas in Italy of floristic biodiversity (2726 species of vascular plants, see CONTI *et al.*, 2005) and of protected parklands and ecological habitats (TINARELLI, 2005; PIGNATTI, 1994). The botanical and ecological diversity is well correlated with the richness of the known aphid fauna and leads us to believe that further discoveries are possible.

MATERIALS AND METHOD

Most of the aphid samples handled and identified derive from our direct field collections during the last

¹ *Pachypappa marsupialis* Koch, reported for the region in two bibliographic records as *Pemphigus marsupialis* (MASSALONGO, 1893; GRANDI, 1908), should now be referred to as *Pemphigus populinigrae* (Schränk), as reported in BARBAGALLO & MASSIMINO COCUZZA (2014), so that the number of aphid species for Emilia Romagna listed in this study is 423.

three years. A number of samples have also been given to us by colleagues, as mentioned in the collection data for each relevant aphid. Approximately 490 aphid samples were collected, permanently mounted on microscopic slides, and then identified. Collecting sites were selected, whenever possible and giving preference to those biotopes not previously visited for the earlier checklist (BARBAGALLO *et al.*, 2011), for obtaining the best results (Fig. I).

RESULTS AND DISCUSSION

The results achieved from our faunistic survey increased the regional checklist of aphids for Emilia Romagna by 85 taxa, reported in List A. Aphid species are listed in order of taxonomic group and genera according to the Italian aphid checklist (BARBAGALLO *et al.*, 1995). Host plants and collecting localities are given for each of the aphid samples. The localities are reported in chronological order of collection, and the nomenclature of the host plants generally followed that by CONTI *et al.* (2005) for the Italian vascular flora.

Most of the aphid species listed here are generally common and widespread in the different Italian regions, and none represent new taxa to the country. Collection data for *Aphis salsolae* (Börner) were kindly provided by Mr. Jon Martin, The Natural History Museum, London. This species is very poorly known for Italy, having been reported only for Emilia Romagna. Another interesting find for the region is *Eriosoma (Schizoneura) patchiae* (Börner & Blunck), a species undoubtedly uncommon in Italy and only known before for Sicily. *Aulacorthum (Neomyzus) circumflexum* (Buckton) and *Uroleucon bielawskii* Szelegiewicz were collected earlier by us but were not included in our previous regional checklist (BARBAGALLO *et al.*, 2011) because they had been overlooked. A small number of species we have listed

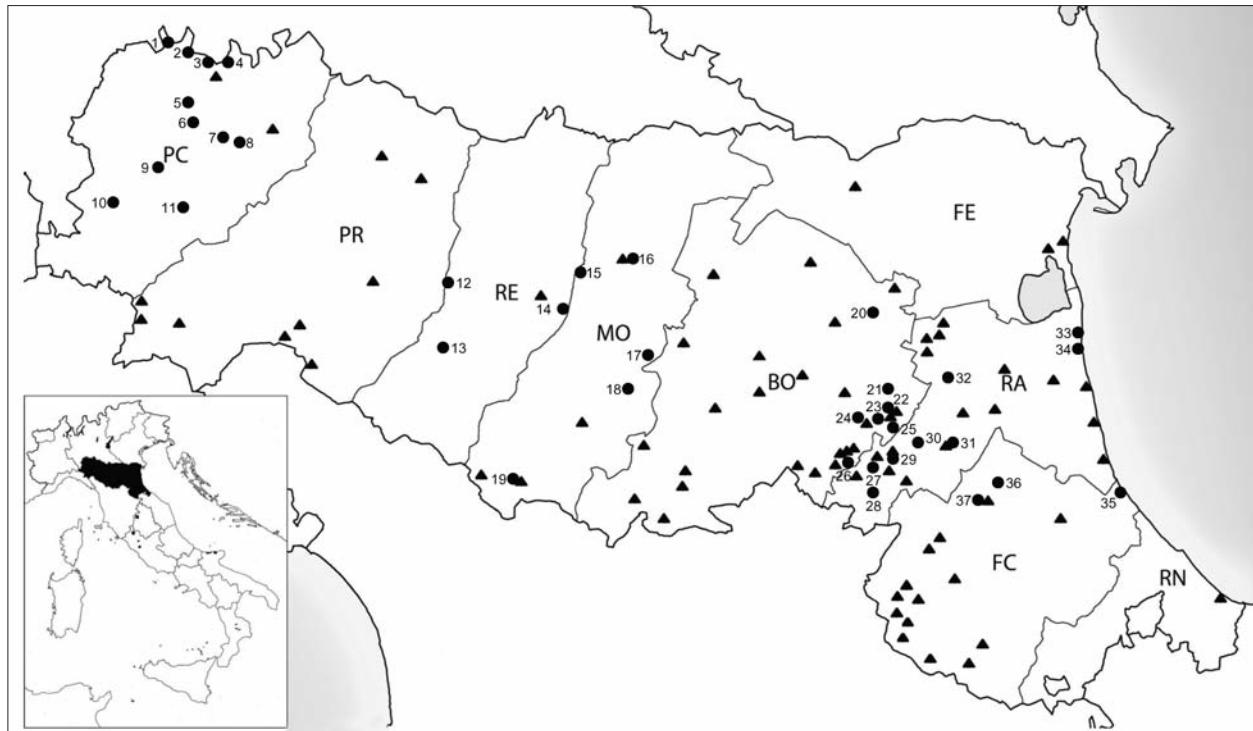


Fig. I – Aphid collecting localities in Emilia Romagna region mentioned in the text (●), [triangles (▲) refer to previous collecting localities as listed in Barbagallo *et al.*, 2011].

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|--|---------------------------------|------------------------------------|
| 1. Calendasco, Cusani Wood | 13. Castelnovo ne' Monti | 25. Imola, La Frattona Wood |
| 2. Calendasco, loc. Incrociata | (Pietra di Bismantova) | 26. Fontanelice, loc. Orsara |
| 3. Piacenza | 14. Castellarano, loc. Tressano | 27. Casola Valsenio |
| 4. Piacenza, loc. Mortizza | 15. Modena, loc. Marzaglia | 28. Brisighella, loc. Poggiolo |
| 5. Gagnano Trebbiense | 16. Modena | 29. Brisighella |
| 6. Gazzola, loc. Canneto Sotto | 17. Vignola | 30. Castel Bolognese |
| 7. Vigolzone | 18. Guiglia, loc. Roccamalatina | 31. Faenza |
| 8. Podenzano, loc. Altoè | 19. Pievepelago | 32. Lugo |
| 9. Travo, loc. Statto | 20. Budrio | 33. Ravenna, loc. Porto Corsini |
| 10. Coli, loc. Perino | 21. Imola, loc. Sasso Morelli | 34. Ravenna, loc. Lido di Dante |
| 11. Bettola, loc. Passo del Cerro | 22. Imola | 35. Cesenatico |
| 12. Canossa, loc. Ciano d'Enza
(Rupe di Campotrera) | 23. Imola, loc. Linaro | 36. Forlì |
| | 24. Imola, Water Mineral Park | 37. Forlì, loc. Ravaldino in Monte |

came from previously published records but unfortunately had not been checked by us. *Colopha compressa* (Koch), for example, was recorded many years ago for this region by MASSALONGO (1893), and a few other species were listed by ZANGHERI (1966) in his excellent annotated catalogue of plants and animals from Emilia Romagna. MASSALONGO (1893), in his largest study of Italian zoocercids, listed thirteen galligenous aphids from Emilia Romagna; all are common species in this region and were collected in and around the town of Ferrara. ZANGHERI (1966) listed 88 aphid species (in addition to three unidentified taxa listed as genera only), four of which (*Maculolachnus submacula*, *Aphis idaei*, *Uroleucon cirsii*, and *U. pulicariae*) have been added to our List A, because they represent additional aphid taxa. A few of Zangheri's recorded species [*Therioaphis ononidis*, *Aphis idaei*, *Aulacorthum geranii* (= *Acyrtosiphon malvae*), *Titanosiphon artemisiae* and *Dactynotus* (= *Uroleucon cirsii*)] do not correctly correlate with the associated host plants, so different aphid taxa may be involved.

