

## ***Nasonovia (Kakimia) saxifragae* (Doncaster & Stroyan) (Homoptera, Aphidoidea) found in northern Fennoscandia**

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The species *Nasonovia (Kakimia) saxifragae* Doncaster & Stroyan, 1952 has been found for the first time in North-West Europe, in Finnmark, Norway. The first description of the fundatrix and biometric data and other diagnostic characters of the viviparous morphs are presented.

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On 17 June 1986, an aphid sample was taken by the late Jorma Kyrki from a flower stalk of *Saxifraga caespitosa* L. in Nesseby, Finnmark (Fn), Norway and bred for 12 days. Several apterous viviparous females and three alate females could thus be preserved and determined as *Nasonovia (Kakimia) saxifragae*. This was the first time that the species has been found in Fennoscandia. Doncaster & Stroyan (1952) described *Kakimia (Neokakimia) saxifragae* from a single adult apterous viviparous female and some immature stages collected from Jan Mayen Island. Later, the species was found in Iceland and apterous viviparous females (2 exx.), oviparous females (6 exx.) and apterous males (4 exx.) could be described (Prior & Stroyan 1960). Other samples have been collected from Great Britain (Cumberland and Perthshire) (Stroyan 1964), and from North-East Greenland (Edwards 1966). The morphological characters, ranges of measurements and length ratios of the different morphs (except fundatrix) in the samples from these localities have been presented by Heie (1979).

The morphological characters of the aphid specimens from Norway agree fairly well with the ranges presented by Heie (1979). However, some

data are slightly different, and therefore the characters of the viviparous morphs are presented below.

*Fundatrix* (Fig. 1a–c): The dark dorsal pattern broken up into isolated irregular spots of various size. Appendages shorter than in other generations. Mesothoracic furca with broad transverse shaft. Biometric data on one specimen in mm: Body: 1.95; ant. flagellum 1.14–1.16; ant. segments III: 0.32–0.34, IV: 0.17–0.20, V: 0.19–0.20, VI (VIa + VIb): 0.11 + 0.33; siphunculi: 0.29; cauda: 0.19; ultimate rostral segm. (urs.): 0.125; 2nd segm. of hind tarsus (2sht): 0.090; hind femur: 0.49; hind tibia: 0.85. Length ratios: ant. flagellum/body: 0.59; VIb/VIa: 3.00; siphunculi/body: 0.15; siphunculi/cauda: 1.51; urs./2sht: 1.39. Sec. rhinaria on ant. III: 10, 7, on IV: 0. Number of accessory hairs on urs: 11. 5 hairs on cauda. Hair lengths in  $\mu\text{m}$ : on ant. III: 27, abd. III: 27, as long as basal diameter of ant. segm. III (IIIbd); on abd. segm. VIII: 42.

*Apterous viviparous female* (Fig. 1i–l): Ranges of biometric data from 14 specimens in mm: Body: 1.58–2.39; ant. flagellum: 1.44–1.85; ant. segm. III: 0.41–0.55, IV: 0.20–0.33, V: 0.24–0.32, VI: 0.105–0.135 + 0.34–0.52; siphunculi:

