

SHORT COMMUNICATION

PARAQUADRIACANTHUS NASALIS GEN. ET SP. N. (MONOGENEA: ANCYROCEPHALIDAE) FROM CLARIAS LAZERA CUVIER ET VALENCIENNES

R. ERGENS

Institute of Parasitology, Czechoslovak Academy of Sciences, České Budějovice

Abstract. *Paraquadriacanthus nasalis* gen. et sp. n. (Monogenea: Ancyrocephalidae) is described from the nasal cavities of the freshwater fish, *Clarias lazera* Cuvier et Valenciennes (Clariidae) from the River Nile near Cairo, Egypt.

Parasitological examination of *Clarias lazera* Cuvier et Valenciennes from the River Nile near Cairo, Egypt during the summer of 1971 revealed the presence of previously undescribed ancylo-discoidins. Examination of these parasites showed that their morphology of the hard parts of haptor justifies their identification as a new genus and species, for which the name *Paraquadriacanthus nasalis* gen. et sp. n. is proposed.

MATERIALS AND METHODS

Two specimens of this parasite were obtained from the nasal cavities of 2 out of 7 *Clarias lazera* examined. Hosts preparations and methods concerning collection, fixation, mounting and measurement of the parasites were employed as given by Ergens and Lom (1970) and Gussev (1985). Observations were made with a phase-contrast microscope and figures were drawn with the aid of a camera lucida. Measurements are in millimetres.

***Paraquadriacanthus* gen. n.**

Diagnosis: Ancyrocephalidae, Ancylo-discoidinae. Haptor armed with seven pairs of marginal hooks, dorsal and ventral pairs of anchors with patches, two bars (dorsal and ventral) and an unpaired weakly sclerotized anterior shield (onchium). Marginal hooks of larval type and of equal size. Dorsal anchors robust, each with a well developed inner and outer root and with a very long patch. Ventral anchors delicate, with not differentiated bases into outer and inner roots and with relatively small but well visible patches. Dorsal bar with posteriorly directed projection in the shape of a massive arrow. Ventral bar broadly V-shaped. Copulatory organ consists of a basal part, tube and accessory piece. Vagina sclerotized.

Type species: *Paraquadriacanthus nasalis* sp. n.

Remarks: *Paraquadriacanthus* gen. n. most closely resembles in the type of haptor armament the genera *Quadriacanthus* Paperna, 1961 and *Bychowskyella* Akhmerov, 1952, but it markedly differs from them in the shape of dorsal anchors, which are characterized by distinctly developed two roots, and shape and non-differentiated size of marginal hooks. Besides, *Paraquadriacanthus* gen. n. differs from *Quadriacanthus* in the presence of onchium and much larger patches of dorsal anchors, and from *Bychowskyella* in the presence of patches of ventral anchors. The generic name is derived from the name of the genus *Quadriacanthus*, which the new genus most closely resembles.

***Paraquadracanthus nasalis* sp. n.**

(Figs. 1, 2)

Host: *Clarias lazera* Cuvier et Valenciennes.

Location: nasal cavities.

Locality: Nile River near Cairo, Egypt.

The holotype is represented by a specimen collected on the host captured on June 3th, 1971. The measurements of its hard parts of haptor, copulatory organ and vaginal sclerite are given in parentheses. Type specimens (holotype and paratype) are deposited in the collections of the Institute of Parasitology, Czechoslovak Academy of Sciences, České Budějovice (No. coll. M-317).

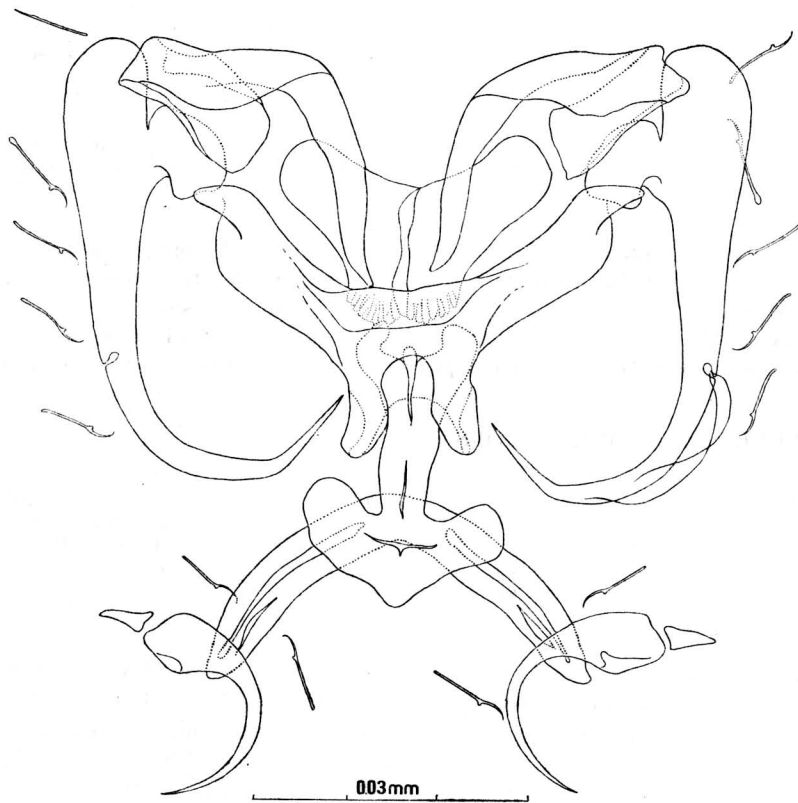


Fig. 1. Hard parts of haptor of *Paraquadracanthus nasalis* gen. et sp. n.

