

ON SOME NEAR-EASTERN APHIDS

BY

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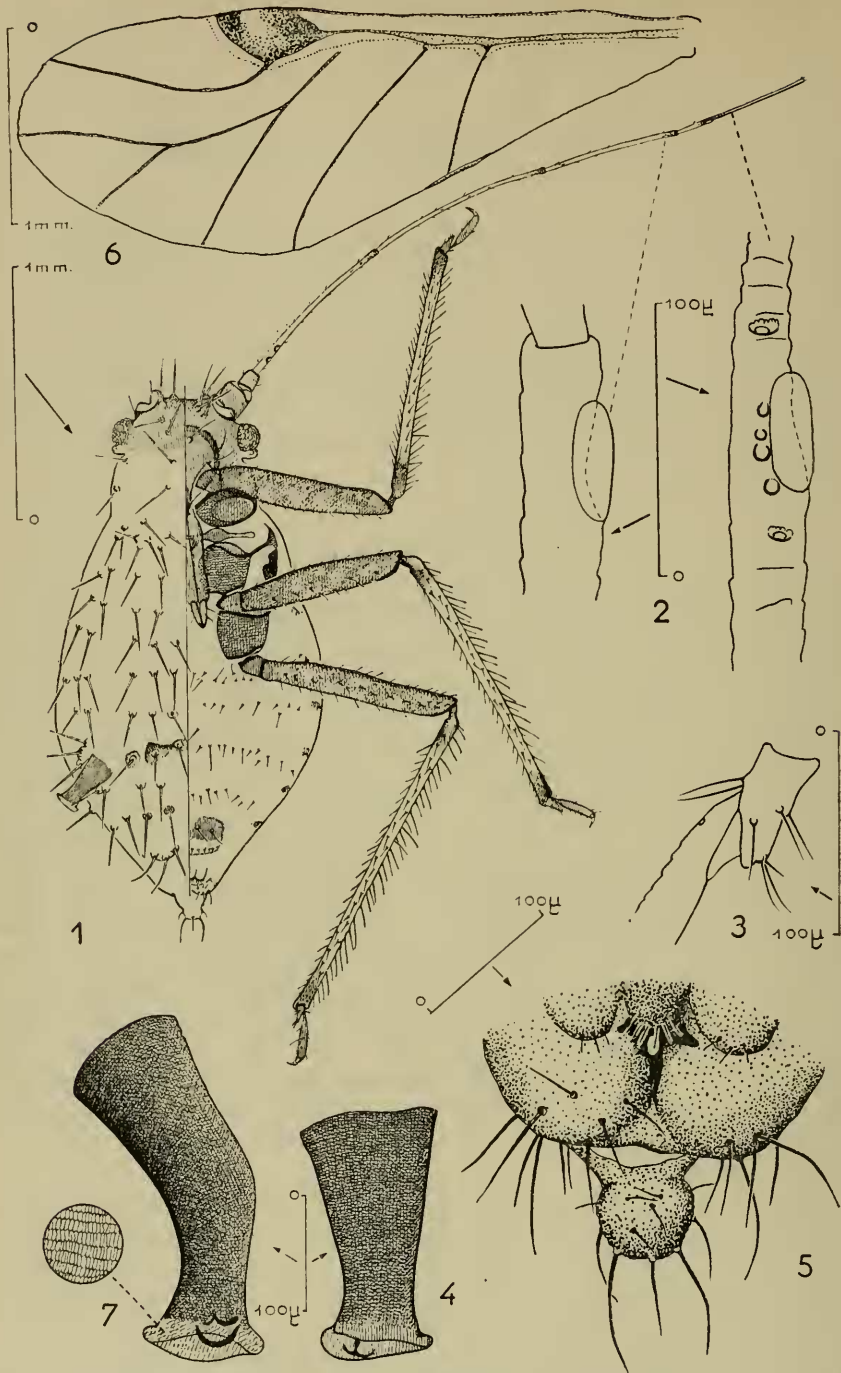
Teberan (Iran), Bennekom (Netherlands), and Paris (France), respectively

Professor F. S. BODENHEIMER in 1942 collected some aphids in Iraq which were submitted for identification to the second author. Two evidently new aphids in this material could not be described because the material was in a very poor condition, but the first and the third authors when in Iran succeeded in obtaining additional material.

