Aphis triglochinis Theobald, 1926, as a pest of Red Currant (Ribes rubrum L.) and Black Currant (Ribes nigrum L.) (Homoptera, Aphididae)

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The second author in Kent, England, occasionally found an Aphis L. on Ribes rubrum which Mr. H. L. G. STROYAN thought to be Aphis triglochinis Theobald. The colonies looked like those of the well-known Ribes aphids, Aphis grossulariae Kltb. and A. schneideri Börner, but the insects were more brownish-green in colour and, although curling the edges of the leaves downward, they caused no leaf-nest. Small colonies of apterae and nymphs, mostly with wing buds, were also found on Ribes nigrum at Yalding, Kent in June, 1963.

The first author for many years observed and reared an Aphis which in the Netherlands appeared to be widely spread and often very common on Rorippa silvestris Bess., Barbarea vulgaris R. Br. (rolling the radical leaves) and B. stricta Andrzj. Again it was Mr. Stroyan who suggested that this might be Aphis triglochinis Theob.

It soon became apparent that the above mentioned aphid from various Cruciferae had host alternation. In the autumn the colonies dissolved into great numbers of alate females and alate males. These winged females could not be induced to colonize Cruciferae, and the alate males also did not accept Cruciferae as food plants.

In the autumn of 1962 alate females from Barbarea vulgaris and Rorippa silvestris were transferred to potted Red Currant (× Ribes rubrum L.), Black Currant (Ribes nigrum L.) and Gooseberry (Ribes grossularia L.). Offspring was produced on the leaves of each of these shrubs, but only on Red Currant did oviparae reach maturity. On Black Currant and Gooseberry the larvae died after moulting once or twice. Males were added and eggs, first very pale green, later black, were laid on the branches. However, no fundatrices were obtained because somebody threw the infected shrubs away.

In the autumn of 1963 more transfers from *Rorippa silvestris* to Red Currant were made and in 1964 several fundatrices developed, which produced many young. Some of the colonies looked rather like the common *Aphis schneideri* Börner, though of a dirtier green, but in one colony a considerable number of bright yellow specimens appeared which developed into alatae with a black thorax and yellow abdomen.

Potted plants of *Triglochin maritima* L. and *Rorippa silvestris* were placed in the cages holding infested Red Currant and soon had colonies of both the dirty green and the bright yellow aphid. Experiment and morphological examination showed that indeed Red Currant is a winter host of *Aphis triglochinis* Theob., of which the various morphs are now known.

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Further work showed that Aphis triglochinis Theob. has more secondary host plants than only Triglochin maritima L., Rorippa silvestris and the two mentioned Barbarea spp. In a nearly dry ditch this species was also found heavily infesting Myosotis palustris L. Transfers to Rorippa silvestris easily succeeded. But also a pickled sample of an Aphis which heavily infested cultivated Anemone coronaria L. ("Anemones de Caen") has to be referred to this species. On the other hand this Aphis, which as secondary hosts accepts such non-related plant families as Cruciferae, Scheuchzeriaceae 3), Boraginaceae and Ranunculaceae, apparently discriminates between Rorippa silvestris, R. amphibia Bess. and R. islandica Borb. In situations where these species occurred together, only the first was infested, although all three Rorippa species were inhabited by Aphis nasturtii Kltb. and Lipaphis erysimi (Kltb.) which also attack the two mentioned Barbarea spp.

Aphis pertinax H.R.L., a small species infesting various Drosera spp., in many respects resembles Aphis triglochinis Theob. But all attempts to infest Drosera rotundifolia L. in various stages of development with specimens from Myosotis palustris and Rorippa silvestris failed.

It is remarkable that no records of *Aphis triglochinis* from *Ribes* are available from the Netherlands, where for the last 10 years the aphid has been quite common on its secondary host plants. Most probably it has been confused with *Aphis schneideri* Börner which is often very common on Currants. The differences in colour when the colonies are green are relatively small and the differences in reactions of Currant not very conspicuous.

Aphis schneideri curls the leaves and shortens the internodes so strongly that mostly the aphids themselves inside the leaf-nest can not be seen from the outside. Aphis triglochinis, however, on Ribes curls the leaves somewhat and may kill them, but does not or hardly shorten the internodes. Therefore its colonies are easily visible on the young shoots, leaf stalks and underside of leaves.

References

Nogmaals Rhipicephalus sanguineus sanguineus (Latreille) (Acari). Naar aanleiding van de eerste vondst, in Dordrecht, van deze vooral bij de hond parasiterende teek schreef ik in Ent. Ber. 22: 213 (1962), dat het te hopen was, dat het bij deze vermelding zou blijven, gezien het feit dat het een uiterst moeilijk te bestrijden soort betreft. Helaas is deze hoop niet bewaarheid geworden. Van collega W. J. Kraan ontving ik exemplaren van deze teek, nu afkomstig uit een huis in Amersfoort, waar zij vooral gevonden werden in de buurt van de hondemand. Een eventueel contact met het buitenland of met het vorige geval kon niet vastgesteld worden.

³⁾ Triglochin L. is mostly placed in Scheuchzeriaceae, sometimes in Juncaginaceae or Potamogetonaceae.

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