

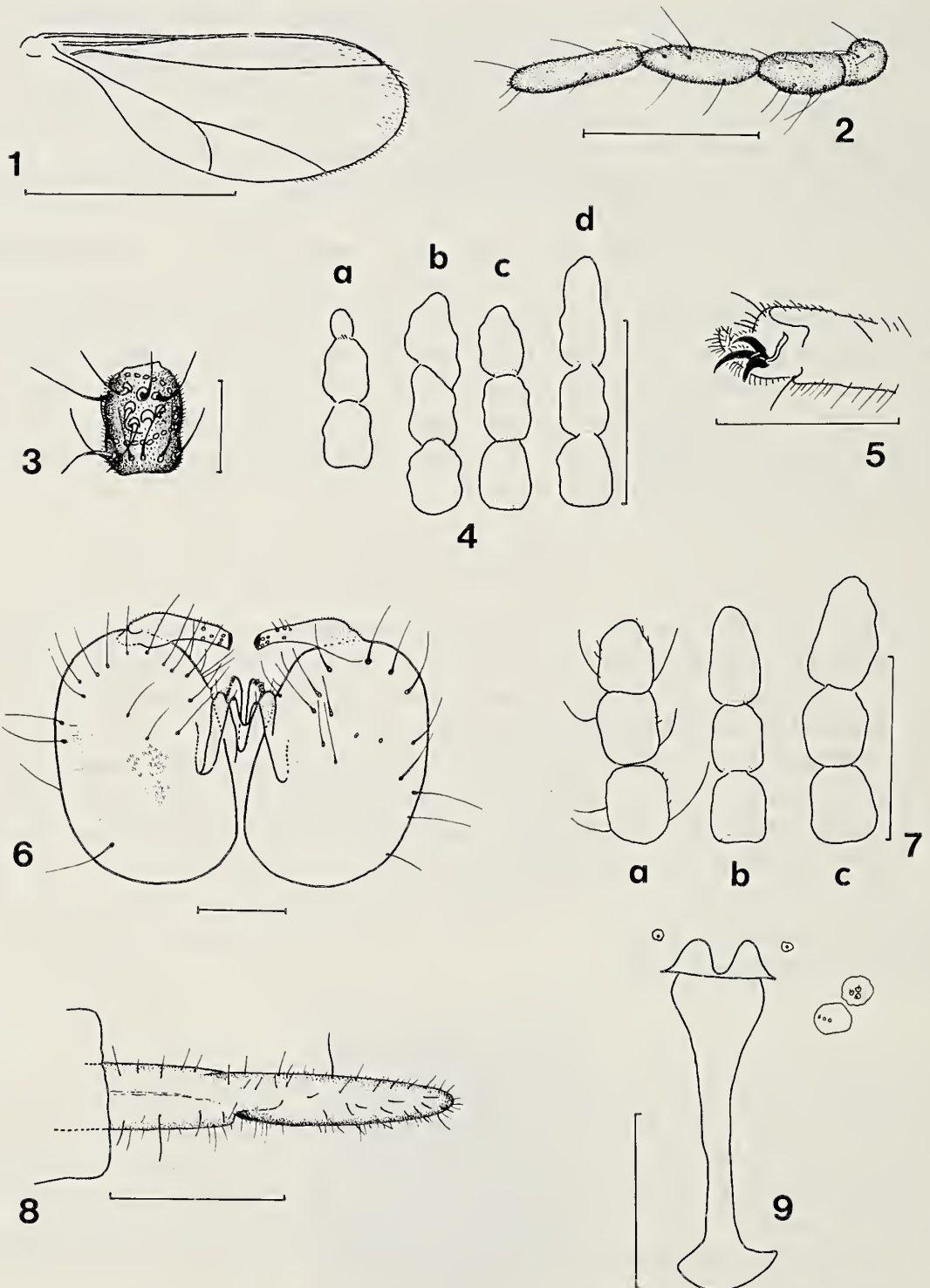
Notes on Cecidomyiidae, II

by

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ABSTRACT. — The correct generic placing of *Macrolabis aquilegiae*, new combination, has been discussed and three new synonyms of *Rabdophaga salicis* (*Cecidomyia karschi*, *R. ramicola* and *R. saliyonai*) are established.



