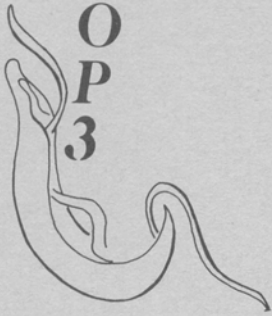


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DYNAMICS OF THE POPULATIONS OF DACTYLOGYRUS SPP. IN CHONDROSTOMA POLYLEPIS POLYLEPIS OF THE ESLA RIVER (NW SPAIN)

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209 noses (Chondrostoma polylepis polylepis), caught in various stretches of the Esla river (Duero basin) (710-748 m. high, river zones barbel and transition to bream), were examined. We found two Dactylogyrus spp.: D. ergensi (incidence 62,67 %; mean intensity 46,83, maximum 549) and Dactylogyrus sp. (43,07 %; 7,07, max. 67).

Both species exhibit seasonal cycles of infection, with two major periods of higher incidence and intensity (late spring-summer and late autumn) and intervening decreases, although there are rises and falls in the two periods. Gravid specimens of D. ergensi were found throughout the year (except October), but only from September to June in the case of Dactylogyrus sp., with the maximum in October. This situation differs from other authors' findings for Dactylogyrus spp. and perhaps may be due to peculiarities of our climate, specially the temperature changes.

There is a tendency for the infection levels to rise with host age and length, although Dactylogyrus sp. shows a decrease in the old groups.

Sex has no clear bearing in general, as only D. ergensi is more abundant in female fishes.

The preferred sites of infection are the 2nd and 3rd gill arches, the sectors II and III and the internal and medial parts of each hemibranch for D. ergensi, whereas Dactylogyrus sp. shows preference for the 2nd gill arch, the sector III and the external part of the hemibranch. There are no important differences between the arches of right and left sides.

Both species seem to be positively associated, as concurrent infections are significantly more frequent than single ones and the intensity is also significantly higher in the formers for both dactylogyrids. This positive association may be due in part to the simultaneous infection, and later favored by the isolation of ecological niches.

D. ergensi infections tend to decrease in the lower stretches of the river, whereas the situation is the contrary for Dactylogyrus sp.