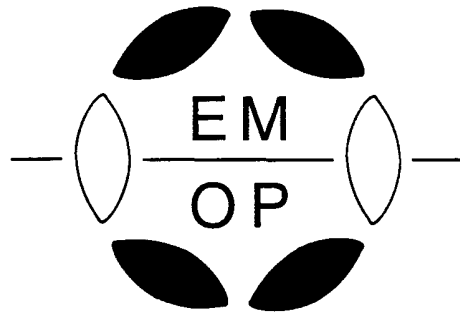


# PROGRAMME

European Federation  
of Parasitologists



Vlth  
EUROPEAN  
MULTICOLLOQUIUM  
OF  
PARASITOLOGY

Organized by the  
Netherlands Society for Parasitology

September 7 - 11, 1992  
Netherlands Congress Centre  
The Hague  
The Netherlands

PRELIMINARY STUDY ON DICROCOELIUM DENDRITICUM (TREMATODA) FIRST LARVAL STAGES IN EXPERIMENTALLY INFECTED CERNUELLA (XEROMAGNA) CESPITUM ARIGONIS (MOLLUSCA).\*

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In Spain the liver fluke Dicrocoelium dendriticum (Rudolphi, 1819) (Digenea) is the species responsible for dicroceliosis, a common parasitic disease in ruminants. The life cycle of this trematode is known to involve several species of land molluscs and ants, as 1st and 2nd intermediate hosts, respectively. The information concerning the development of the first larval stages of D. dendriticum in the molluscs is very scant.

Two batches of 150 and 50 numbered Cerनुella (Xeromagna) cespitum arigonis (Schmidt, 1853) (Helicidae) were experimentally infected with 50 and 150 eggs of D. dendriticum per mollusc, respectively. After four days without food, each snail spent 48 hours in contact with eggs recently obtained from the faeces of a ewe, experimentally infected with this trematode. Following infection, infected and control snails were maintained at 20°C, relative humidity 40% and fed on lettuce. To trace parasite localization and development, 3 molluscs per day were killed days 0, 1, 2, 5, 7 post-infection (p.i.) and then every 7 days until day 113 p.i. The animals were processed using routine histological methods and techniques.

In the zone in which the heart-kidney, the hepatopancreas and the intestine coincide, free rounded parasitic cellular accumulations were observed in periintestinal cavities, in a mollusc killed on day 1 p.i. In the spaces between hepatopancreatic lobules, small cellular accumulations with big nuclei, evident nucleolus and some cells in division were detected, in a snail 21 days p.i. Unwalled parasitic cellular accumulations (possible 1st sporocysts), consisting of two types of cells and extracellular matrix, filling the spaces between several hepatopancreatic lobules were observed in the molluscs 42 days p.i. From then until day 113 p.i. parasite development to 2nd walled sporocysts was followed, at the same time as infection in the molluscs spread to other parts of the hepatopancreas.

\* This study was supported by the "Junta de Castilla y León" (Project number 0701/89).

## P102

CRYPTOSPORIDIUM AMONG CHILDREN WITH ACUTE DIARRHOEA

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A parasite Cryptosporidium is a well known cause of diarrhoea in animals. As it is known it may also cause a self-limiting diarrhoea in immunocompetent humans and even fatal diarrhoea in immunocompromised patients.

The aim of this study was to estimate this infection in a group of pediatric patients of both sexes aged 6 months to 10 years. Smears of stool samples were stained with safranin-methylene-blue. Feces were examined also for enteropathogenic bacteria and viruses. The research was performed in winter 1991/92.

Cryptosporidium oocysts were detected in 15 (8 %) out of 186 pediatric diarrhoea cases. The parasite was detected as a sole pathogen in 5 (2.6 %) cases and in combination with other enteropathogens in 10 (5.3 %) cases. The occurrence of the parasite was higher in patients aged 6 to 24 months. No sex specific incidence was determined. These results indicate that the Cryptosporidium is a common parasite causing diarrhoea in the pediatric age group of Slovenia and suggest the need for routine examination of all diarrhoea cases.