A second list of species reported here (List B) contain a number of aphid taxa (130) already included in our previously published regional checklist but for which additional data are now available. The new collection

data refer to: i) taxa that were included in the previous list on the basis of early records by different authors but were not collected at that time by us, ii) taxa included in our previous list on the basis of vagrant (or trapped) alates, without an identified host plant, or iii) taxa for which additional host plants and/or localities (i.e. different administrative provinces) are now available. Samples (more than 50) that did not meet these conditions were discarded to avoid the addition of redundant data.

The list of additional aphid species only slightly modified the chorological spectrum previously shown jointly for Emilia Romagna and Tuscany (BARBAGALLO *et al.*, 2011). For Emilia Romagna, the number of species having a Palaearctic distribution has increased slightly, and the number with a more restricted European chorology has decreased slightly. The main chorological categories for aphids presently recorded (408 species) for Emilia Romagna have the following biogeographical subdivision: 21.0% are Cosmopolitan or Subcosmopolitan distributed species; 26.9% are Holarctic species; 21.0% are Palaearctic species; 26.0% are European distributed species; and 5.1% are Mediterranean (or more restricted) species. The earlier chorology of Italian aphid

fauna (BARBAGALLO *et al.*, 2009) reported distributions of 24.9% Cosmopolitan & Subcosmopolitan; 19.5% Holarctic; 17.0% Palaearctic; 30.6% European; and 8% Mediterranean (or more restricted) species. The differences in all groups are small but slightly larger in the European and Mediterranean categories.

CHECKLIST OF SPECIES COLLECTED²

List A – Additional species for Emilia Romagna region

Family **Aphididae**

Eriosoma (Schizoneura) patchiae (Börner & Blunck, 1916)
Ulmus minor, Fontanelice-BO, loc. Orsara, 6.VI.13
(Fig. II, 2)

Colopha compressa (Koch, 1856)
Recorded in the region by MASSALONGO (1893)

Symydobius oblongus (von Heyden, 1837)
Betula pendula, Coli-PC, loc. Perino, 18.X.12

Callipterinella calliptera (Hartig, 1841)
Betula pendula, Imola-BO, 8.VI.12 and 24.V.13; Coli-PC, loc. Perino, 18.X.12

Callipterinella tuberculata (von Heyden, 1837)
Betula pendula, Coli-PC, loc. Perino, 18.X.12

Hoplocallis picta (Ferrari, 1872)
Quercus ilex, Imola-BO, 8.VI.12

Tuberculatus (Tuberculoides) neglectus (Krzywiak, 1966)
Quercus petraea, Imola-BO, La Frattona Wood, 7.VI.13

Tinocallis takachiboensis Higuchi, 1972
Ulmus minor, Bettola-PC, loc. Passo del Cerro, 18.X.12; Imola-BO, 24.V.13

Takecallis arundinariae (Essig, 1917)
Phyllostachys bambusoides, Vigolsone-PC, 18.X.12; Brisighella-RA, loc. Zattaglia, 6.VI.13; Castel Bolognese-RA, 21.III.14

Takecallis taiwanus (Takahashi, 1926)
Phyllostachys bambusoides, Vigolsone-PC, 18.X.12

Pterocallis ostryae (Börner, 1949)
Ostrya carpinifolia, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12; Gazzola-PC, loc. Canneto Sotto, 18.X.12

Therioaphis alatina Hille Ris Lambers & van den Bosch, 1964
Ononis natrix, Castellarano-RE, loc. Tressano, 16.X.13

Therioaphis riehmii (Börner, 1949)
Melilotus alba, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; Gazzola-PC, loc. Canneto Sotto, 18.X.12

Subsaltusaphis picta (Hille Ris Lambers, 1939)
Carex sp., Calendasco-PC, Cusani Wood, 15.X.13

Subsaltusaphis rossneri (Börner, 1940)
Carex sp., Piacenza, loc. Mortizza, 15.X.13

Saltusaphis scirpus (Theobald, 1915)
Cyperus glomeratus, Piacenza, loc. Mortizza, 15.X.13;
Scirpus sp., Calendasco-PC, Cusani Wood, 15.X.13

Drepanosiphum aceris Koch, 1855
Acer campestre, Brisighella-RA, loc. Zattaglia, 7.VI.12; Casola Valsenio-RA, 7.VI.12; Imola-BO, loc. Linaro (Forestry Nursery), 5.VI.13 and La Frattona Wood, 7.VI.13

Drepanosiphum dixonii Hille Ris Lambers, 1971
Acer campestre, Imola-BO, La Frattona Wood, 7.VI.13

Drepanosiphum oregonense Granowsky, 1939
Acer monspessulanum, Imola-BO, loc. Linaro (Forestry Nursery), 5.VI.13

Drepanaphis acerifoliae (Thomas, 1878)
Acer saccharinum, Calendasco-PC, loc. Incrociata, 15.X.13

Periphyllus venetianus Hille Ris Lambers, 1966
Acer campestre, Brisighella-RA, loc. Zattaglia, 7.VI.12; Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; Imola-BO, loc. Linaro (Forestry Nursery), 5.VI.13 and La Frattona Wood, 7.VI.13

Chaitophorus quinque maculatus Bozhko, 1976
Salix apennina and *S. ? myrsinifolia*, Bettola-PC, loc. Passo del Cerro, 18.X.12

Eulachnus tauricus Bozhko, 1957
Pinus pinea, Cesenatico-FC, 8.VI.12

Eulachnus tuberculostemmatus (Theobald, 1915)
Pinus pinaster, Ravenna, loc. Porto Corsini, 8.VI.12; *P. pinea*, Cesenatico-FC, 8.VI.12

Cinara pinimaritimae Dufour, 1833
Pinus pinaster, Ravenna, loc. Porto Corsini, 8.VI.12; *Pinus nigra* ssp. *austriaca*, Fontanelice-BO, loc. Orsara, 6.VI.13

Maculolachnus submacula (Walker, 1848)
Recorded in the region by ZANGHERI (1966)

Lachnus ilicophilus (Del Guercio, 1909)
Quercus ilex, Imola-BO, 8.VI.12

Rhopalosiphum rufiabdominale (Sasaki, 1899)
Vagrant alates, Gazzola-PC, loc. Canneto Sotto, 18.X.12 and Vigolsone-PC, 18.X.12

Schizaphis (Paraschizaphis) caricis (Schouteden, 1906)
Carex sp., Calendasco-PC, Cusani Wood, 15.X.13

Melanaphis donacis (Passerini, 1862)
Arundo donax and *A. plinii*, Brisighella-RA, loc. Zattaglia, 7.VI.12

Aphis ? armata Hausman, 1802
Digitalis lanata, Casola Valsenio-RA, Officinal Plants Garden., 5.VI.13,

² Abbreviations used for provinces names: BO = Bologna; FC = Forlì-Cesena; MO = Modena; PC = Piacenza; RA = Ravenna; RE = Reggio Emilia.

