

A MORPHOLOGICAL STUDY OF THE POPULATIONS OF UROLEUCON ON PICRIS
AND ANDRYALA (HOMOPTERA, APHIDOIDEA).

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ABSTRACT

Aphids identified as Uroleucon (U.) picridis (Fabricius) had ultimate rostral segments longer than 1.5 times the length of their hind tarsal segment II and were collected from the compositae genera Picris and Andryala.

Fourteen characters were measured on 84 apterous viviparous females, and an analysis showed that Uroleucon (U.) picridis living on these two composites can be separated morphologically into two groups consistent with the differences in the host plant. However, until further biological information is obtained, these two groups can not be given separate taxonomic status.

INTRODUCTION

Uroleucon (U.) picridis (Fabricius) is a species which has been found in practically all Europe, Central Asia, Japan, Turkey, and Israel. It can be separated from the rest of the species of Uroleucon by its very long ultimate rostral segment which is between 1.51 and 1.85 times longer than the length of the second segment of the hind tarsus (Hille Ris Lambers, 1939). At first it was thought to be monophagous on Picris hieracioides (Hille Ris Lambers, 1939). However, it has also been recorded on Picris pyrenaica in France

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(Remaudière, 1951), Picris echioides in Portugal and the Middle East (Ilharco, 1979; Eastop, 1985), Cichorium and Lactuca in Turkey (Tuatay and Remaudière, 1964) and Sonchus and Leontodon in Madeira (Ilharco, 1974).

The presence of one Uroleucon species on Andryala spp. in southeastern Europe was reported by Nieto (1974) and Mier (1978) in Spain, by Ilharco (1973) on the island of Porto Santo (Portugal), and by Starý *et al.* (1975) in Corsica (France). In all cases, it was identified as Uroleucon (U.) picridis.

However, when Nieto Nafria and Remaudière (personal communication) found sexual morphs, including winged males, on Andryala spp. in the province of Cuenca and when it was realized that Andryala has a tomentose stem while Picris has hispid hairs on its stem, we began to wonder if there were differences between the populations on Andryala and those on Picris. This study was started to find out if differed morphologically these two populations of Uroleucon.

MATERIAL AND METHODS

The aphids used in this study were 53 parthenogenetic apterae field collected as follows: 6 from Picris hieracioides, 10 from P. echioides, and 34 from Andryala spp. Additionally, two Uroleucon samples collected on Leontodon hispidus and one on Hispidella hispanica, in the Department's collection, were classified as U. picridis and were included in this study. Overall, 84 specimens were measured.

The samples were mainly collected in Spain (47 from 13 Spanish provinces) although 3 were from Algeria, 2 from France and one from Italy (Sardinia).

Each aphid was measured for fourteen variables, including those normally used in the separation of Uroleucon species.

