THE TAXONOMIC POSITION OF ANGUILLULINA OBTUSA GOODEY, 1932 AND 1940

BY

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T. Goodey (1932) described and figured a female nematode which he designated Anguillulina obtusa (Bastian, 1865), believing it identical with Bastian’s Tylenchus obtusus. He regarded it as close to A. pratensis (now Pratylenchus) in head and stylet characters, though resembling A. dubia (now Tylenchorhynchus) and A. robusta (now Rotylenchus) in being didelphic. Later he described and figured the male and amplified his description of the female (Goodey, 1940), eventually placing it doubtfully in the genus Pratylenchus (Goodey, 1951). Meanwhile Filipjev (1936) had transferred Bastian’s Tylenchus obtusus to the genus Rotylenchus. Filipjev & Schuurmans Stekhoven (1941) followed suit, reproducing Goodey’s 1932 figures, but a note of caution was added, presumably by Schuurmans Stekhoven, who thought that the oesophageal base, as figured by Goodey, suggested affinity with the genus Tylenchorhynchus rather than Rotylenchus. Thorne (1949) split the Tylenchidae into three subfamilies, placing Tylenchorhynchus in the Tylenchidae, Rotylenchus in the Hoplolaiminae, and Pratylenchus in the Pratylenchinae. At the same time he created the genus Radopholus, within the Pratylenchinae, to receive “those didelphic species which most closely resemble nema of the genus Pratylenchus”. J. B. Goodey & Franklin (1956) followed Filipjev & Schuurmans Stekhoven in considering the nematode described by T. Goodey as Rotylenchus obtusus.

Interest in the subject has been revived recently by the finding of nematodes obviously belonging to Goodey’s “A. obtusa”, in aqueous extracts from Rothamsted turf. The general proportions, and particularly the shape of the tail in both male and female, are as figured by Goodey. The head (Fig. 1) usually has 3-4 annules (2-3 striations). The arrangement of the oesophageal glands is essentially as shown by Goodey (1932); it appears to take the form of a “wrap-round” over-
lap, completely or almost completely enclosing the alimentary canal. An interesting variant frequently seen by the writer is shown in Fig. 2. Here a small bulbous structure appears to link the oesophagus and intestine. Occasionally the glands appear less united, forming more

or less distinct lobes. Otherwise the nematodes appear as described and figured by Goodey. When at rest or killed by gentle heat they usually assume a straight or slightly bent posture reminiscent of *Pratylenchus*, the male tail often curved dorsally as illustrated by Goodey (1940). None of the worms killed by the writer assumed the spiral or open “C” curvature usually associated with *Rotylenchus* and *Tylenchorhynchus* species.

The writer agrees with Sher & Allen (1953), that Bastian’s *Tylenchus obtusus* is insufficiently described and illustrated to determine its generic status. Similarly, the data are too meagre to synonymize this species and Goodey’s “*A. obtusa*”; consequently the latter requires a new specific name. On head and stylet characters, length and shape of tail in both sexes, and posture when killed by gentle heat, Goodey’s nematode is obviously close to *Pratylenchus*, although this genus contains only monodelphic species. It would appear logical, therefore, to place Goodey’s nematode in the genus *Radopholus* Thorne. In all known

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![Fig. 1-2. Pratylenchoides crenicauda n.sp.](image)

1. Anterior region, showing head shape and annulation.
2. Oesophageal region, showing arrangement of glands frequently encountered by writer.