MACROPOSTHONIA ANNULATIFORMIS N. SP. (CRICONEMATIDAE)

BY

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Description of Macroposthonia annulatiformis n. sp., found in large numbers in moist meadow soil at Oegstgeest, the Netherlands. Females are characterized by having about 100 annules, spear length 54-65 µ, acute tail and open vulva with slight ornamentation on the anterior lip. Males have an acute tail bent sharply ventrad, and are relatively slender. Old, egg-laying females tend to be more slender than younger ones, which no doubt is connected with the peculiar annulation in this genus. The differences from M. annulata De Man, 1880, M. raskiensis (De Grisse, 1964) De Grisse & Loof, 1965, and M. reedi (Diab & Jenkins, 1966) nov. comb. are given.

During examination of soil samples from moist meadows around Leiden, The Netherlands, we found large numbers — males, females and juveniles — of a Macroposthonia species which we at first glance took to be M. annulata De Man, 1880 (syn. Criconemoides kirjanovae Andrassy, 1962), of which this is the type locality. On closer examination, however, we found this not to be the case: there were constant differences in females, juveniles and males. The males in particular were different from those of M. annulata as originally described and illustrated by De Man (1880, 1884). On account of its great similarity to M. annulata the new species is here described under the name of M. annulatiformis n. sp. Dimensions and drawings are from specimens fixed in F.A.A. and mounted in glycerin by the Seinhorst method.

MACROPOSTHONIA ANNULATIFORMIS N. SP.

Dimensions: cf. Table I.

Description:

Female (Fig. 1, A-I; Fig. 2, A, G):

Body relatively slender, cylindroid, tapering towards both extremities, especially towards posterior. Body generally curved when killed by gentle heat (Fig. 1, D). Body annules retrorse except the two anterior ones; with smooth posterior edges (sometimes the edges are irregular due to fixation). Anastomoses one or none. Lip region not offset; with four small, separate, but distinct, slightly projecting submedian lobes; distinct labial plates are present (Fig. 1, B). Amphids opening through slit-like pores at the sides of the labial disc (Fig. 1, AA' A”). Spear strongly developed, its length about 25 × width of shaft; basal knobs with
somewhat forward pointing outer angles; width of spear base 9-11 μ. Oesophagus typical for genus (Fig. 1, C). The excretory pore usually lies a short distance behind the oesophagus base.

In egg-laying specimens the ovary may be very long; in one specimen it was fully as long as the distance from head end to vulva, curved twice, its origin lying near the base of the oesophagus. There is a distinct, round or broadly oval spermtheca, 18-23 μ long and 10-17 μ wide, filled with sperm. Vulva a wide opening, directed sideways; anterior lip with two not very large, sometimes minute, projections. Tail conical, terminal annule very narrow, often lobed (Fig. 1, H-I); the postvulval part of the body is distinctly longer than the diameter at level of vulva and sometimes slightly bent ventrally. Dimensions of three intra-uterine eggs: 56-64 μ long and 21-23 μ wide.

Male (Fig. 1, J-P; Fig. 2, B, H):

Body often curved into a semicircle or sometimes even more when killed by gentle heat; tapering towards flatly rounded head end. Annulation coarse. Lateral field with four longitudinal lines (Fig. 1, M-N). Excretory pore apparently located between two annules. Hemizonid low triangular, covering nearly two