

Some short notes on *Phylloxerina salicis* (Licht.) from Turkey

S. Toros*

Summary

Family Phylloxeridae is presented in Turkey by only two species, *Viteus vitifolii* and *Phylloxera florentina*. During faunistic aphid research on *Salix alba* var. *vittalina pendula*'s branches, *Phylloxerina salicis* (Licht.) was found. Under the light of the available literature it is considered that this is the first record for Turkish aphid fauna.

Introduction

In Turkey, family Phylloxeridae is presented by only two species, *Viteus vitifolii* (Fitch.) and *Phylloxera florentina* Targioni-Tozzetti (Çanakçıoğlu, 1972). The sample collected from *Salix alba* var. *vittalina pendula* by Prof. Dr. Z. Düzgüneş from Farabi - Ankara (5.10.1981) was identified as *Phylloxerina salicis* (Licht.) which is considered as first record for Turkish Phylloxeridae additionally.

Systematics and morphological characters

Börner und Heinze (1957) classified the family Phylloxeridae under two subfamilies; Phylloxerininae and Phylloxerinae. Within these two subfamilies, genus *Phylloxerina* is placed in Phylloxerininae.

*University of Ankara, Faculty of Agriculture, Plant Protection Division, Ankara
Turkey.

Subfamily : Phylloxerininae.

According to Börner und Heinze (1957) their host plants are Salicaceae and Nyssaceae. Body has facet-shaped wax glands. Abdomen has 5-6 pair abdominal stigma. Alate is not known.

Genus : *Phylloxerina* Börner 1908

Lapsus pro *Phylloxera salicis* Licht. 1884, Type species
Pemphigus salicis Lichtenstein, 1884 (Eastop and Hille Ris-Lambers, 1976)

This genus has no alate forms. Virginoparae has filamentous wax glands. Host plant is Salicaceae.

Species : *Phylloxerina salicis* (Lichtenstein, 1884)

Syn : *Pemphigus (Phylloxera) salicis* Licht.

«Weidenzwerghlaus», «Phylloxera des saules», «Fillosserina del salice», «Sögüt filoxerası».

This species has no abdominal spiracles and there is no tubercles on the body (Eastop, 1966). As illustrated in fig. 1, the body has facet-shaped wax glands groubs and the rostrum is very long. Sexuales have short antennae and no wax glands (Bodenheimer and Swirski, 1957). They reproduce with egg.

P. salicis is in yellowish color. Virginoparae covered with white waxy filamentous secretion under which there are many whitish eggs.

Biology and host plant

In one year *P. salicis* has 4 or more successive parthenogenetic generations (Börner und Heinze, 1957). At the end of summer or beginning of autumn the sexuales appear. They produce the winter eggs. It hibernates in egg stage in Europe. The life history in the Middle East has yet not been investigated (Bodenheimer and Swirski, 1957). In Ankara it has been found out that it hibernates in egg stage.

P. salicis lives in the cravices of bark and especially two years old branches of many *Salix* species (Börner und Heinze, 1957). Shaposhnikov (1964) states that it lives in cracks in bark and on shoots of *Salix alba*, rarely *S. babylonica*.

Distribution

P. salicis is common in Europe and Asia (Silvestri, 1939), and generally distributed in Great Britain, Poland, Netherland, France, Germany, Italy, Manchuria, Israel, Lebanon (Bodenheimer and Swirski, 1957) and USSR (Shaposhnikov, 1964).