1. *Drepanosiphoniella* gen. nov.

Type of the genus is *Drepanosiphoniella aceris* spec. nov. The genus is characterized as follows. Both apterous and alate viviparous females present. Antennae as in *Drepanaphis* del Guercio, with both in apterae and alatae rhinaria on IIIrd ant. segment, the accessory rhinaria scattered basad and distad of the elongate primary rhinarium of VIth segment (fig. 2), but the primary and secondary rhinaria without hairy fringe. Siphunculi, cauda, subanal plate and rudimentary gonapophyses exactly as in *Drepanaphis*, i.e., the siphunculi tapering, smooth, bent just past the middle and with a wide flange; the cauda knobbed; the subanal plate with faintly incised posterior margin but ventrally very deeply grooved and therefore bilobed, with a pigmented sclerotic part at the ventral end of the groove (fig. 5). Seemingly only one of the rudimentary gonapophyses present, which is fingertip-shaped and pigmented, but the lateral ones also present, broadly rounded and quite pale. Femora somewhat swollen but without a tooth ventrally near apex; tibiae with a pigmented zone near base, and with spinules near apex; first tarsal joints as in *Drepanaphis* with 7 ventral and probably always 2 dorsal hairs (fig. 3); empodial hairs band-shaped. Forewings with a pale area in the dark stigma and recurved Cu_2 (fig. 6), as in *Drepanaphis*. Dorsal tubercles very low conical, hardly conspicuous. First larval instar with pleural hairs to the VIth abd. tergite.

Discussion. In some respects this genus is intermediate between *Periphyllus* v. d. Hoeven and *Drepanaphis* del Guercio. Because the primary rhinaria have no hairy fringe, it would come in the Chaitophoridae and not in the Callaphididae in BÖRNER's classification of 1952. But unfortunately the absence or presence of a hairy fringe is not a very good character for any taxon beyond a genus. On the basis of the rudimentary gonapophyses a better classification is possible, because then the new genus, with *Drepanosiphum* Koch, *Drepanaphis* del Guercio and *Shenabweum* Hottes & Frison can be placed in a special group, the Drepanosiphina of VAN DER GOOT.



Figs. 1—7. *Drepanosiphoniella aceris* spec. nov. Figs. 1—5. Apterous viviparous female. 1. Body; left half dorsally, right half ventrally; 2. Primary and accessory rhinaria. 3. First tarsal joint. 4. Siphunculus. 5. Cauda, subanal plate and rudimental gonapophyses ventrally. Figs. 6—7. Alate viviparous female. 6. Forewing. 7. Siphunculus.

Drepanosiphoniella aceris spec. nov.

Apterous viviparous female (fig. 1).

