

NEW MEMBER IN THE FISH FAUNA OF THE RIVER TISZA: THE BALON STICKLEBACK (*Gymnocephalus baloni* HOLČIK ET HENSEL 1974)

Á. HARKA

“Lajos Kossuth” Secondary School, Tiszafüred
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Abstract

This short publication reports on the newer place of occurrence of the Balon stickleback (*Gymnocephalus baloni*), the latest species of the *Gymnocephalus* (= *Acerina*) genus described by HOLČIK and HENSEL (1974). The new species — demonstrated by the describers from the area of Czechoslovakia and Roumania — was first found in Hungary in the Danube (BOTTA, KERESZTESSY, PINTÉR — manuscript), and shortly later it also appeared in the river Tisza (Tiszafüred, October 17, 1981).

A review is given of the external species features on the basis of which the sample from the river Tisza was identified, and on the basis of which, respectively, the new species can be distinguished from its nearest relative, the ruff (*Acerina cernua*) (Fig. 1).

The experiences gained so far show that the Balon stickleback — contrary to the ruff — is a rheophyl species having solitary habitude, developing by way of ecological isolation.

Owing to the small size and rareness, the new fish species in the river Tisza has no economical significance.

The Balon stickleback (*Gymnocephalus* (= *Acerina*) *baloni*) was described by HOLČIK and HENSEL from the Czechoslovakian reach of the Danube (HOLČIK and HENSEL 1974). Authors mention that the figure of the species had occurred also earlier in the special literature, thus for example, in the works of ANTIPA (1909), BERG (1949) and BĂNĂRESCU (1964) the picture of this species can be seen as the ruff (*Acerina cernua*). The describers of the new species have also demonstrated it from the Roumanian reach of the Danube — examining the earlier collections of museum material. Since the Hungarian reach of the Danube lies between the Czechoslovakian and Roumanian reaches, it was expectable that the species manifests itself in Hungary, too (PINTÉR 1978).

The first Hungarian samples were collected by BOTTA, KERESZTESSY and NEMÉNYI on October 14, 1981 from the Danube at the border of the village Gerjen, and in the following year, they were also successful in finding the species in other sections of the river. The collected individuals were taken to the aquarium of the zoo in Budapest for further studying, and this is where author had the opportunity to observe them in the August of 1982. On this occasion, author had notified István Botta, the director of the aquarium, that the new species is also present in the river Tisza, as he had caught one from the Tisza at Tiszafüred on October 17, 1981. This was then thought by author to be a variant of the ruff, nevertheless, the prepared colour slides of it also made possible the exact determination.

On the basis of the new species' original description obtained in the meantime,

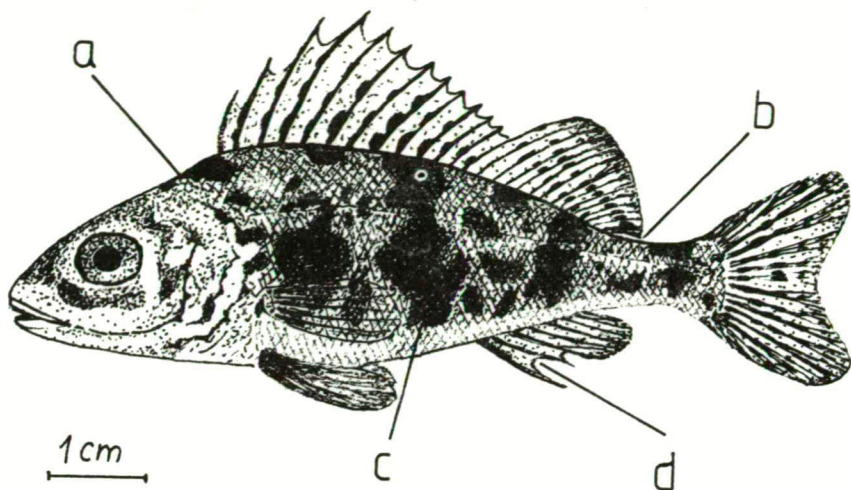


Fig. 1. Sample of the Balon stickleback (*Gymnocephalus baloni* HOLČIK et HENSEL 1974) originating from the river Tisza. External characteristics: the contour of the spine is more highly arched (a), the contour of the posterior dorsal fin's arch almost perpendicularly intersects the contour of the tail (b), the spine and flank shaft are speckled by large, dark brown spots (c), the fin membrane of the anal fin is deeply intersected (d).

it became unambiguously proved that the sample caught from the Tisza — thought earlier by author to be a variant — is identical with the fish species described by HOLČIK and HENSEL under the name of *Gymnocephalus baloni*; therefore the new fish species is a member of the Tisza's fauna. This is further strengthened by the fact that meanwhile, it has also turned up from one of the regions of the Tisza — the Laskó brook flowing into the Tisza at the village Sarud — (October 18, 1982) (BOTTA, KERESZTESSY, PINTÉR — manuscript).

The describers have found characteristic osteological differences between the two closely related stickleback species, however, their differentiation is also possible on the basis of the external morphological features.