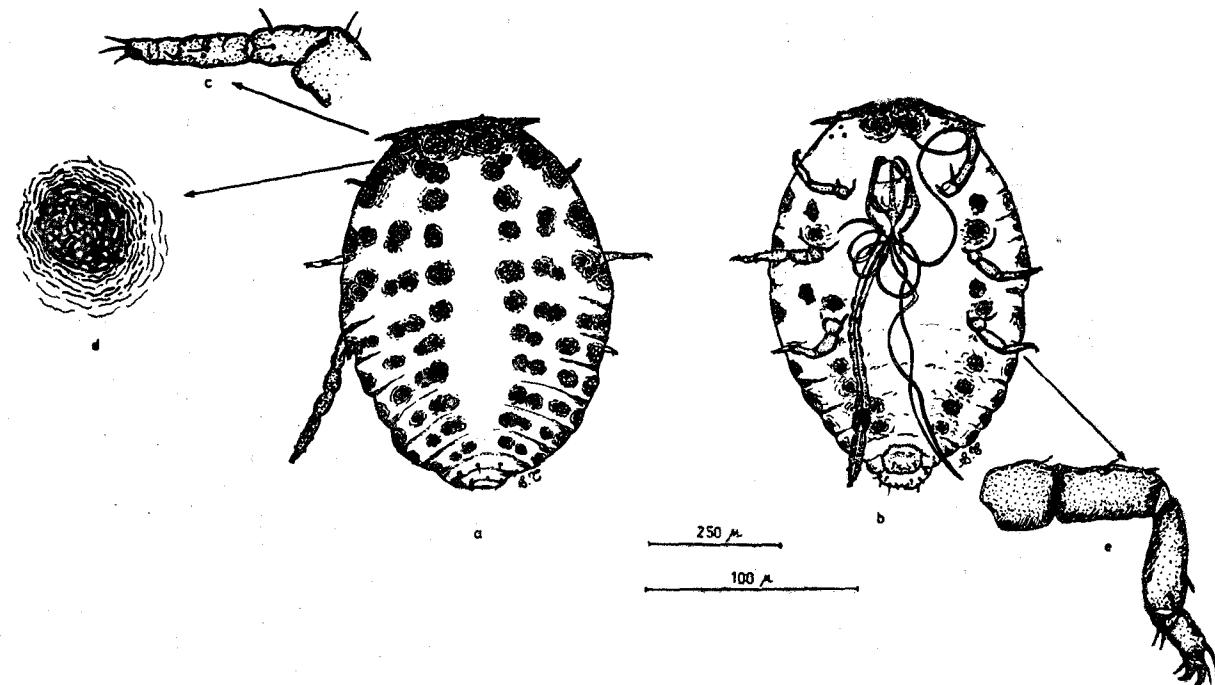


Fig. 1. *Phylloxerina salicis* (Licht.) aptera dorsal (a) and ventral (b) views and
enlargement of antenna (c), facet-shaped wax gland (d) and hind leg (e)

Acknowledgement

The autor presents her thanks to Prof. Dr. Zeliha Düzgüneş for giving the opportunity to prepare this paper.

Özet

Phylloxera salicis (Licht) üzerine bazı kısa notlar

Phylloxeridae familyası Türkiye'de iki tür ile temsil edilmektedir (*Viteus vitifolii* ve *Phylloxera florentina*). Afitlerle ilgili faunistik çalışmalar sırasında Prof. Dr. Z. Düzgüneş tarafından toplanan *Salix alba* var. *vittalina pendula* dalları üzerinden, elde mevcut literatürün ışığı altında Türkiye faunası için yeni olduğu kabul edilen *Phylloxera salicis* (Licht.) saptanmıştır. Hazırlanan bu yayında «Söğüt filoxerası» olarak isimlendirilen *P. salicis*'in tanınmasında yardımcı olabilecek morfolojik karakterler şekil yardımına ile açıklanmış, biyolojisi ve yayılışı literatür verilerine göre ele alınmıştır.

Literature

- Bodenheimer, F.S. and E. Swirski, 1957. The Aphidoidea of the Middle East. The Weizman Science Press of Israel, Jerusalem, 378 pp.
- Börner, C. und K. Heinze, 1957. Aphidina-Aphidoidea Blattläuse, Plant lice (Aphids) puserons (Aphides). In Sorauer, P. Handb. Pflkrankh. 5th Ed., 5 (4) : 1-402.
- Çanakçioğlu, H., 1972. The Aphidoidea of Turkey. İst. Üni. Orman Fak. Yayınları. İ.Ü. Yayın No: 1751, O.F. Yayın No: 189, 309 pp.
- Eastop, V.F., 1966. A taxonomic study of Australian Aphidoidea (Hom), Aust. J. Zool., 14: 399-592.
- Eastop, V.F. and D. HilleRisLambers, 1976. Survey of the world's Aphids. Dr. W. Junk B.V. publishers, The Hague, 573 pp.
- Shaposhnikov, G. Kh., 1964. Suborder Aphidinea - Plant lice (In «Keys to the insects of the European USSR» Vol: 1, Edi: Ya. Bei-Bienko et all.): 616-799.
- Silvestri, F., 1939. Compendio di Entomologia applicata. Vol: 1, Portici Tipografia Bellavista, 1939. XVIII, 972 pp.