**HETERODERA LATIPONS N. SP., A CEREAL CYST NEMATODE FROM THE MEDITERRANEAN REGION**

**BY**

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*Heterodera latipons* n. sp., which was found on the roots of wheat and barley in Israel and Tripoli, can also infest oats and rye. The cysts resemble those of *H. turcomanica* Kirjanova & Shagalina, 1965, but lack the gland-like structures on the cyst wall and the eggs are larger, 112 × 48 µ, instead of 77 × 40 µ. Eggs and larvae are smaller than those of *H. avenae* and the fenestration of the cyst cone is different.

Stunted, chlorotic wheat plants with *Heterodera* cysts on the roots were sent in March 1960 by Dr. E. Pucci, Chief of the Phytopathology Section, Nazara of Agriculture, Tripoli, for identification of the nematodes. The material was examined by Mr. J. J. Hesling who observed morphological differences between the cysts and contained larvae and those of *H. avenae* Woll. 1924 (Hesling, 1965). He also observed that the cysts were dispersed fairly regularly along the wheat roots rather than several together in a “knot” of lateral roots as with *H. avenae* on oats. Minz (1956) recorded *H. avenae* on wheat in Israel in soil conditions thought to be too hot and dry for it. In 1960 Ing. Minz, Head of the Division of Nematology, Rehovot, kindly sent soil from the infested area (Gilat) which had been stored dry since 1956: in May 1961 it was planted with wheat, variety Capelle, in pots. Six cysts found on the wheat roots differed morphologically from *H. avenae* but resembled those from Tripoli.

In April 1962 barley roots and soil were received from Dr. Pucci, collected as was the first lot from Azzahrah, 40 km from Tripoli. The material contained two distinct types of cysts and larvae, one resembling those found in 1960, and the other was *H. avenae*. The finding of the two types living together on barley confirmed the opinion that a species distinct from *H. avenae* existed on cereals in the Mediterranean region. More material was then obtained from Israel (again by the kind co-operation of Ing. Minz) and cultures were set up. A study of the nematodes that developed made it clear that the species was an undescribed one. The following description is based on specimens from roots of wheat grown in soil infested with cysts from Gilat, Israel. Females, larvae and males were killed by gentle heat, fixed in T.A.F., transferred to warm lactophenol with 0.005% cotton blue and then by Baker’s method to glycerine for permanent mounts. Cyst cones were mounted in either euparal or Canada balsam.
Fig. 1. *Heterodera latipons* n. sp. Female. A. Mature females. B. Anterior end with excretory pore C. Face view. D. Head, dorso-ventral. E. Head and stylet, lateral. F. Cuticle of vulval region and anus in white cyst. G. Fenestralia and underbridge in brown cyst. H. Fenestralia and bullae in *H. avenae* brown cyst.