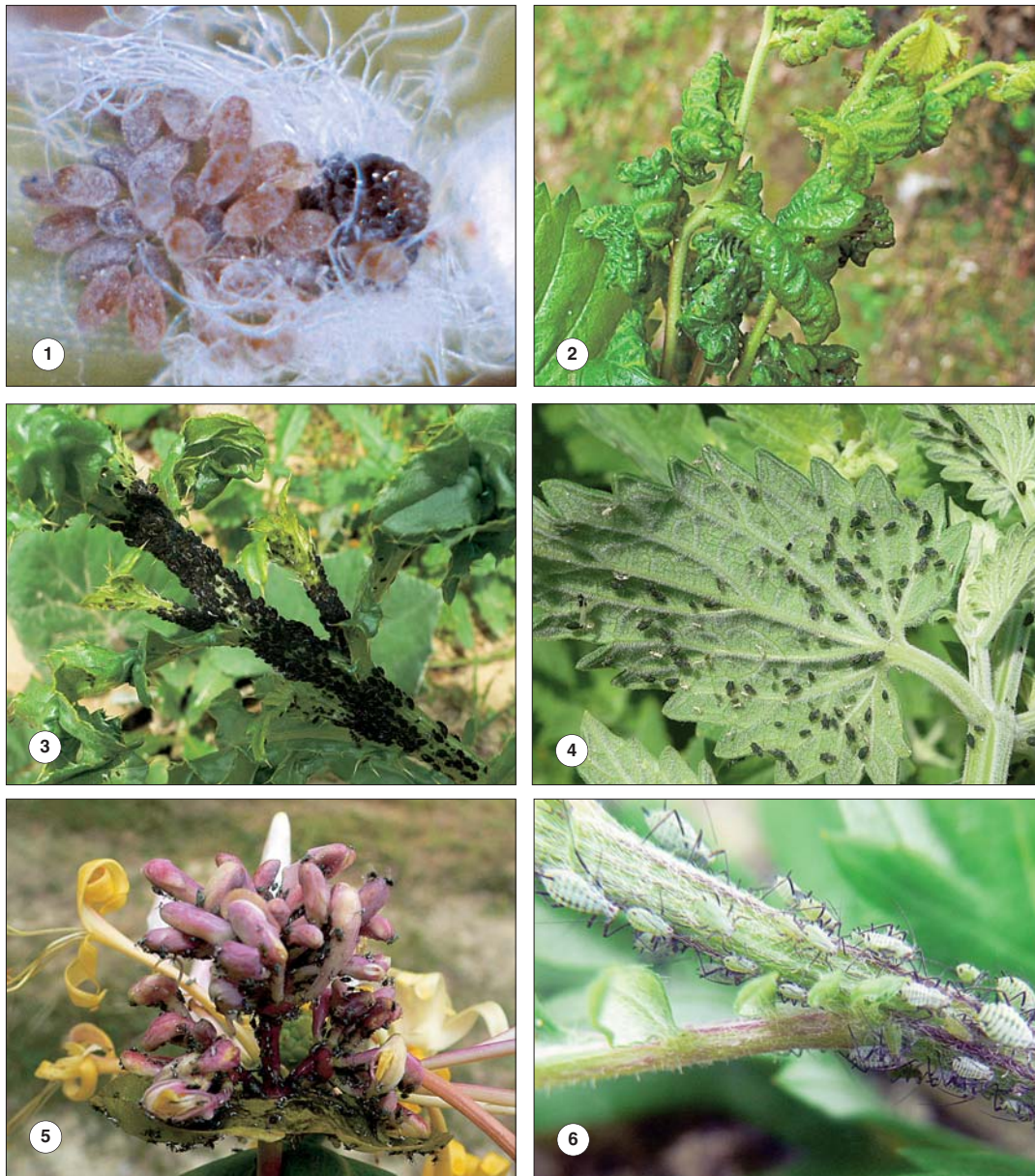


Fig. II – Aphids from Emilia Romagna: 1. Apterous (pseudo-progrediens) of *Gilletteella coweni* with its eggs on a needle of *Pseudotsuga menziesii* (Brisighella-RA, 6.VI.13); 2. Pseudo-galls of *Eriosoma (Schizoneura) patchiae* on *Ulmus minor* (Fontanelice-BO, 6.VI.13); 3. *Aphis fabae cirsiiacanthoidis* on *Cirsium arvense* (Fontanelice-BO, 6.VI.13); 4. *Aphis frangulae* on *Leonurus cardiaca* (Casola Valsenica-RA, 5.VI.13); 5. *Hyadaphis passerinii* on *Lonicera etrusca* (Fontanelice-BO, 6.VI.13); 6. *Macrosiphoniella artemisiae* on *Artemisia vulgaris* (Fontanelice-BO, 6.VI.13).

Aphis calamintbae (Börner, 1952)

Calamintha nepeta, Gazzola-PC, loc. Canneto Sotto, 18.X.12

Aphis epilobii Kaltenbach, 1843

Epilobium montanum, Bettola-PC, loc. Passo del Cerro, 18.X.12

Aphis fabae ssp. *mordvilkoii* Börner & Janish, 1922

Arctium lappa, Brisighella-RA, loc. Poggiolo, 6.VI.13

Aphis galiiscabri Schrank, 1801

Galium album, Imola-BO, loc. Linaro (Forestry Nursery), 5.VI.13

Aphis idaei van der Goot, 1912

Recorded in the region by ZANGHERI (1966)

Aphis mamonthovae Davletshina, 1964

Verbena officinalis, Gazzola-PC, loc. Canneto Sotto, 18.X.12

Aphis nepetae Kaltenbach, 1843

Nepeta cataria, Casola Valsenica-RA, Official Plants Garden, 7.VI.12 and 5.VI.13

Aphis polygonata Nevsky, 1929

Polygonum aviculare, Podenzano-PC, loc. Altoè, 18.X.12

Aphis salsolae (Börner, 1940)

Kochia scoparia, Forlì, September (year unknown, likely after 1966)

