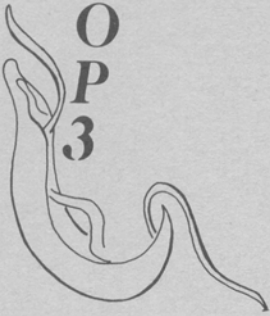


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**THE THIRD EUROPEAN
MULTICOLLOQUIUM
OF PARASITOLOGY**
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PROCEEDINGS

was Naylor's but not... TM. T. P. Naylor

POPULATION DYNAMICS OF CARYOPHYLLIDEAN CESTODES IN BARBUS
BARBUS BOCAGEI FROM RIVERS OF THE DUERO BASIN (NW SPAIN).

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446 barbels (Barbus barbus bocagei) caught in 9 stretches of 6 rivers of the Duero basin (León and Zamora) were examined. The following caryophyllideans were found: Archigetes sp. (incidence 2,01 %; mean intensity 6,22); Caryophyllaeus laticeps (14,79 %; 16,84); Caryophyllaeides fennica (0,89 %; 1,75) and Khawia sp. (44,39 %; 24,17).

C. laticeps and Khawia sp. exhibit seasonal cycles of incidence, intensity and maturation. C. laticeps shows an annual cycle and is present only from December to July. Recruitment takes place in winter-early summer and adult specimens are eliminated from June.

Khawia sp. has two generations a year, with two periods of infection, autumn-winter, more important, and late spring-early summer, and, consequently, two periods of egg-production.

Temperature seems to play an important role as controlling factor of seasonal fluctuations for both caryophyllideans, specially concerning the maturation rythm. Archigetes sp. and C. fennica are not present throughout the year and show levels of infection too light to deduce conclusions about seasonal dynamics or host age and sex influence.

C. laticeps and Khawia sp. infections increase significantly with host age and length. Both caryophyllideans are more prevalent and abundant in female fishes, so contradicting the current situation.

C. laticeps and Khawia sp. tend to be positively associated in their host, the barbel, probably due to ecological and etological causes, particularly to the simultaneous ingestion of intermediate hosts infected by both cestodes.

The four caryophyllidean are more frequent and abundant in the lower stretches of the rivers (corresponding to the preferred habitat of the barbel), specially the most specific of the host, Khawia sp.