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UPDATE ON *FIMBRIARIA TERESAE* (CESTODA, HYMENOLEPIDIDAE)

B. Grytner-Zięcina¹, R. V. Salamatin^{1, 2},
D. Cielecka¹, V. V. Korniyushin²

¹ Department of General Biology and Parasitology, Medical University of Warsaw, Chalubieckiego Str. 5,
02–004 Warszawa, Poland; E-mail: ruslan@ib.amwaw.edu.pl

² I. I. Schmalhausen Institute of Zoology, National Academy of Sciences of Ukraine, Vul. B. Khmelnits'kogo,
15, Kyiv, 01601 Ukraine; E-mail: ruslan@izan.kiev.ua

Update on *Fimbriaria teresae* (Cestoda, Hymenolepididae). Grytner-Zięcina B., Salamatin R. V., Cielecka D., Korniyushin V. V. – The eggs of *Fimbriaria teresae* Grytner-Zięcina et Cielecka, 1995 are released from the uterus in chains of 5–8 in each chain. Description of this species was complemented with the structure of the tapeworm's eggs which was unknown up to now. The mallard, *Anas platyrhynchos* was added to the list of its final hosts. Authors pointed out at the necessity of a detailed analysis of morphological features while diagnosing this species. Similarity of the egg morphology and their arrangement in the egg chains as well as the common host could conduct to the erroneous diagnosis of this species and its consideration as a *Fimbraria fasciolaris*.

Доповнення до опису *Fimbriaria teresae* (Cestoda, Hymenolepididae). Гритнер-Зєнціна Б., Салама-тін Р. В., Цєлєцка Д., Корніюшин В. В. – Яйця *Fimbriaria teresae* Гритнер-Зєнціна et Cielecka, 1995 вивільнюються з матки, з'єднані в ланцюжки по 5–8 яєць в кожному. Вперше наводиться опис яєць. До переліку дефінітивних хазяїв додано *Anas platyrhynchos*. Відзначена потреба детального вивчення морфологічних ознак цього виду. Подібність будови яєць і способу їх з'єднання в ланцюги, а також спільність дефінітивного хазяїна уможливають помилкове визначення виду як *Fimbraria fasciolaris*.

Introduction

The species *Fimbriaria teresae* was described on the basis of the single specimen (without eggs) and three young specimens without strobilas, kindly provided for our studies by professor Teresa Sulgostowska from her own collection in a form of fixed microscopic preparations. All three tapeworms came from a naturally infected shoveler, *Anas chryseata* killed in Western Poland, in the vicinity of S^onsk. Differential diagnosis with earlier described species of *Fimbraria* genus was based on a small number of genital primordia (7–10 per segment) and much larger cirrus and cirrus sac than in others fimbriarias (Grytner-Zięcina, Cielecka, 1995; Grytner-Zięcina et al., 1998). However, these young specimens contained no eggs which are important diagnostics features of tapeworms, easily to recognized in fresh specimens.

Materials

The examined material, obtained from the jejunum of *Anas platyrhynchos* killed in September 2003 in the vicinity of P^onsk, consisted of 5 mature strobilas with scolices.

Results and discussion

All 5 examined specimens were diagnosed as *Fimbraria teresae*. The diagnosis was based on the important morphological features of the species, including the number of genital primordia in the anterior part of strobila (7–10), the number of hooks at the base of cirrus, the size of cirrus sac, and copulatory part of vagina (fig. 1, a–c). The presence of the mature proglottids in the analysed material enabled us a precise description of the eggs. It is known that the structure of the oncospherical envelopes, especially the shape and the size of the outer envelope, as well as the way of releasing oncospheres from the strobila, represent the essential, primary features for distinguishing dif-

