

THE QUESTION OF PHYLOGENETIC RELATIONSHIP OF MEMBERS OF THE  
FAMILY LONGIDORIDAE (NEMATODA: DORYLAIMOIDEA)

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In: VIII Vsesoyuznoe soveshchanie no nematodnym boleznyam sel'skolchozyai-stvennykh kul'tur. Tezisy dokladov i soobshchenii. Kishinev, USSR; Izdatel'stvo "Shtiinsta" pp. 33-34 (1976).

At the present time the family Longidoridae consists of 3 genres of nematode: *Xiphinema* Cobb, 1913, *Longidorus* Micoletzky, 1922, and *Paralongidorus* Siddiqi, Hooper & Khan, 1963.

Dalmasso (1969) separated two subgroups in the family Longidoridae: Xiphineminae and Longidorinae based on morphological and anatomical differences between the genre *Xiphinema* on the one hand, and *Longidorus* and *Paralongidorus* on the other,

Apparently, and despite differences between species in the two groups, these are related genera, that have developed convergently, or, more likely, the genus *Longidorus* evolved from the older genus *Xiphinema*. The general characteristics showing the relationship between the genera *Xiphinema* and *Longidorus*, are as follows: peculiarities of bioecology and nutritional physiology, divergence of individual evolution, appearance in the deeper levels of the soil, virus-carrying capacity and formation of galls on plant roots.

The genus *Paralongidorus* is apparently a transitional stage between *Xiphinema* and *Longidorus*. Evidence of this can be found in morphological characteristics linking this genus both with both the xiphinemids and the longidorids. Of special interest in this link are the most pronounced transitional forms between *Xiphinema* and *Longidorus*.