Recorded for the first time in Italy by BLACKMAN &

- EASTOP (2006) on the basis of the above sample stored at The Natural History Museum in London
- Aphis taraxacicola* (Börner, 1940)
Taraxacum officinale, Podenzano-PC, loc. Altoè, 18.X.12; Brisighella-RA, loc. Poggiolo, 6.VI.13; Gazzola-PC, loc. Canneto Sotto, 15.X.13
- Aphis verbasci* Schrank, 1801
Verbascum phlomooides, Travo-PC, loc. Statto, 18.X.12
- Aphis vitalbae* Ferrari, 1872
Clematis vitalba, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12
- Aphis (Toxoptera) vandergooti* Börner, 1939
Achillea millefolium, Bettola-PC, loc. Passo del Cerro, 18.X.12
- Brachyunguis tamaricis* (Lichtenstein, 1885)
Tamarix gallica, Imola-BO, 5.VII.14
- Ceruraphis eriophori* (Walker, 1848)
Viburnum lantana, Imola-BO, Acque Minerali Park, 3.V.13 and 17.IV.14
- Nearctaphis bakeri* (Cowen, 1895)
Trifolium pratense, Gazzola-PC, loc. Canneto Sotto, 18.X.12
- Dysaphis apiifolia* (Theobald, 1923)
Foeniculum vulgare, Casola Valsenio-RA, Official Plants Garden, 5.VI.13
- Dysaphis radicola* (Mordvilko, 1897)
Rumex obtusifolius, Calendasco-PC, Cusani Wood, 15.X.13
- Lipaphis pseudobrassicae* (Davis, 1914)
Sinapis alba, Casola Valsenio-RA, Official Plants Garden, 7.VI.12
Previously recorded in the region by POLLINI (2013)
- Coloradoa absinthii* (Lichtenstein, 1885)
Artemisia absinthium, Casola Valsenio-RA, Official Plants Garden, 5.VI.13
- Coloradoa angelicae* (Del Guercio, 1911)
Artemisia absinthium, Casola Valsenio-RA, Official Plants Garden, 5.VI.13
- Coloradoa bourmieri* Remaudière & Leclant, 1969
Santolina marchii, Casola Valsenio-RA, Official Plants Garden, 7.VI.12
- Coloradoa palmerae* Börner, 1952
Artemisia alba, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12 and 6.VI.13
- Coloradoa tanacetina* (Walker, 1850)
Tanacetum vulgare, Casola Valsenio-RA, Official Plants Garden, 6.VI.13; Castelnovo ne' Monti-RE, Pietra di Bismantova, 16.X.13
- Myzaphis rosarum* (Kaltenbach, 1843)
Rosa sp. (cult.), Brisighella-RA, loc. Zattaglia, 6.VI.13
- Ovatus mentharius* (van der Goot, 1913)
Mentha x piperita, *Thymus serpyllum* and *T. vulgaris*, Casola Valsenio-RA, Official Plants Garden, 7.VI.12
- Neotoxoptera violae* (Pergande, 1900)
Viola odorata, Piacenza and Calendasco-PC, Cusani Wood, 15.X.13
- Myzus (Nectarosiphon) certus* (Walker, 1849)
Viola tricolor, Modena, 19.V.13 (M. Mandrioli leg.); Imola-BO, loc. Sasso Morelli, 7.IV.14
- Capitophorus carduinus* (Walker, 1850)
Carduus pycnocephalus, Imola-BO, La Frattona Wood, 7.VI.13
- Eucarazzia elegans* (Ferrari, 1872)
Hyssopus officinalis, *Thymus serpyllum* and *T. vulgaris*, Casola Valsenio-RA, Official Plants Garden, 7.VI.12
- Aulacorthum (Neomyzus) circumflexum* (Buckton, 1876)
Cyclamen x persicum (cult.), Lugo-RA, 10.IV.98
- Acyrtosiphon caraganae* (Cholodkovsky, 1907)
Emerus majus, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12
- Acyrtosiphon loti* (Theobald, 1913)
Lotus corniculatus, Imola-BO, loc. Linaro (Forestry Nursery), 5.VI.13; Brisighella-RA, loc. Poggiolo, 6.VI.13
- Cryptaphis poae* (Hardy, 1850)
Poa sp., Calendasco-PC, Cusani Wood, 15.X.13
- Rhodobium porosum* (Sanderson, 1900)
Rosa sp. (cult.), Brisighella-RA, loc. Zattaglia, 6.VI.13; Piacenza, 15.X.13
- Macrosiphum albifrons* Essig, 1911
Lupinus polyphyllus (cult.), Coli-PC, loc. Perino, 18.X.12
- Macrosiphum cerinthiacum* Börner, 1950
Cerithe major, Brisighella-RA, loc. Zattaglia, 6.VI.13
- Macrosiphum bellebori* Theobald & Walton, 1923
Helleborus sp., Imola-BO, La Frattona Wood, 7.VI.13
- Titanosiphon artemisiae* (Koch, 1855)
Artemisia campestris, Coli-PC, loc. Perino, 18.X.12
- Uroleucon achilleae* (Koch, 1855)
Achillea millefolium, Casola Valsenio-RA, Official Plants Garden, 7.VI.12
- Uroleucon bielawskii* (Szelegiewicz, 1962)
Lactuca saligna, Forlì, loc. Ravaldino in Monte, 12.X.10
- Uroleucon chondrillae* (Nevsky, 1929)
Chondrilla juncea, Gazzola-PC, loc. Canneto Sotto, 18.X.12; Gragnano Trebbiense, 15.X.13
- Uroleucon cirsii* (Linnaeus, 1758)
Recorded in the region by ZANGHERI (1966)

- Uroleucon inulicola* (Hille Ris Lambers, 1939)
Inula salicina, Canossa-RE, loc. Ciano d'Enza (Rupe di Campotrera), 16.X.13
 Previously recorded in the region by ZANGHERI (1966)
- Uroleucon leontodontis* (Hille Ris Lambers, 1939)
Leontodon hispidus, Bettola-PC, loc. Passo del Cerro, 18.X.12
 Previously recorded in the region by ZANGHERI (1966)
- Uroleucon pulicariae* (Hille Ris Lambers, 1939)
 Recorded in the region by ZANGHERI (1966)
- Uroleucon (Lambersius) erigeronensis* (Thomas, 1878)
Erigeron canadensis, Gazzola-PC, loc. Canneto Sotto, 15.X.13
- Uroleucon (Uromelan) aeneum* (Hille Ris Lambers, 1939)
Carduus pycnocephalus, Imola-BO, La Frattona Wood, 7.VI.13; *Cirsium arvense*, Modena, loc. Marzaglia, (M. Mandrioli leg.)
- Uroleucon (Uromelan) carthami* (Hille Ris Lambers, 1948)
Carthamus lanatus, Travo-PC, loc. Statto, 18.X.12
- Uroleucon (Uromelan) nigrocampanulae* (Theobald, 1928)
Campanula trachelium, Bettola-PC, loc. Passo del Cerro, 18.X.12; Calendasco-PC, Cusani Wood, 15.X.13
- Paczoskia paczoskii* Mordvilko, 1919
Echinops ritro, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12
- Macrosiphoniella abrotani* (Walker, 1852)
Artemisia annua, Piacenza, loc. Mortizza, 15.X.13
- Macrosiphoniella fasciata* Del Guercio, 1913
Artemisia campestris, Gazzola-PC, loc. Canneto Sotto, 15.X.13
- Macrosiphoniella staegeri* Hille Ris Lambers, 1947
Centaurea deusta, Gazzola-PC, loc. Canneto Sotto, 15.X.13
- List B – *Additional collection data for aphid species already recorded for Emilia Romagna*
- Family **Adelgidae**
- Gilletteella coweni* (Gillette, 1907)
Pseudotsuga menziesii, Brisighella - RA, loc. Zattaglia (Mt. Mauro), 6.VI.13 (Fig. II, 1)
- Family **Aphididae**
- Eriosoma (Schizoneura) pyricola* Baker & Davidson, 1916
Ulmus minor, Canossa-RE, loc. Ciano d'Enza (Rupe di Campotrera), 16.X.13 (empty galls)
- Tetraneura caerulea* (Passerini, 1856)
 Vagrant alate, Casola Valsenio-RA, 5.VI.13; *Ulmus minor*, Imola-BO, La Frattona Wood, 7.VI.13
 Previously identified by us in the region as a vagrant alate (BARBAGALLO *et al.*, 2011)
- Thecabius affinis* (Kaltenbach, 1843)
Populus nigra, Gazzola-PC, loc. Canneto Sotto, 18.X.12; *Ranunculus repens*, Calendasco-PC, Cusani Wood, 15.X.13
- Pemphigus immunis* Buckton, 1896
Populus nigra, Travo-PC, loc. Statto, 18.X.12; Modena, 20.VI.14 (M. Mandrioli leg.)
- Pemphigus spyrothecae* Passerini, 1856
Populus nigra, Modena, 20.VI.14 (M. Mandrioli leg.)
- Geoica utricularia* (Passerini, 1856)
Pistacia terebinthus, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 10.VII.92 and 7.VI.12
 The host plant, *P. terebinthus*, was erroneously identified in BARBAGALLO *et al.* (2011) as *Pistacia lentiscus*.
- Forda formicaria* von Heyden, 1837
Pistacia terebinthus, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 8.IX.98 and 7.VI.12; vagrant alate, Fontanelice-BO, loc. Orsara, 6.VI.13
 The aphid host plant, *P. terebinthus*, was erroneously identified in BARBAGALLO *et al.* (2011) as *Pistacia lentiscus*.
- Forda marginata* Koch, 1857
Pistacia terebinthus, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12
 Previously recorded in the region by PASSERINI (1860, 1861, 1863) and ZANGHERI (1966)
- Anoecia corni* (Fabricius, 1775)
Cornus sanguinea, Gazzola-PC, loc. Canneto Sotto, 18.X.12; *Setaria viridis*, Gragnano Trebbiense-PC, 15.X.13
- Anoecia vagans* (Koch, 1856)
Cornus sanguinea, Budrio-BO, 12.IV.01
 Previously recorded in the region by PASSERINI (1860, 1863) and POLLINI (2013)
- Thelaxes suberi* (Del Guercio, 1911)
Quercus ilex, Ravenna, loc. Porto Corsini, 8.VI.12; Imola-BO, 8.VI.12
- Euceraphis betulae* (Koch, 1855)
Betula pendula, Imola-BO, 8.VI.12; Travo-PC, loc. Statto, 18.X.12
 Previously identified by us in the region as a vagrant alate (BARBAGALLO *et al.*, 2011)
- Crypturaphis grassii* Silvestri, 1935
Alnus cordata (cult.), Brisighella-RA, loc. Zattaglia (Mt. Mauro), 6.VI.13
- Myzocallis (Pašekia) mediterraneus* Quednau & Remaudière, 1994
Quercus pubescens, Canossa-RE, loc. Ciano d'Enza (Rupe di Campotrera), 16.X.13
- Tuberculatus (Tuberculoidea) annulatus* (Hartig, 1841)
Quercus robur, Imola-BO, loc. Linaro (Forestry Nursery), 24.V.13 and 15.VI.13
 Previously recorded in the region by PASSERINI (1863)
- Tuberculatus (Tuberculoidea) eggleri* Börner, 1950
Quercus pubescens, Gazzola-PC, loc. Canneto Sotto,