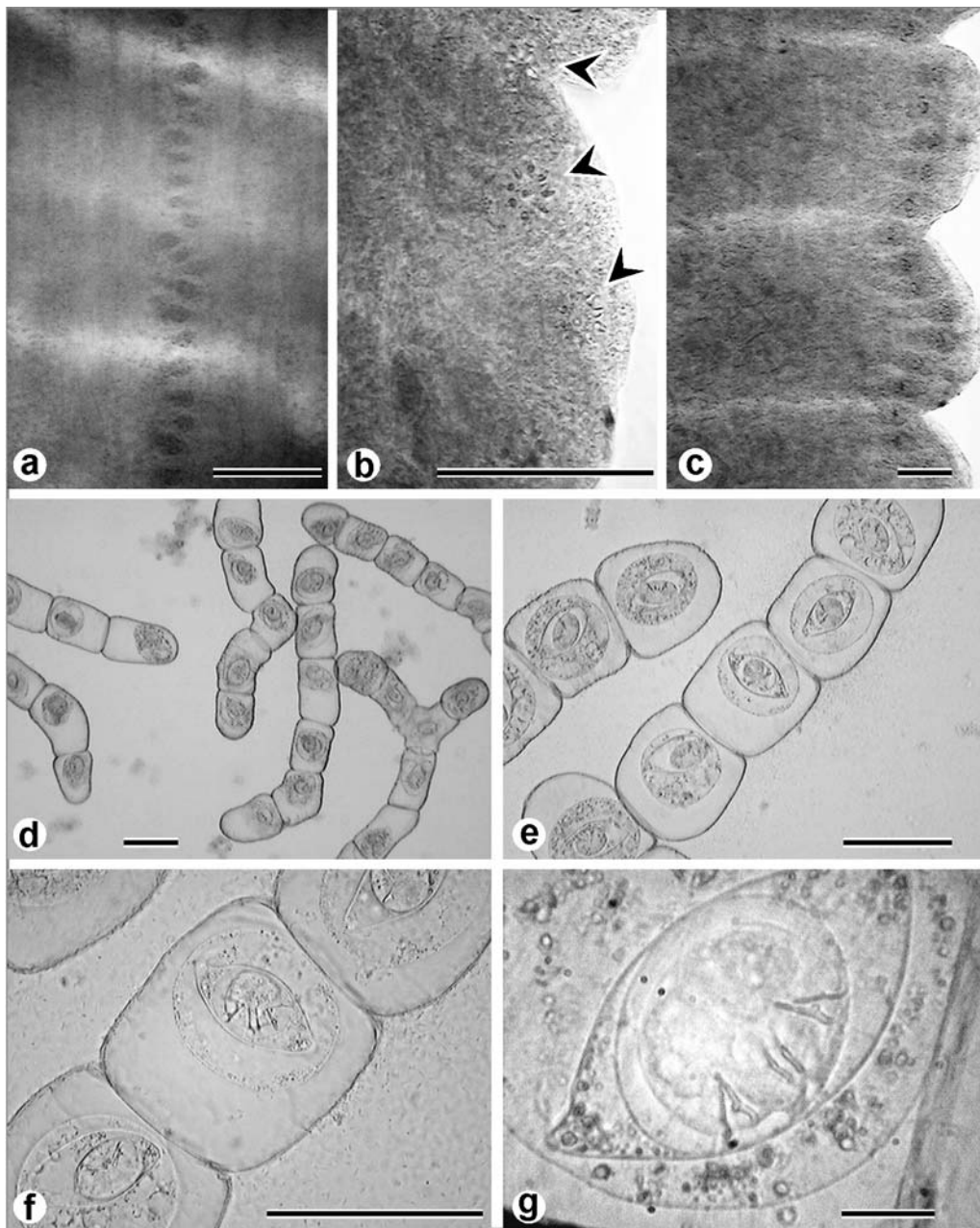


Fig. 1. *Fimbraria teresae*: a – genital primordia; b – spines at the cirrus basis (arrows); c – cirrus sacs; d–g – eggs. Scale bar 100 mkm (a–f) and 20 mkm (g).

ferent *Fimbraria* species. These features can only be observed in the fresh specimens. It was confirmed that in *F. teresae* the eggs are released from uterus in chains of 5 to 8 in each chain. The eggs are oval, and measure 33–38 × 20–25 mkm, oncospherical hooks measure 10–11 mkm. The inner oncospherical envelope has two polar, finger-like bent processes with two filaments (fig. 1, d–g). These processes are smaller than in *F. fasciolaris* (Chomicz et al., 1995). The outer envelope when swelling in water, reaches the size 85–120 × 60–85 mkm. The different structures of oncospherical envelopes are considered as morphological adaptations, facilitating contact between cestode larvae and the appropriate intermediate hosts (Jarecka, 1961). The tapeworm species, the

eggs of which can expand and float in water, generally use Copepoda as their intermediate hosts. It is quite possible that some copepod species represent also the intermediate host for *F. teresae* (Wilanowicz, 1987).

A great similarity between the morphology of eggs in *F. fasciolarsis* and *F. teresae*, as well as their presence in the same common final host *Anas platyrhynchos*, show that the detailed analysis of the morphological features in differential diagnosis of various tapeworm species is necessary. It is quite probable that there is in the literature a lot of misdiagnosed specimens of *Fimbraria*, which still require verification, in particular when the knowledge on this group will be more complete.

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