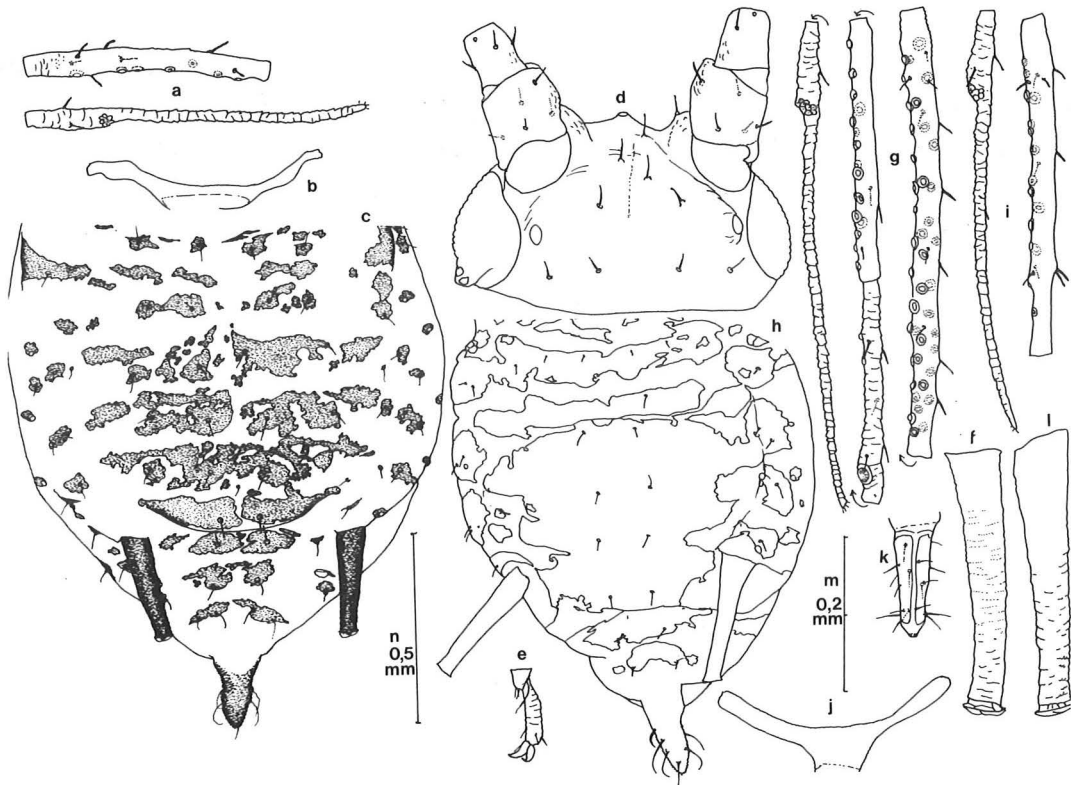


Fig. 1. *Nasonovia (Kakimia) saxifragae* Donc. & Stroyan, 1952. Fn: Nesseby, Norway, *Saxifraga caespitosa* L., June 29, 1986, J. Kyrki leg. Fundatrix (a–c), alate viviparous female (d–h), apterous viviparous female (i–l). a, i: antennal segments III and VI; g: antennal segments III–VI; b, j: mesothoracic furca; c, h: abdomen with siphunculi and cauda; d: head and antennal segments I and II; k: ultimate rostral segment; f, l: siphunculi. n: scale for c and h; m: scale for the others.

0.32–0.40; cauda: 0.21–0.27; urs.: 0.13–0.15; 2sht: 0.09–0.11; hind femur 0.57–0.70; hind tibia: 1.03–1.26. Length ratios: ant. flagellum/body: 0.56–0.85; VIb/VIa: 2.88–4.52; siphunculi/body: 0.16–0.20; siphunculi/cauda: 1.33–1.62; urs./2sht: 1.24–1.67. Sec. rhinaria on ant. III: 9–25, IV: 0–3, V: 0. Number of accessory hairs on urs.: 14–18. 5–7 hairs on cauda. Hair lengths in  $\mu\text{m}$ : on ant. segm. III: 23–31,  $0.82\text{--}1.04 \times \text{IIIbd}$ ; on abd. segm. III–IV: 30–36, on VIII: 36–46.

*Alate viviparous female* (Fig. 1d–h): Ranges of biometric data from 3 specimens in mm: Body: 2.27–2.32; ant. flagellum: 1.85–1.99; ant. segm. III: 0.58–0.62, IV: 0.32–0.36, V: 0.28–0.32, VI: 0.11–0.13 + 0.52–0.58; siphunculi: 0.32–0.35;

cauda: 0.22–0.24; urs.: 0.135–0.150; 2sht: 0.080–0.095; hind femur: 0.70; hind tibia: 1.31–1.40. Length ratios: ant. flagellum/body: 0.81–0.85; VIb/VIa: 4.04–5.00; siphunculi/body: 0.14–0.15; siphunculi/cauda: 1.40–1.55; urs./2sht: 1.42–1.88. Sec. rhinaria on ant. III: 35–44, IV: 14–21, V: 2–6. Number of accessory hairs on urs.: 14–17. 5–6 hairs on cauda. Hair lengths in  $\mu\text{m}$ : on ant. segm. III: 25–26,  $0.90\text{--}0.93 \times \text{IIIbd}$ ; on abd. segm. III–IV: 30–32, on VIII: 38–43.

*Remarks.* The most conspicuous characters distinguishing the fundatrix are the scattered sclerotic pattern on the abdominal dorsum, the much shorter legs and distinctly shorter antennae.

The alate specimens from Norway are slightly smaller than the alatae described by Heie (1979) and the number of secondary rhinaria on their ant. segm. V is greater (2–6 vs. 0–2). In both apterae and alatae the length ratios antennal flagellum/body of the specimens from Norway are slightly smaller than presented by Heie, and the ratio  $urs./2sht$  is slightly greater.

*N. (K.) saxifragae* has been found on different species of *Saxifraga*. It differs from the other species of the subgenus living on *Saxifraga* and allied plant genera in having antennae with a shorter processus terminalis, shorter tarsi and a subtriangular ultimate rostral segment, and in the number of accessory hairs on the ultimate rostral segment, the number of secondary rhinaria and the length ratio siphunculi/cauda (Doncaster & Stroyan 1952, Stroyan 1957, 1964, Holman 1972, Heie 1979).

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