- 18.X.12; Canossa-RE, loc. Ciano d'Enza (Rupe di Campotrera), 16.X.13; *Q. petraea*, Imola-BO, La Frattona Wood, 7.VI.13
- Tinocallis saltans* (Nevsky, 1929)
Ulmus x pumila, Piacenza, 15.X.13
Previously identified by us in the region as a vagrant alate (BARBAGALLO *et al.*, 2011)
- Pterocallis alni* (DeGeer, 1773)
Alnus glutinosa, Gazzola-PC, loc. Canneto Sotto, 18.X.12; Imola-BO, loc. Linaro (Forestry Nursery), 5.VI.13
Previously recorded in the region by PASSERINI (1863)
- Therioaphis trifolii* (Monell, 1882)
Medicago sativa, Vigolsone-PC, 18.X.12; Fabaceae not ident., Piacenza, loc. Mortizza, 15.X.13
- Therioaphis (Rhizoberlesia) brachytricha* Hille Ris Lambers & van den Bosch, 1964
Lotus corniculatus, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12
- Periphyllus hirticornis* (Walker, 1848)
Acer campestre, Bettola-PC, loc. Passo del Cerro, 18.X.12; Imola-BO, 17.IV.14
- Periphyllus testudinaceus* (Ferne, 1852)
Acer campestre, Brisighella-RA, loc. Zattaglia, 7.VI.12; *A. opalus*, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; Bettola-PC, loc. Passo del Cerro, 18.X.12; *A. saccharinum*, Calendasco-PC, loc. Incrociata, 15.X.13
- Chaitophorus leucomelas* Koch, 1854
Populus nigra, Gazzola-PC, loc. Canneto Sotto, 18.X.12 and 15.X.13; Travo-PC, loc. Statto, 18.X.12; Podenzano-PC, loc. Altoè, 18.X.12; *P. canadensis*, Calendasco-PC, Cusani Wood, 15.X.13
- Chaitophorus populiabae* (Boyer de Fonscolombe, 1841)
Populus alba, Ravenna, loc. Porto Corsini, 8.VI.12
- Chaitophorus salicti* (Schrank, 1801)
Salix apennina, Fontanelice-BO, loc. Orsara, 6.VI.13; *S. caprea*, Casola Valsenio-RA, Officinal Plants Garden, 6.VI.12
- Atheroides serrulatus* Haliday, 1839
Poaceae not ident., Piacenza, loc. Mortizza, 15.X.13
- Sipha (Rungsia) elegans* Del Guercio, 1905
Elymus repens, Podenzano-PC, loc. Altoè, 18.X.12; Gazzola-PC, loc. Canneto Sotto, 15.X.13; Gragnano Trebbiense-PC, 15.X.13
- Sipha (Rungsia) maydis* Passerini, 1860
Sorghum halepense, Imola-BO, 21.IX.12; Poaceae not ident., Castelnovo ne' Monti-RE, Pietra di Bismantova, 16.X.13
- Schizolachnus obscurus* Börner, 1940
Pinus pinaster, Ravenna, loc. Porto Corsini, 8.VI.12; *P. nigra*, Bettola-PC, loc. Passo del Cerro, 18.X.12; Fontanelice-BO, loc. Orsara, 6.VI.13
- Cinara brauni* Börner, 1940
Pinus nigra, Bettola-PC, loc. Passo del Cerro, 18.X.12
- Cinara piceicola* (Cholodkovsky, 1896)
Picea abies, Fontanelice-BO, loc. Orsara, 6.VI.13
- Cinara pilicornis* (Hartig, 1841)
Picea abies, Fontanelice-BO, loc. Orsara, 6.VI.13
Previously recorded in the region (jointly with five other congeneric species) by TASSINARI (1992)
- Cinara (Cupressobium) juniperi* (De Geer, 1773)
Juniperus communis, Imola-BO, loc. Linaro (Forestry Nursery), 5.VI.13
- Cinara (Cupressobium) tujaefilina* (Del Guercio, 1909)
Thuja occidentalis, Imola-BO, loc. Linaro (Forestry Nursery), 5.VI.13
Previously recorded in the region by POLLINI (2013)
- Tuberolachnus salignus* (Gmelin, 1790)
Salix eleagnos, Travo-PC, loc. Statto, 18.X.12; *S. caprea*, Casola Valsenio-RA, Officinal Plants Garden, 6.VI.13; *S. x apennina*, Piacenza, loc. Mortizza, 15.X.13
- Lachnus roboris* (Linnaeus, 1758)
Quercus pubescens, Travo-PC, loc. Statto, 18.X.12; Imola-BO, La Frattona Wood, 7.VI.13; *Q. cerris*, Canossa-RE, loc. Ciano d'Enza (Rupe di Campotrera), 16.X.13
- Pterocomma pilosum* ssp. *konoii* Hori & Takahashi, 1939
Salix ? myrsinifolia, Bettola-PC, loc. Passo del Cerro, 18.X.12
- Rhopalosiphum maidis* (Fitch, 1856)
Sorghum halepense, Gazzola-PC, loc. Canneto Sotto, 18.X.12
Previously recorded in the region by MARTELLI (1950)
- Rhopalosiphum padi* (Linnaeus, 1758)
Poaceae not ident., Calendasco-PC, Cusani Wood, 15.X.13; *Echinochloa crus-galli*, Piacenza, loc. Mortizza, 15.X.13; Poaceae not ident., Castelnovo ne' Monti, Pietra di Bismantova, 16.X.13
- Schizaphis graminum* (Rondani, 1852)
Triticum vulgare, Imola-BO, La Frattona Wood, 7.VI.13
Previously recorded in the region by RONDANI (1852), PASSERINI (1863) and others (see BARBAGALLO *et al.*, 2011)
- Schizaphis (Paraschizaphis) scirpi* (Passerini, 1874)
Typha angustifolia, Vigolsone-PC, 18.X.12
Previously recorded in the region by PASSERINI (1874)
- Toxoptera aurantii* (Boyer de Fonscolombe, 1841)
Hibiscus sp., Modena, 19.V.13 (M. Mandrioli leg.)
- Aphis affinis* Del Guercio, 1911
Mentha x piperita and *M. suaveolens*, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12
- Aphis chloris* Koch, 1854
Hypericum androsaemum, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; *H. calycinum*, Imola-BO, Tozzoni Park, 15.V.14
Previously recorded in the region by PASSERINI (1863)

