Geographical and ecological variability of mites of the cohort *Uropodina* (*Acari: Mesostigmata*) in Poland
1. Uropodine mites of oak-hornbeam forests (*Carpinion betuli*)

Summary
The history of research on uropodine mites in Poland begins with the first mention of Polish uropodines by FRENZEL (1926), followed by WILLMANN (1939, 1949) and SELLNICK (1945). Two periods of research on this group in Poland can be distinguished. The first period is characterised by very superficial knowledge. Until 1980 fewer than 25 species were known. Thereafter, interest in these mites has increased. Both the number of species in Poland and the number of publications have increased (Fig. 1). Also, the character of the publications has changed. After the early works, which were typica1ly faunistic only, more recent publications have included data on the biology, ecology and geographical distribution of particular species.

Introduction
The present work is the first contribution to the study of uropodid mites of Polish oak-hornbeam forests (*Carpinion betuli*). This group of mites is relatively well-known in Europe, but data concerning the biology and biogeography of Uropodina are scarce and fragmentary. This work presents new data on the biology, ecology and geographica1 distribution of39 species found from oak-hornbeam forests in Poland. Supplementary data from other European countries (Belgium, France, Germany, Czech Republic, Norway, Slovakia, Romania) have also been included.
Woodlands nowadays cover about 27% of Polish territory. Almost 81% ofthem are coniferous and only 19% are deciduous forests. The oak-hornbeam forests are spread alI over Poland, in both lowland and upland areas. The natural associations of *Carpinion betuli* (=*Querco-Carpinetum* s.1.) in Europe are very modified by human activity. The rapid reduction of these fertile ecosystems was one of the main reasons why the present work was undertaken.
Horn-beam forests are faunistically one of the richest in associations in the country .Soil mites occurring in this type of forests ecostystem are characterised by a great number of species (RAJSKI 1961; NIEDBAŁA 1976; BŁOSZYK 1980a,b, 1983,1992; MICHOCKA 1987; BŁOSZYK, MIKO 1990; B£ASZAK, MADEJ 1993; BŁOSZYK et al.1994). This study is a review of 20 years of investigations on this group of mites in oak-hornbeam forests conducted by the author.

General characteristic of uropodid mites
The cohort *Uropodina* is one of the best known mite groups in Poland. Wiśniewski's (1997) "Check1ist of Anima1s of Poland" includes 150 species. According to the author, there are 120 -130 species present in Poland, i.e. 38 % of all known species in Europe and about 6% of alI world species of *Uropodina* (Fig. 2).
The uropodid mites are widely distributed and occur in various kind ofhabitats. Some species are associated with unstable microhabitats (hollow tree trunks, rotten trunks, nests of mamma1s and birds, ant hills). Many species disperse by phoresy on other organisms. Despite this dispersal ability, distributions ofuropodid mites are often far more limited than for other groups of mites (e.g. Oribatida).