Macrolabis aquilegiae (Kieffer). Fig. 1. wing; 2. maxillary palp (dorsal); 3. third flagellomere of male; 4. outlines of three terminal flagellomeres of male; 5. fore leg with tarsal claws; 6. male genitalia (dorsal); 7. outlines of three terminal flagellomeres of female; 8. female ovipositor (lateral); 9. larva, sternal spatula. Measures: fig. 1: 1 mm; fig. 2: 0.1 mm; fig. 3: 0.05 mm; fig. 4-9: 0.1 mm.

Macrolabis aquilegiae (Kieffer, 1909) — New combination.

This species was briefly described from larvae by Kieffer (1909) under the name *Perrisia aquilegiae*. It was found in Nancy, France, on *Aquilegia vulgaris* L. In 1946, De Meijere recorded the species for the first time from the Netherlands (Groningen, The Hague). In 1970 I received galls, collected by Dr. D. Hille Ris Lambers on *Aquilegia* hybrids in his garden at Bennekom, Netherlands. The species has also been found in Wageningen.

The red larvae live gregariously within the flowers, which show little sign of their presence. In 1970 and 1971 I succeeded in breeding the adults which proved to belong in *Macrolabis* Kieffer, new combination.

Description. — Male. Body length about 1.5 mm, wing length 1.5 mm. Venation as illustrated in fig. 1. Maxillary palp four segmented (fig. 2). Antennae with 2 + 12 segments, first and second flagellar segments (flagellomeres) not fused. Flagellomeres cylindrical, without distinct neck, circumfila simple (fig. 3, and 4 a-d). All tarsal claws with a simple tooth (fig. 5). Genitalia characteristic for *Macrolabis* (fig. 6).

Female. Body length 1.5—2.8 mm, wing length 1.8—2.0 mm. Antennae with 13—14 segments (fig. 7 a-c). Ovipositor as illustrated (fig. 8). Otherwise about as in male.

Larva. Length about 3 mm. Sternal spatula with slender, elongated shaft and anterior bilobed blade (fig. 9). Eight terminal papillae with setae (fig. 10).

Rabdophaga salicis (Schrank, 1803).