- Aphis clinopodii* Passerini, 1861
Clinopodium vulgare, Gazzola-PC, loc. Canneto Sotto, 15.X.13
 Previously recorded in the region by PASSERINI (1861, 1863)
- Aphis confusa* Walker, 1849
Scabiosa columbaria, Brisighella-RA, loc. Zattaglia and loc. Poggiolo, 6.VI.13
 Previously recorded in the region by PASSERINI (1863)
- Aphis craccae* Linnaeus, 1758
Vicia villosa, Ravenna, loc. Porto Corsini, 8.VI.12
- Aphis craccivora* Koch, 1854
Artemisia dracunculus, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12; *Rumex acetosa*, Vignola-MO, 24.VI.13 (G.C. Manicardi leg.); *Portulaca oleracea*, Casola Valsenio-RA, Officinal Plants Garden, 5.VIII.13
- Aphis cytisorum* Hartig, 1841
Colutea arborescens, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12
- Aphis eupatorii* Passerini, 1863
Eupatorium cannabinum, Gazzola-PC, loc. Canneto Sotto, 18.X.12; Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12
 Previously recorded in the region by PASSERINI (1863)
- Aphis euphorbiae* Kaltenbach, 1843
Euphorbia helioscopia, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12
 Previously recorded in the region by PASSERINI (1863)
- Aphis fabae* Scopoli, 1763
Agastache anethiodora, *Centranthus ruber*, *Cnidium silaifolium*, *Fagopyrum esculentum*, *Foeniculum vulgare* and *Levistichum officinale*, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; *Chaerophyllum temulum*, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12; *Cichorium intybus*, Modena, loc. Marzaglia, 16.VI.13 (M. Mandrioli leg.); *Euonymus europaeus*, Modena, loc. Marzaglia, 16.VI.13 (M. Mandrioli leg.); *Chenopodium album*, Imola-BO, 2.VII.13; *Atriplex hortensis*, Casola Valsenio-RA, Officinal Plants Garden, 5.VII.13; *Cynara cardunculus*, Modena, loc. Marzaglia, 29.IX.13 (M. Mandrioli leg.)
- Aphis fabae* ssp. *cirsiiacanthoidis* Scopoli, 1763
Cirsium arvense, Fontanelice-BO, loc. Orsara, 6.VI.13 (Fig. II, 3)
- Aphis fabae* ssp. *solanella* Theobald, 1914
Solanum nigrum, Imola-BO, loc. Linaro, 5.VI.13
- Aphis farinosa* Gmelin, 1790
Salix viminalis, Faenza-RA, 15.V.81; *S. eleagnos*, Coli-PC, loc. Perino, 18.X.12; *S. apennina*, Fontanelice-BO, loc. Orsara, 6.VI.13
- Aphis frangulae* Kaltenbach, 1845
Rhamnus alaternus, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; *Stachys recta*, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12; *Leonurus cardiaca*, Casola Valsenio-RA, Officinal Plants Garden, 5.VI.13 (Fig. II, 4)
 Previously recorded in the region by PASSERINI (1863)
- Aphis gossypii* Glover, 1877
Hibiscus syriacus, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; *Matricaria chamomilla* and *Myosotis arvensis*, Imola-BO, loc. Linaro, 5.VI.13; *Ocimum basilicum*, Modena, loc. Marzaglia, 16.VI.13 (M. Mandrioli leg.); *Sedum* sp. (cult.), Imola-BO, 30.VI.13; *Begonia* sp., Modena, 9.X.13 (M. Mandrioli leg.); *Cucurbita pepo*, Modena, loc. Marzaglia, 11.IX.13 and 18.X.13 (M. Mandrioli leg.)
- Aphis loti* Kaltenbach, 1862
Lotus corniculatus, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12 and 6.VI.13
- Aphis nasturtii* Kaltenbach, 1843
Rorippa sylvestris, Gazzola-PC, loc. Canneto Sotto, 18.X.12; *Weigelia x florida*, Imola-BO, 10.VI.14
- Aphis oenotherae* Oestlund, 1887
Oenothera biennis, Casola Valsenio-RA, 7.VI.12; *Epilobium dodonaet*, Coli-PC, loc. Perino, 18.X.12; *Oe. lamarckiana*, Casola Valsenio-RA, Officinal Plants Garden, 5.VIII.13
- Aphis origani* Passerini, 1860
Origanum majorana, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12
- Aphis parietariae* Theobald, 1922
Parietaria judaica, Fontanelice-BO, loc. Orsara, 6.VI.13;
- Aphis passeriniana* (Del Guercio, 1900)
Salvia officinalis, Imola-BO, 8.VI.12; Fontanelice-BO, loc. Orsara, 6.VI.13
- Aphis pomi* DeGeer, 1773
Crataegus laevigata, Imola-BO, 8.VI.12; *Sorbus aucuparia* and *S. torminalis*, Imola-BO, loc. Linaro (Forestry Nursery), 5.VI.13; *Malus domestica*, Modena, loc. Marzaglia, 18.X.13 (M. Mandrioli leg.)
- Aphis sambuci* Linnaeus, 1758
Persicaria lapathifolia, Imola-BO, loc. Linaro (Forestry Nursery), 5.VI.13; *Saxifraga* sp., Pievepelago-MO, Baccio Lake, 23.VI.13 (M. Mandrioli leg.); *Sambucus nigra*, Modena, loc. Marzaglia, 16.VI.13 (M. Mandrioli leg.)
- Aphis sedi* Kaltenbach, 1843
Sedum rupestre, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12
 Previously recorded in the region by PASSERINI (1863)
- Aphis serpyllii* Koch, 1854
Thymus vulgaris, Imola-BO, loc. Linaro (Forestry Nursery), 5.VI.13; same host plant and *T. serpyllii*, Casola Valsenio-RA, Officinal Plants Garden, 5.VI.13
 Previously recorded in the region by PASSERINI (1863)
- Aphis spiraeicola* Patch, 1914
Spiraea cantoniensis, Imola-BO, 23.V.05; *Viburnum opulus*, Casola Valsenio-RA, Officinal Plants

