

## Korte mededelingen

### *Macrosiphum euphorbiellum* present in the Netherlands (Hemiptera: Sternorrhyncha: Aphididae)

Early June 2020, I found two small colonies of an unknown *Macrosiphum* species on *Euphorbia amygdaloides purpurea* in Nijmegen (province of Gelderland) (figure 1). Following the key of Blackman & Eastop (2000), I later identified the species as *Macrosiphum (Macrosiphum) euphorbiellum* Theobald, 1917, which is a new species for the Netherlands. It is a rather big aphid with a body length of about 3 mm. The aphids were not ant attended, suggesting that this species unlike some other aphids may not form symbiotic relationships with ants.

Similar to *M. (Macrosiphum) euphorbiae* (Thomas, 1878), *M. euphorbiellum* exhibit different colour morphs (including red, yellow and green), which has confused the classification in the past. Theobald (1917) first described the red morphotype of *M. euphorbiellum* feeding on *Euphorbia esula*. Later, in 1921 and 1923 Theobald (1925) found a green aphid living on *Euphorbia amygdaloides* and classified this aphid species as *Macrosiphum amygdaloides*. Interestingly, however, a few years later Hille Ris Lambers (1933) examined the Theobald collection in the British Museum and noticed that several aphid species with different names shared the same morphological characteristics. Among them were *M. euphorbiellum*, *M. euphorbiellus* and *M. amygdaloides*. Based on the matching characteristics, Hille Ris Lambers concluded that *M. amygdaloides* and *M. euphorbiellus* are junior synonyms of *M. euphorbiellum* and that this species exhibits different colour morphs (Hille Ris Lambers 1933, Blackman 2010).

The different colour forms seem to have similar feeding behaviour and can occur on a plant simultaneously. Börner (1952) and Remaudière (1952) observed the red form not only on *E. esula* but also on *E. amygdaloides* which is similar to green morphotype (Theobald 1925). Moreover, Meier (1961), like me, observed the yellow-green/yellow and red forms together on *E. amygdaloides* (figure 2), but also observed the yellow form solely (figure 3). For unknown reason the yellow form disappeared from the plant after some time and the red form remained.

*Macrosiphum euphorbiellum* is originally described from England. Until now *M. euphorbiellum* is not only recorded from England and the Netherlands, but also from France (Remaudière 1952), Germany (Börner 1952), Austria (Börner & Franz 1956), the Crimea (Bozhko 1957), Switzerland (Meier 1961), Poland (Szelegiewicz 1966) and Spain (Nieto Nafria 1976). Furthermore from Bulgaria, Corsica, Czech Republic, Ireland, Italy, Romania and Slovakia (Nieto Nafria 2013). Outside Europe *M. euphorbiellum* is recorded from Turkey (Remaudière et al. 2006) and the USA (Skvarla et al. 2017).

Theobald recorded the red form of *M. euphorbiellum* on *Euphorbia esula* growing in King's Wood, near Wye (England) in 1916 (Theobald 1917). *Macrosiphum euphorbiellum* lives the whole year on *E. amygdaloides* and *E. esula*, suggesting that her host range is restricted to these two plants. In autumn, red males and oviparae (i.e. females that produce eggs) develop. After mating, the oviparae



2. *Macrosiphum (Macrosiphum) euphorbiellum* on *Euphorbia amygdaloides purpurea*. Nijmegen (province of Gelderland), 16.vi.2020. Photo: Paul Piron

2. *Macrosiphum (Macrosiphum) euphorbiellum* op *Euphorbia amygdaloides purpurea*. Nijmegen (Gelderland), 16.vi.2020.

deposit their eggs mainly underside the leaves of *E. amygdaloides* where the eggs hibernate. In spring the eggs hatch and a new population develops (Meier 1961).

The immature apterae (i.e. wingless parthenogenetic females) are whitish-yellow (figure 3) or semi-transparent red. When they mature however, their colour becomes somewhat darker. Unfortunately, I did not observe alatae (i.e. parthenogenetic females with wings) because a heavy rain-shower washed down all the aphids from the plants and no aphids were left. Parthenogenetic females give birth to offspring without fertilization by males.



1. *Euphorbia amygdaloides purpurea*. Photo: Paul Piron  
1. *Euphorbia amygdaloides purpurea*.



3. *Macrosiphum (Macrosiphum) euphorbiellum* on *Euphorbia amygdaloides purpurea*. Nijmegen (province of Gelderland), 16.vi.2020. Photo: Paul Piron

3. *Macrosiphum (Macrosiphum) euphorbiellum* op *Euphorbia amygdaloides purpurea*. Nijmegen (Gelderland), 16.vi.2020.

## Acknowledgements

I am very grateful to Dr. A.V. Stekolshchikov (Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia), Dr. D. Matile-Ferrero (Muséum national d'Histoire naturelle, Paris, France) and Mr G. Baldee (Naturalis Biodiversity Center, Leiden, the Netherlands) for supplying me with some essential publications. I also thank the referees for reading the manuscript and for their valuable suggestions.

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## Samenvatting

### *Macrosiphum euphorbiellum* aanwezig in Nederland (Hemiptera: Sternorrhyncha: Aphididae)

*Macrosiphum (Macrosiphum) euphorbiellum* Theobald, 1917, is beschreven van *Euphorbia esula* in Engeland. Sindsdien is ze, behalve in Noord-Europa, ook in een aantal andere Europese landen aangetroffen. Buiten Europa is ze alleen bekend van Turkije en de Verenigde Staten van Amerika. Deze bladluis is nu voor het eerst in Nederland in 2020 waargenomen op *Euphorbia amygdaloides purpurea*. *Macrosiphum euphorbiellum* kan gemakkelijk verward worden met *M. euphorbiae* (Thomas, 1878). De bladluis kan in een scala van kleuren aangetroffen worden, variërend van geel-groen tot rood. Deze kleurvormen kunnen zowel door elkaar als apart op de plant gevonden worden. *Macrosiphum euphorbiellum* leeft alleen op enkele *Euphorbia*-soorten en heeft geen waardwisseling met andere planten. In de herfst worden de eitjes aan de onderkant van de bladeren afgezet om te overwinteren. In het voorjaar komen deze eitjes uit en ontstaan er nieuwe kolonies bladluizen.

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## Een nieuwe mierenexoot in Nederland: *Crematogaster schmidtii* (Hymenoptera: Formicidae)

Ter voorbereiding van een artikel over vestigingen van de rode schorpioenmier *Crematogaster scutellaris* (Olivier, 1792) in Nederland, werden enkele populaties nader

onderzocht. De eerste auteur bezocht in Elst (Ge) een kolonie in en rondom een huis. Dit nest was in 2017 voor het eerst gemeld aan de tweede auteur. Na het in

kaart brengen van de voedselbronnen en mogelijke locaties van de koningin, werden werksters verzameld om door de derde auteur te laten fotograferen. Pas bij het bestuderen van de foto's ontstond er twijfel: ging het hier niet om *Crematogaster schmidtii* (Mayr, 1853) (figuur 1-2)?



a



b

1. Werkster van *Crematogaster schmidtii*: (a) lateraal, (b) dorsaal. Elst (Gelderland), 18.v.2020. Foto's Theodoor Heijerman  
1. Worker of *Crematogaster schmidtii*: (a) lateral, (b) dorsal. Elst (province of Gelderland), 18.v.2020.