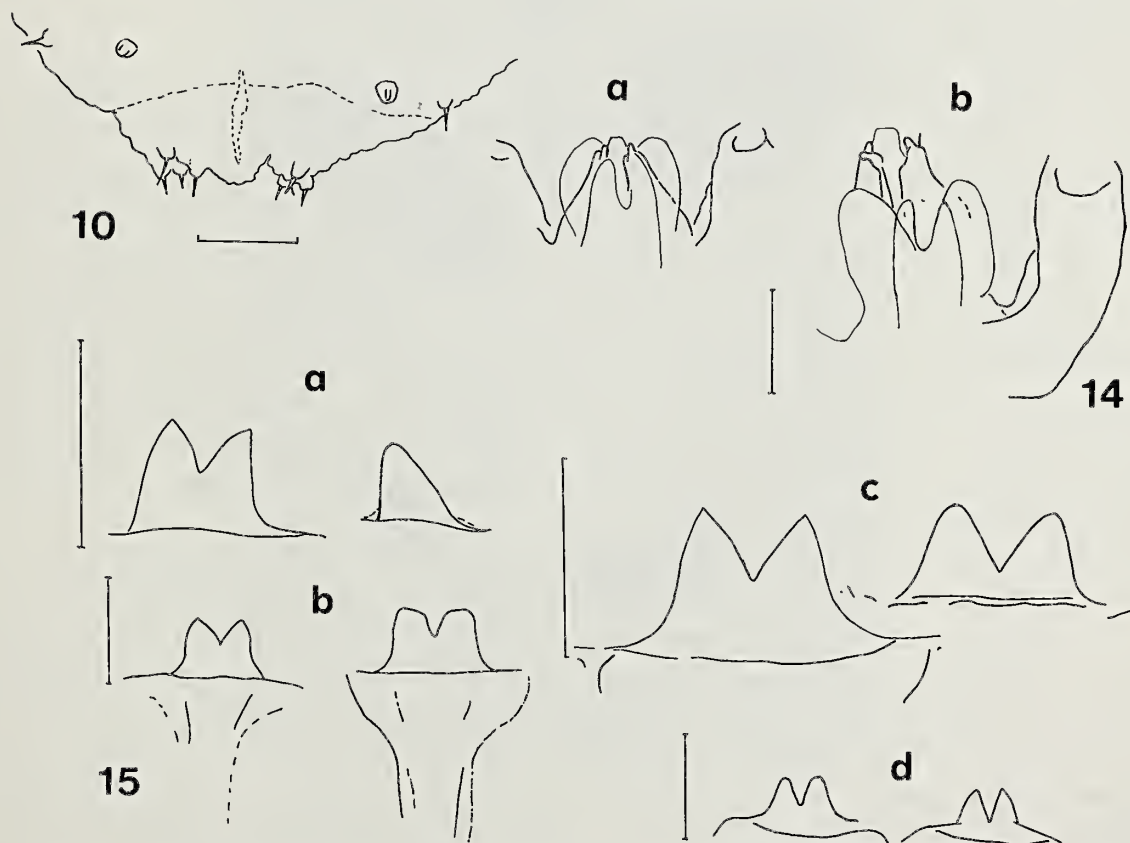
Tipula salicis Schrank, 1803: 69

Cecidomyia salicina Bouché, 1834: 27

Cecidomyia Degeeri Bremi-Wolf, 1847: 17

Cecidomyia gallarum - salicis Hardy, 1850: 185

Cecidomyia argyrosticta Macquart, 1854: 21-22



Rabdophaga salicis (Schrank). Fig. 10. larva, terminal segment (dorsal); 14. male genitalia (dorsal) of specimens, reared from galls on: a - *Salix cinerea*, b - *Salix repens*; 15. spatula of larvae, dissected from one gall on: a - *Salix purpurea*, b - *Salix purpurea*, c - *Salix cinerea*, d - *Salix repens*. Measures: Fig. 10, 14, 15: 0.1 mm.



Rabdophaga salicis (Schrank). Fig. 11. gall on *Salix cinerea*; 12. gall on *Salix purpurea*; 13. gall on *Salix repens*. Figs. about 1/6 natural size.

Cecidomyia Karschi Kieffer, 1891: 251-253-New synonymy

Rabdophaga ramicola Rübsaamen, 1915: 534-536-New synonymy

Rabdophaga saliyonai Shinji, 1938: 178-182-New synonymy

Schrank (1803) originally described this species very briefly in the genus *Tipula*. A more detailed description of the adult stages was published by Stelter (1955/1956). The larvae produce subglobular, hemispherical or spindle-shaped, woody swellings on the twigs of several *Salix* spp. Its correct identification, however, can present difficulties and necessitates taking into account biological details, including food plant range, and structural details of its immature and adult stages. A study of these points showed that some species are synonymous with *R. salicis*. Kieffer (1891) described both sexes and the gall as well as the egg, larva and pupa of *Cecidomyia karschi*, currently placed in the genus *Rabdophaga*. A comparison of Kieffer's description with material of *R. salicis* in the collection of the Instituut voor Taxonomische Zoölogie (Zoölogisch Museum) in Amsterdam and an examination of larvae of *R. karschi* from galls on *Salix repens* L., sent to me by Dr. E. Möhn (Staatliches Museum für Naturkunde, Stuttgart) showed that this species is indistinguishable from *R. salicis*.

Rabdophaga ramicola was described by Rübsaamen (1915) from specimens, reared from woody twig galls on *Salix purpurea* L. collected near Remagen, Germany, in 1906. He separated this species from *R. salicis* on the basis of some biological and morphological characters. However, an examination of many specimens reared from twig galls on several *Salix* species, collected in Europe and Japan, showed that this separation cannot stand and that *R. ramicola* and also *R. saliyonai* Shinji, 1938, must fall as synonyms of *R. salicis*. (The possible synonymy of *R. saliyonai* and *R. salicis* had already been discussed by Yukawa in 1971). The number of flagellomeres, which was stated to be 16-17 in Rübsaamen's description, varied in the examined material from 14-16 in *R. ramicola*, from 16-20 in *R. salicis* and from 17-19 in *R. saliyonai*. The basal clasp segment (basimere) of the male genitalia was described as more and the distal clasp segment (telomere) as less slender than in *R. salicis*, but these differences were not constant. Other alleged differences were the length of the aedeagus, which is longer than tergum X in *R. salicis*, but not in *R. ramicola*, and sternum X, which is broader in *R. ramicola* than in *R. salicis*.