- Garden, 5.VI.13; Imola-BO, loc. Linaro, 5.VI.13; *Erigeron canadensis*, Calendasco-PC, Cusani Wood, 15.X.13
- Aphis umbrella* (Börner, 1950)
Malva sylvestris, Casola Valsenio-RA, Officinal Plants Garden, 5.VI.13
- Aphis urticata* Gmelin, 1790
Urtica dioica, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12; Piacenza, loc. Mortizza, 15.X.13
Previously recorded in the region by PASSERINI (1863)
- Cryptosiphum artemisiae* Buckton, 1879
Artemisia vulgaris, Fontanelice-BO, loc. Orsara, 6.VI.13
- Dysaphis lappae* (Koch, 1854)
Arctium lappa, Brisighella-RA, loc. Zattaglia, 6.VI.13; Gazzola-PC, loc. Canneto Sotto, 15.X.13; Calendasco-PC, Cusani Wood, 15.X.13
Previously recorded in the region by PASSERINI (1863)
- Dysaphis (Pomaphis) plantaginea* (Passerini, 1860)
Malus domestica, Modena, loc. Marzaglia, 22.V.13 (M. Mandrioli leg.)
- Dysaphis (Pomaphis) sorbi* (Kaltenbach, 1843)
Sorbus aucuparia, Imola-BO, loc. Linaro (Forestry Nursery), 5.IV.13 and 10.VI.14
- Brachycaudus helichrysi* (Kaltenbach, 1843)
Viola tricolor, Modena, 19.V.13 (M. Mandrioli leg.)
- Brachycaudus (Acaudus) cardui* (Linnaeus, 1758)
Carduus pycnocephalus, Imola-BO, La Frattona Wood, 7.VI.13
- Brachycaudus (Acaudus) lychnidis* (Linnaeus, 1758)
Silene latifolia subsp. *alba*, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; Imola-BO, loc. Linaro, 5.VI.13; *Silene italica*, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12
Previously recorded in the region by PASSERINI (1863)
- Brachycaudus (Thuleaphis) amygdalinus* (Schouteden, 1905)
Polygonum aviculare, Gagnano Trebbiense-PC, 15.X.13
- Brachycaudus (Thuleaphis) rumexicolens* (Patch, 1917)
Rumex sp., Imola-BO, La Frattona Wood, 7.VI.13
- Semiaphis dauci* (Fabricius, 1775)
Daucus carota, Calendasco-PC, Cusani Wood, 15.X.13
- Hyadaphis foeniculi* (Passerini, 1860)
Foeniculum vulgare, Casola Valsenio-RA, 11.VI.99 (P. Baronio leg.)
- Hyadaphis passerinii* (Del Guercio, 1911)
Lonicera etrusca, Fontanelice-BO, loc. Orsara, 6.VI.13 (Fig. II, 5)
Previously recorded in the region by DEL GUERCIO (1911)
- Liosomaphis berberidis* (Kaltenbach, 1843)
Berberis vulgaris, Ravenna, loc. Porto Corsini, 8.VI.12
- Cavariella aegopodii* (Scopoli, 1763)
Petroselinum crispum, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; *Chaerophyllum temulum*, Brisighella-RA, loc. Zattaglia, 6.VI.13
- Cavariella theobaldi* (Gillette & Bragg, 1918)
Salix alba, Gazzola-PC, loc. Canneto Sotto, 15.X.13
- Ovatus crataegarius* (Walker, 1850)
Mentha aquatica, Gazzola-PC, loc. Canneto Sotto, 15.X.13; *Mentha* sp., Vigolsone-PC, 18.X.12; Labiatae not ident., Piacenza, loc. Mortizza, 15.X.13
Previously recorded in the region by BARONIO *et al.* (2009)
- Phorodon humuli* (Schrank, 1801)
Humulus lupulus, Calendasco-PC, Cusani Wood, 15.X.13
- Myzus cerasi* (Fabricius, 1775)
Prunus cerasus, Modena, loc. Marzaglia, 16.VI.13 (M. Mandrioli leg.)
- Myzus lythri* (Schrank, 1801)
Vagrant alates, Coli-PC, loc. Perino, 18.X.12
Previously recorded in the region by PASSERINI (1863)
- Myzus ornatus* Laing, 1932
Viola odorata, Imola-BO, 7.XII.97; *Narcissus x poeticus* (cult.), Imola-BO, 25.VI.14
- Myzus varians* Davidson, 1912
Clematis vitalba, Brisighella-RA, loc. Zattaglia, 7.VI.12; Castelnuovo ne' Monti-RE, Pietra di Bismantova, 16.X.13
- Myzus (Nectarosiphon) persicae* (Sulzer, 1776)
Coriandrum sativum, *Sinapis alba* and *Valeriana officinalis* Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; *Matricaria chamomilla*, Imola-BO, loc. Linaro (Forestry Nursery), 5.VI.13; *Viola tricolor*, Modena, 19.V.13 (M. Mandrioli leg.) and Casola Valsenio-RA Officinal Plants Garden, 30.VI.13; *Lavandula officinalis*, Modena, 29.V.13 (M. Mandrioli leg.); *Cynara cardunculus*, Modena, loc. Marzaglia, 9.VII.13 (M. Mandrioli leg.); *Brassica oleracea*, Modena, loc. Marzaglia, 24.IX.13 (M. Mandrioli leg.); *Solanum capsicastrum*, Modena, 18.X.13 (M. Mandrioli leg.)
- Tricosiphonaphis (Xenomyzus) polygonifoliae* (Shinji, 1944)
Persicaria lapathifolia, Imola-BO, loc. Linaro (Forestry Nursery), 5.VI.13
Previously identified in the region as a vagrant alate by BARBAGALLO *et al.* (2011)
- Cryptomyzus ribis* (Linnaeus, 1758)
Leonurus cardiaca, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; *Ribes rubrum*, Casola Valsenio-RA, Officinal Plants Garden, 6.VI.13
- Capitophorus elaeagni* (Del Guercio, 1894)
Cirsium arvense, Ravenna, loc. Lido di Dante, 17.VI.10; Fontanelice-BO, loc. Orsara, 6.VI.13; *Carduus pycnocephalus*, Imola-BO, La Frattona Wood, 7.VI.13; *Cirsium* sp., Castelnuovo ne' Monti-RE, Pietra di Bismantova, 16.X.12