Description: Small worms, body length up to 0.7, width up to 0.15. Dorsal anchors with inner length 0.066—0.073 (0.073), outer length 0.082—0.090 (0.090); length of their shaft 0.065—0.070 (0.070), point 0.015, inner root 0.012—0.016 (0.016), outer root 0.017—0.020 (0.020). Markedly large patches of these anchors are bent approximately in the first third and their total length is 0.079—0.110 (0.110). Ventral anchors without roots; total length 0.031—0.032 (0.032), length of point 0.012—0.013 (0.013), patches 0.008—0.009 (0.009) long. Dorsal bar 0.052—0.059 (0.059) long (including projection), 0.074—0.085 (0.085) wide. Measurements of ventral bar 0.007—0.010 × 0.073—0.076 (0.010 × 0.073). Onchium 0.026 × 0.051. Length of marginal hooks 0.014—0.016. Total length of copulatory organ 0.033—0.036 (0.036), vaginal sclerite 0.028 long.

Remarks: The parasites were fixed by a method which enables a detailed study of their hard parts of haptor, copulatory organ and vaginal sclerite, but does not enable to observe the structure of the internal organ system. It is therefore necessary to fix other newly found specimens of *P. nasalis* sp. n. in a manner enabling to obtain the necessary information about their internal structures. The specific name was derived from the location of the parasite.

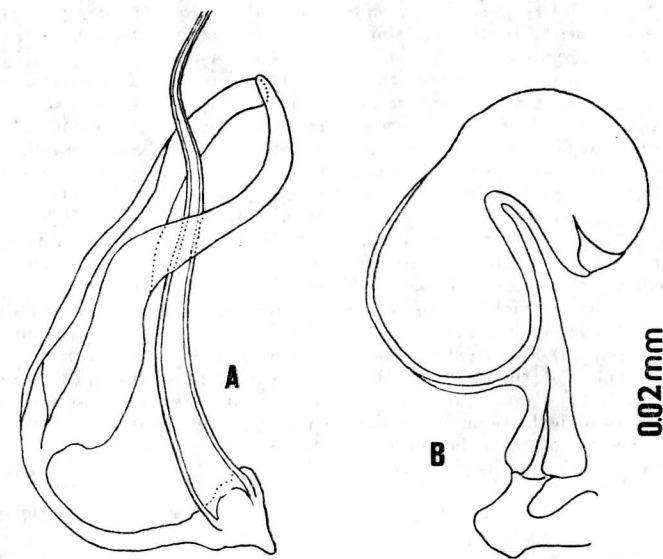


Fig. 2. Copulatory organ and vaginal sclerite of *Paraquadracanthus nasalis* gen. et sp. n.

PARAQUADRACANTHUS NASALIS GEN. ET SP. N. (MONOGENEA: ANCYROCEPHALIDAE) OT *CLARIAS LAZERA* CUVIER ET VALENCIENNES

Р. Эргенс

Резюме. Описан новый род и новый вид *Paraquadracanthus nasalis* gen. et sp. n. (Monogenea: Ancyrocephalidae) из носовых полостей пресноводной рыбы *Clarias lazera* Cuvier et Valenciennes из реки Нил около Каира (Египет).

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R. E., Parazitologický ústav ČSAV, Branišovská 31, 370 05 České Budějovice, ČSSR

G. Stanek, H. Flamm, A. G. Barbour, W. Burgdorfer (Eds.): Lyme borreliosis.
Gustav Fischer Verlag, Stuttgart—New York 1987, 501 pp., 148 Figs., 137 Tables.
 Price 178 DM.

The Lyme borreliosis — a recently emerged disease — attracts for several years the attention and interest of many specialists. In the meantime many new data concerning this nosological unit were accumulated. They are presented in this book containing the contributions to the Second International Symposium on Lyme Disease and Related Disorders which took place at the Hygiene Institute of the University of Vienna in September 1985. The text is divided into 11 parts. Part 1 (3 papers) is devoted to the history of the disease and its agent's discovery. Part 2 (11 papers) brings results of animal experiments and ecology of the borrelia in nature. Part 3 (6 papers) deals with the biology, immunology and genetics of the agent. Part 4 (10 papers) and part 5 (2 papers) concern the pathology and clinical features of the disease. The following three parts (6, 4 and 13 papers) discuss various dermatological, rheumatological and neurological aspects of this borreliosis. Part 9 (6 papers) is devoted to its treatment,

part 10 (7 papers) deals with various methods of serodiagnosis. The last part (13 papers) treats the geographical distribution and epidemiology of the disease.

It is not possible in this short review to mention the very interesting results achieved by the teams of scientists from different countries. They contributed substantially to the deepening of our knowledge concerning various aspects of this tick-borne borreliosis. It is now clear that it occurs much more frequently, its distribution is much larger and its clinical picture is more variable than it was earlier expected.

The book is very carefully edited, with excellent tabular, graphical and pictorial documentation. It reveals an exhausting survey of the main problems and will serve for scientists as an indispensable source of information on the present state and perspectives of Lyme disease investigations.

Dr. V. Černý, C.Sc.