(fig. 14 a-b), but both characters were observed in males of each species in the examined material.

Another separation was made on larval characters; the sternal spatula of *R. ramicola* has broadly rounded lobes on the anterior blade, whereas they are pointed in *R. salicis*. But I found both types in larvae, dissected from one twig gall, collected on *Salix purpurea* L. in the Biesbosch, in October 1951 (fig. 15a). The same phenomenon was observed again in larvae, dissected from twig galls on *Salix purpurea*, collected near Dussen, in April 1953 (fig. 15b), on *Salix cinerea* L., collected in Leur, in May 1956 (fig. 15a) and on *Salix repens*, collected near Haarlem, in October 1961 (fig. 15d) (all localities are in the Netherlands).

Rübsaamen (1915) and other authors (Buhr, 1964/65, Docters van Leeuwen, 1957) separate *R. ramicola* from *R. salicis* on the basis of some differences in the external structure of the galls, but these differences may be considered as a specific reaction of the host plant on the feeding behaviour of the gall midge larvae rather than to be of real diagnostic value (see also Nijveldt, 1971). It is almost certain, that the unidentified gall on *Salix repens*, recorded by Buhr (1964/65) under nr. 6032, is caused by *R. salicis* too.

Dasineura iteobia (Kieffer, 1890)

In my paper dealing with the rosette-like galls on *Salix repens* (1971) I discussed an undescribed *Rabdophaga* species, reared from galls of *R. rosaria* H. LW., but which can also produce terminal galls on the same host plant (fig. 16). A study of larval characters and gall formation, a comparison with the original description by Kieffer (1890) and data, given by Rübsaamen & Hedicke (1925/1939) and an examination of larvae from galls on *Salix caprea* L., sent to me by Dr. E. Möhn showed that this midge is identical with *Dasineura iteobia*.



Dasineura iteobia (Kieffer). Fig. 16. gall on *Salix repens*, $\times 1\frac{1}{2}$.

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Rabdophaga. I am also indebted to Dr. E. Möhn (Staatliches Museum für Naturkunde, Stuttgart, West Germany) and to Dr. J. Yukawa (Kagoshima University, Kagoshima, Japan) for sending me material of *R. karschi*, *D. iteobia* and *R. saliyonai* for examination.

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ARASCHNIA LEVANA (LINNAEUS) IN DE NOORDOOSTPOLDER (LEP., NYMPHALIDAE). Om te genieten van de ruimte en de rust kom ik nogal eens in deze polder. Het is er heerlijk zwerven in het jong aangeplante bos, te zien hoe het zich ontwikkelt, welke vogels en vlinders er al vliegen. Zo bleek me, dat het Landkaartje nu door bijna de hele polder op de geschikte plaatsen voorkomt, ongetwijfeld dank zij de weelderige brandnetel-vegetaties tussen de jonge bomen. In het Roggebotse bos en het Reve-Abberbos (in het verlengde daarvan) is de vlinder nu heel gewoon. Ook in het Kuinder bos vliegen er genoeg. In het Nageler bos trof ik een nestje rupsen aan. Verder komt de vlinder voor in het Schokker bos op Schokland. Ik zag *levana* tenslotte vliegen in Oostelijk Flevoland in het Zuigerplaspark onder de rook van Lelystad, weliswaar slechts twee stuks, maar het was al laat in de vliegtijd.

De rupsen zijn vaak nogal moeilijk te zien omdat ze zich aan de onderkant van een brandnetelblad bevinden. Soms zit er één bovenop een blad en dan vind je de andere in de regel wel dicht er bij op hun normale schuilplaats. Het meest zijn ze aan te treffen langs een breed bospad of aan de rand van een bos, niet zelden verschillende nesten op één brandnetelgroep. De rupsen zijn echter vaak geparasiteerd.

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