The Balon stickleback's spine is slightly more arched than that of the ruff, thus in this regard of its stature it is more similar to the perch (*Perca fluviatilis*). On its spine and flank — contrary to the sporadic, small spots of the ruff — larger, dark brown, irregular shaped spots are detectable. These may even blend into transverse stripes, nevertheless, the striation in such case is not as definite as for example in the case of the perch. There are also differences observable in the shape of the fins regarding the two stickleback species. While in the case of ruff the contour of the dorsal fin's arch, supported by the soft fin-rays, reaches the tail by a sharp angle; in the shaft case of the Balon stickleback this angle is close to 90° — in the latter, the fin membrane stretching between the firm rays of the anal fin is also deeply intersected (Fig. 1).

According to describers, the Balon stickleback and the ruff developed as the result of ecological specialization, and their differing environmental demands are also supported by the new species' places of occurrence observed in Hungary so far. The ruff favours backwaters, channels and the slow river reaches, while the Balon stickleback more likely lives in waters of stronger current; thus being more similar in this regard to the *Acerina schraetzer*.

In connection with its ethology, the aquarium observations show that it is a solitary species. Contrary to the ruff — it does not gather into schools, and — also in contrast to the ruff being active in the daytime, too — it only leaves its hiding place at sunset (BOTTA, KERESZTESSY, PINTÉR — manuscript).

Due to the smallness and rarity of the fish fauna's new member in the river Tisza, it has no economical significance.

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A Tisza folyó halfaunájának új tagja: Balon durbincs (*Gymnocephalus baloni* Holčík et Hensel 1974)

HARKA Á.

Kossuth Lajos Gimnázium, Tiszafüred

Kivonat

A rövid közlemény a *Gymnocephalus* (= *Acerina*) genus HOLČIK és HENSEL (1974) által leírt legújabb fajának, a Balon durbincsnak (*Gymnocephalus baloni*) újabb lelőhelyéről számol be. Az új fajt, amelyet leírónak Csehszlovákia és Románia területéről sikerült kimutatniuk, Magyarországon először a Dunában találták meg (Botta, Keresztessy, Pintér — kézirat), s röviddel ezután a Tiszából is előkerült (Tiszafüred, 1981. október 17.).

A dolgozat bemutatja azokat a külső faji bélyegeket, amelyek alapján a tiszai példány azonosítása történt, illetve amelyek alapján a vágó durbincstől (*Acerina cernua*) megkülönböztethető. A Balon durbincs — ellentétben a vágó durbinccsal — soliter életmódot folytató reofil faj, amely ökológiai izolációval alakult ki.

A Tisza új halfajának kis mérete és ritkasága következtében gazdasági jelentősége nincs.

Новый член рыбной фауны реки Тисы: ёрш Balon (*Gymnocephalus baloni* Holčíka et Hensel 1974)

А. Харка

Гимназия им. Лайоша Кошута, Тисафюред

Резюме

Краткое сообщение даёт отчёт о новом местонахождении ерша Balon — новейшего вида *Gymnocephalus* (= *Acerina*) genus, описанного в 1974 г. Холциком и Хеншелем. Этот новый вид, найденный ими на территории Чехословакии и Румынии, в Венгрии впервые удалось обнаружить в Дунае (Ботта, Керестешы, Пинтер — рукопись), а вскоре и в Тисе (Тисафюред, 17-го октября 1981 г.).

Работа описывает те внешние признаки вида, на основании которых провели опознание

найденного в Тисе вида, то есть на основе которых его можно отличить от режущего ерша — (*Acerina cernua*).

Ерш *Balon*, в отличие от режущего ерша, — реофильный вид, ведущий солитёрный образ жизни, появившийся в ходе экологической изоляции.

Новый вид рыбы Тисы вследствие мелкого размера и редкого появления не имеет экономического значения.

Novi član ihtiofaune reke Tise: *Gymnocephalus baloni* Holčík et Hensel, 1974.

HARKA Á.

Gimnazija „Kossuth Lajos”, Tiszafüred

Abstrakt

U ovom kratkom saopštenju daje se prikaz novog nalaza *Gymnocephalus baloni* HOLČIK et HENSEL. 1974, najnovije vrste roda *Gymnocephalus* (= *Acerina*). Autori su novu vrstu opisali iz Cehoslovačke i Rumunije. U Madjarskoj su prvi put registrovali u Dunavu (BOTTA, KERESZTESSY, PINTÉR — rukopis), a nedugo zatim javlja se i nalaz u Tisi (Tiszafüred, 17. okt. 1981).

U radu su prikazani oni karakteri po kojima je primerak iz Tise identifikovan, odnosno po kojima se ova vrsta razlikuje od *Acerina cernua*.

Gymnocephalus baloni nasuprot *Acerina cernua* je solitarno reofilna vrsta i nastala je ekološkom izolacijom.

Ova nova vrsta u ihtiofauni reke Tise nema privrednog značaja, kako zbog malih dimenzija, tako i kao retka vrsta.