- Previously recorded in the region by BARONIO *et al.* (2009) and POLLINI (2013)
- Capitophorus hippophaes* (Walker, 1852)
Hippophaë fluvialis, Fontanelice-BO, loc. Orsara, 6.VI.13; *Persicaria maculosa*, Calendasco-PC, Cusani Wood, 15.X.13
- Capitophorus inulae* (Passerini, 1860)
Dittrichia viscosa, Gazzola-PC, loc. Canneto Sotto, 18.X.12
- Capitophorus similis* van der Goot, 1915
Tussilago farfara, Fontanelice-BO, loc. Orsara, 6.VI.13
- Pleotrichophorus glandulosus* (Kaltenbach, 1846)
Artemisia absinthium, Casola Valsenio-RA, Officinal Plants Garden, 5.VI.13
- Hyperomyzus lactucae* (Linnaeus, 1758)
Ribes nigrum, Casola Valsenio-RA, Officinal Plants Garden, 6.VI.13
- Hyperomyzus (Neonasonovia) picridis* (Börner & Blunck, 1916)
Picris hieracioides, Brisighella-RA, loc. Zattaglia, 7.VI.12; Casola Valsenio-RA, 5.VI.13
- Aulacorthum solani* (Kaltenbach, 1843)
Cirsium arvense, Ravenna, loc. Lido di Dante, 17.VI.10; *Hibiscus* sp., Modena, 18.V.12 (M. Mandrioli leg.); *Hyssopus officinalis*, *Lippia citriodora* and *Thymus serpyllum*, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; *Bellis perennis*, Modena, 27.VI.12 (M. Mandrioli leg.); *Cerastium* sp., Imola-BO, loc. Linaro, 5.VI.13; *Salvia* sp. (cult.), Casola Valsenio-RA Officinal Plants Garden, 5.VI.13; *Melissa officinalis*, Brisighella-RA, loc. Zattaglia, 6.VI.13; *Myosotis sylvatica*, Imola-BO, La Frattona Wood, 7.VI.13
- Microlophium carnosum* (Buckton, 1876)
Urtica dioica, Imola-BO, 17.V.13; Piacenza, loc. Mortizza, 15.X.13
- Acyrtosiphon cyparissiae* (Koch, 1855)
Euphorbia cyparissias, Fontanelice-BO, loc. Orsara, 6.VI.13
Previously recorded in the region by PASSERINI (1863, 1871)
- Acyrtosiphon malvae* (Mosley, 1841)
Geranium rotundifolium, Imola-BO, La Frattona Wood, 7.VI.13
- Acyrtosiphon pisum* (Harris, 1776)
Lotus corniculatus, Casola Valsenio-RA, 7.VI.12; *Vicia villosa*, Ravenna, loc. Porto Corsini, 8.VI.12; *Medicago sativa*, Modena, loc. Marzaglia, 16.VI.13 (M. Mandrioli leg.); Guiglia-MO, loc. Roccamalatina, 22.IX.12 (G.C. Manicardi leg.)
- Metopolophium dirhodum* (Walker, 1849)
Poaceae not ident., Casola Valsenio-RA, 5.VI.13
- Sitobion avenae* (Fabricius, 1775)
Bromus sterilis, Ravenna, loc. Porto Corsini, 8.VI.12; Poaceae not ident., Gazzola-PC, loc. Canneto Sotto, 18.X.12; *Triticum vulgare*, Imola-BO, La Frattona Wood, 7.VI.13
- Sitobion fragariae* (Walker, 1848)
Hordeum murinum, Imola-BO, loc. Linaro, 5.VI.13; Poaceae not ident., Imola-BO, loc. La Frattona Wood, 7.VI.13
- Macrosiphum euphorbiae* (Thomas, 1878)
Origanum majorana, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; *Tulipa gesneriana*, Imola-BO, 27.IV.14
- Macrosiphum rosae* (Linnaeus, 1758)
Cephalaria tatarica, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; *Rosa* sp. (cult.), Brisighella-RA, loc. Zattaglia, 6.VI.13; Fontanelice-BO, loc. Orsara, 1.V.14; *Scabiosa columbaria*, Brisighella-RA, loc. Poggiolo, 6.VI.13
- Uroleucon grossum* (Hille Ris Lambers, 1939)
Crepis sp., Brisighella-RA, loc. Zattaglia, 6.VI.13; Modena, loc. Marzaglia, 11.IX.13 (M. Mandrioli leg.)
- Uroleucon hypochoeridis* (Fabricius, 1779)
Hypochoeris glabra, Ravenna, loc. Porto Corsini, 8.VI.12; *H. radicata*, Imola-BO, La Frattona Wood, 7.VI.13
- Uroleucon picridis* (Fabricius, 1775)
Picris hieracioides, Brisighella-RA, loc. Zattaglia, 7.VI.12
- Uroleucon sonchi* (Linnaeus, 1767)
Sonchus oleraceus, Fontanelice-BO, loc. Orsara, 6.VI.13
- Uroleucon tanacetii* (Linnaeus, 1758)
Tanacetum vulgare, Castelnuovo ne' Monti-RE, Pietra di Bismantova, 16.X.13
Previously recorded in the region by PASSERINI (1863)
- Uroleucon (Uromelan) campanulae* (Kaltenbach, 1843)
Campanula sp., Castelnuovo ne' Monti-RE, Pietra di Bismantova, 16.X.13
- Uroleucon (Uromelan) jaceae* (Linnaeus, 1758)
Centaurea jacea, Fontanelice-BO, loc. Orsara, 6.VI.13; *C. ?nigrescens*, Modena, loc. Marzaglia, 3.X.13 (M. Mandrioli leg.)
- Uroleucon (Uromelan) solidaginis* (Fabricius, 1779)
Solidago virgaurea, Brisighella, loc. Zattaglia, 6.VI.13
- Macrosiphoniella absinthii* (Linnaeus, 1758)
Artemisia absinthium, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 6.VI.13; Fontanelice-BO, loc. Orsara, 6.VI.13
Previously recorded in the region by PASSERINI (1863) and BARONIO *et al.* (2009)
- Macrosiphoniella artemisiae* (Boyer de Fonscolombe, 1841)
Artemisia abrotanum and *A. absinthium*, Casola Valsenio-RA, Officinal Plants Garden, 6.VI.13; *A. vulgaris*, Fontanelice-BO, loc. Orsara, 6.VI.13; Calendasco-PC, Cusani Wood, 15.IX.13 (Fig. II, 6)

Macrosiphoniella atra (Ferrari, 1872)
Artemisia alba, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12 and 6.VI.13

Macrosiphoniella helichrysi Remaudière, 1952
Helicbrysum italicum, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12; Brisighella-RA, loc. Zattaglia (Mt. Mauro), 6.VI.13; Imola-BO, 8.X.13
Previously recorded in the region by BARONIO *et al.* (2009)

Macrosiphoniella kaufmanni Börner 1940
Artemisia alba, Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12 and loc. Poggiolo, 6.VI.13

Macrosiphoniella millefolii (DeGeer, 1773)
Achillea millefolium, Bettola-PC, loc. Passo del Cerro, 18.X.12; Castelnovo ne' Monti-RE, Pietra di Bismantova, 16.X.13

Macrosiphoniella oblonga (Mordvilko, 1901)
Artemisia vulgaris, Casola Valsenio-RA, Officinal Plants Garden, 5.VI.13

Macrosiphoniella tanacetaria (Kaltenbach, 1843)
Tanacetum vulgare, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12 and 6.VI.13
Previously recorded in the region by PASSERINI (1863) and BARONIO *et al.* (2009)

Macrosiphoniella tapuskae (Hottes & Frison, 1931)
Achillea millefolium, Castelnovo ne' Monti-RE, Pietra di Bismantova, 16.X.13
Previously identified in the region as a vagrant alate (BARBAGALLO *et al.*, 2011)

Macrosiphoniella (Asterobium) linariae (Koch, 1855)
Aster linosyris, Casola Valsenio-RA, Officinal Plants Garden, 7.VI.12 and 5.VI.13; Canossa-RE, loc. Ciano d'Enza (Rupe di Campotrera), 16.X.13

Amphorophora rubi (Kaltenbach, 1843)
Rubus ulmifolius, Brisighella-RA, loc. Zattaglia, 6.VI.13
Previously identified in the region as a vagrant alate (BARBAGALLO *et al.*, 2011)

Wahlgreniella arbuti (Davidson, 1910)
Arbutus unedo Brisighella-RA, loc. Zattaglia (Mt. Mauro), 7.VI.12

CONCLUSIONS

This second contribution to the aphid fauna of Emilia Romagna updates the number of species or subspecies recorded to 408. The inclusion of collection data also significantly improves our knowledge of the host plants and the local distributions of the recorded aphid species. Only two other Italian regions (Lombardy and Sicily) have more than four hundred recorded aphid species. Nevertheless, despite the demonstrated and appreciable aphid biodiversity, we believe that further faunistic searches could substantially increase the number of known aphid species for Emilia Romagna, in keeping with its local floristic biodiversity and richness of ecological habitats.

RIASSUNTO NOTIZIE INTEGRATIVE SULL'AFIDOFAUNA DELLA REGIONE EMILIA ROMAGNA

La presente nota riporta notizie integrative sulla fauna afidica della regione Emilia Romagna, dove si segnala la presenza di 408 specie complessive, incluse alcune sottospecie. Tale apprezzabile biodiversità per questo gruppo di insetti deriva da una precedente indagine faunistica con la quale sono segnalate 323 taxa, cui si aggiungono altre 85 specie (Lista A) derivanti dalla presente ricerca triennale di campo. Questa ha permesso inoltre l'acquisizione di dati aggiuntivi sulle piante ospiti e le località di rinvenimento degli stessi afidi. Con tali acquisizioni la fauna afidica dell'Emilia Romagna risulta fra le più composite nel contesto delle varie regioni italiane, in poche delle quali sono registrati valori di oltre 400 specie afidiche accertate.

ACKNOWLEDGEMENTS

Many thanks are due to Prof. Mauro Mandrioli and Prof. Gian Carlo Manicardi (University of Modena-Reggio Emilia, Italy) as well as Prof. Piero Cravedi and Mr. Sandro Gabbiani (University Cattolica S. Cuore, Piacenza, Italy) for the gifts of several aphid samples and/or logistic support during the field collections in the respective administrative provinces. We are also grateful to Dr. Jon Martin (The Natural History Museum, London, Great Britain) and to Dr. Nevio Agostini (Foreste Casentinesi National Park, Santa Sofia, Forlì-Cesena, Italy) for their kind sharing of information and their bibliographic support. Last but not least, we acknowledge with many thanks the courtesy of Dr. Sauro Biffi, Director of the "A. Rinaldi Ceroni" Herb Garden (Casola Valsenio, Ravenna, Italy), for allowing us to collect aphids from the plants in the garden.

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