Body about 2.25 mm long, membranous with brown sclerotic areas as shown in fig. 1, dorsally with long, thick, stiff, slightly blunt hairs arranged as in that figure; the large sockets of these hairs placed on very low, conical tubercles which particularly on Vth abd. tergite are distinct and somewhat brownish pigmented, with a pale centre. Front in the middle straight, with small frontal tubercles with the frontal hairs on low tubercles. Antennae with the basal segments as dark as the head, flagellum pale with dark apices to the segments, of 6 segments, slightly longer than body; IIIrd segment lightly imbricated, thin, with on a thicker almost smooth basal portion 1—5 rather large round, quite nude rhinaria in a row; IVth segment hardly or not shorter than IIIrd, a little longer than Vth; processus terminalis 2.1—2.7 times as long as base of VIth segment and not abruptly thinner than the base, about half as long as IIIrd segment; primary rhinaria (fig. 2) nude, elongated oval; accessory rhinaria with a very indistinct fringe, with 4—5 along one side of the primary rhinarium of VIth segment, but nearly always with 2 placed farther away both basad or apicad of that rhinarium. Hairs on IIIrd ant. segment up to about as long as basal diameter of that segment. Rostrum reaching to the hind coxae; last segment with tapering apex, about $\frac{3}{4}$ of second joint of hind tarsi, with besides the 3 subapical pairs of hairs two long lateral hairs on basal half and 2—4 shorter ones on ventral surface. Siphunculi dark, quite smooth, about $1\frac{1}{10}$ times as long as second joint of hind tarsi, in dorsal view very slightly constricted at base, with a very wide flange (slightly wider than fig. 4 shows). Cauda pale, with a nearly globular knob on which two long hairs, one just shorter median hair and about 6—10 considerably shorter, mostly ventral hairs are placed. Anal plate pale, with its posterior margin hardly incised, but pygidimorph on the underside, with a deep x-shaped groove, which at its ventral end is sclerotic, dark brown with a membranous perforation. Median gonapophysis projects obliquely downwards, far beyond the broadly rounded lateral gonapophyses, and they are placed far caudad the very large genital porus. Mesosternal furca shortly petiolate, its long branches with an abruptly enlarged part near their middle. Femora all similar, brown, very conspicuously mottled with darker brown; fore femora faintly incrassate; tibiae with dark brown bases, but within this dark area a paler part on the dorsal side, the rest quite pale except their black apices; near the apex of the tibiae, also above the dark socks, a small number of spinules between the hairs. First tarsal joints with 7 ventral hairs and 2 dorsal hairs. Empodial hairs band-shaped, slightly widening towards their rounded apices.

Colour in life: body grey to dark brown, dull with a faint powdery wax excretion. Colour details as mentioned before.

Alate viviparous female.

In most respects like the apterae, but head and thorax blackish brown, the abdominal tubercles more sclerotic and pigmented, with strongly pigmented marginal sclerites which very conspicuously increase in size caudad so that in front of each siphunculus a large, tuberculous plate is present. Subgenital plate also in the

middle somewhat brownish. Dorsal hairs much longer and finer than in apterae, up to 6 times basal diameter of IIIrd ant. segment, acute. IIIrd ant. segment with 3—9 rhinaria on basal half. Siphunculi much longer than in apterae, to nearly 3 times as long as second joint of hind tarsi, with more cylindrical basal $\frac{2}{3}$, abruptly narrower at about distal $\frac{2}{3}$ and there generally curved backwards, so that in mounts the flange is mostly directed downwards. Wings normal, with pale, not bordered veins; the short very wide, rounded stigma with two dark blotches; sector radii curved with straight distal half; media twice furcated; Cu_1 and Cu_2 both recurved.

This species was collected by Professor F. S. BODENHEIMER on 13.X.1942 near Shuartz in Iraq. He records *Acer microphyllum* as hostplant. On 20.VI.1955 REMAUDIÈRE and DAVATCHI collected the species on the undersides of the leaves of *Acer cinerascens* (identified by Dr. ESFANDIARI) near Deh-Bakri (2200 m, Djemal Barrez Mountains, province Kerman) in Iran.

Types. Cotypes (material from Iran) are in the collections of each of the authors, in the British Museum (Natural History), London, and in the U.S. National Museum, Washington (D.C.).

2. *Lachnus swirskii* subsp. *persicae* subsp. nov.

Material collected by Professor F. S. BODENHEIMER on 16.V.1943 near Dokuk, Iran, hostplant recorded as *Quercus persica*, and by REMAUDIÈRE and DAVATCHI on branches of *Quercus brandti persica* (identified by Dr. ESFANDIARI), 25 km east of Kazeroun (2250 m), Iran, agrees as to dorsal reticulation with *Lachnus swirskii* H. R. L., 1954. The apterous morphs are not comparable with those of *swirskii* because they are more or less alatiform, but the alatae differ from those of the main species in having the hairs on vertex about twice as long and nearly all acute.

Types. Cotypes (material from Iran) are in the collections of each of the authors, in the British Museum (Natural History), London, and in the U.S. National Museum, Washington (D.C.).