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Research Article

THE NEW LOCALITY OF *Salmo* cf. *coruhensis* Turan, Kottelat & Engin, 2010, FROM YALOVA PROVINCE

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ABSTRACT. Trout fish species, *Salmo cf. coruhensis*, was recorded for the first time from Yalova Province. The samples were captured from the Sarıkayaboğazı stream, which is within the boundaries of the Yalova province district, 250 meters above sea level. *Babka gymnotrachelus* (Kessler, 1857) was caught in the same stream with *Salmo cf. coruhensis*. This study will provide an important contribution to the determination of the distribution of the Salmo genus in Turkey.

Keywords: *Salmo, Yalova, Marmara basin, Biodiversity*

INTRODUCTION

Trout has a wide distribution area and diversity in Europe and Turkey [1]. In Turkey, *Salmo platycephalus* BEHNKE, 1968, *Salmo trutta abanticus* TORTONESE, 1954, *Salmo trutta caspius* KESSLER, 1877, *Salmo trutta labrax* PALLAS, 1811 and *Salmo trutta macrostigma* (DUMERIL, 1858) was known to be in the range of species [2]. However, with the molecular and morphological studies conducted in recent years, this number has increased by reporting new species [3, 5]. As a result of the studies carried out in recent years, 14 species have been reported [6, 7].

Trouts are generally known to show the distribution in high mountain streams [3]. The presence of trout in Uludağ and Domaniç in the Susurluk basin and Kırklareli in the Marmara basin have reported [8]. However, as a result of the literature review, no record related to the city of Yalova was found. This study will provide important contributions to the field of determining the distribution of trout species ranging in Turkey.

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MATERIALS AND METHODS

The sampling study was carried out in Yalova province in 2019 (Fig. 1). Fish were caught by pulsed DC electro-fishing equipment and killed by over anaesthetization, fixed in 10% formaldehyde and stored in 4% formaldehyde. Measurements were made with a dial caliper and recorded to 0.1 mm. All measurements were made point to point, following literature [3].

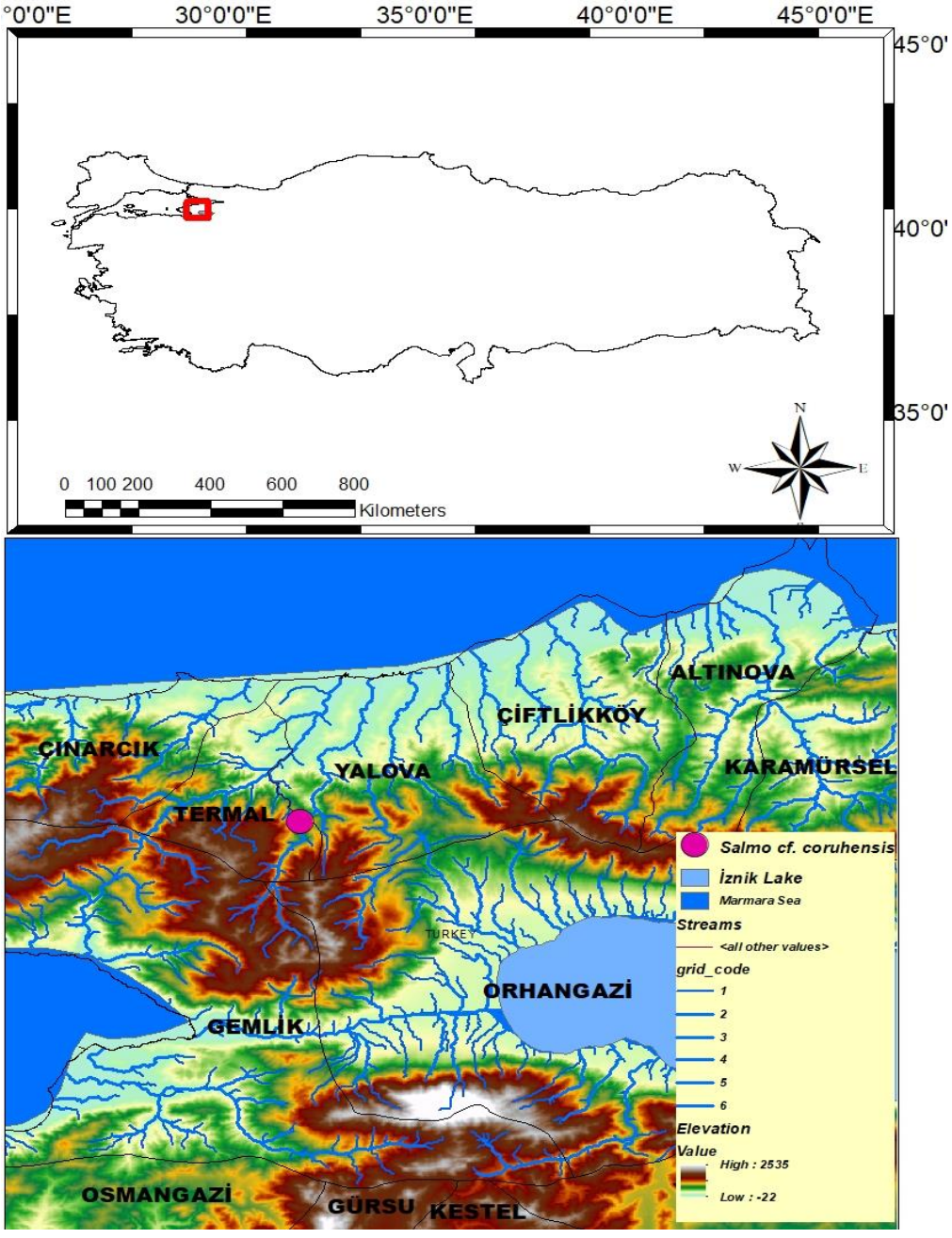

Fig. 1. *Study area map*

RESULTS AND DISCUSSION

Result

Five female individuals from *S.coruhensis* and one individual from *B. gymnotrachelus* were caught. The general view of the body is shown in Figures 2; morphometric and meristic data are given in Tables 1. Lateral line with 113-116 scales; 28 scale rows between lateral line and dorsal-fin origin; 15-17 scales between lateral line and adipose fin; 20 scale rows between lateral line and anal-fin origin (Table 1). Red spots show 2-4 irregular lines in the middle part of the body. There is one black spot on the back of the eye and 2-5 on the operculum. General body color silvery has 11-12 par marks on the side of the body.

Fig. 2. *Salmo cf. coruhensis general view*

Table 1. *Morphometric and Meristic data of Salmo cf. coruhensis from Yalova province*

	Min	Max	Mean	Std(+/-)
Standart Length (mm)	99,00	175,00	115,00	
% Standart Length				
Body depth at dorsal-fin origin	23,05	25,78	24,33	0,98
Predorsal length	47,22	49,08	48,12	0,91
Prepelvic length	53,65	56,14	54,62	0,97
Preanal length	71,99	75,24	73,62	1,29
Pectoral-anal fin distance	50,94	54,46	53,18	1,44
Pectoral-ventral fin distance	32,64	34,59	33,51	0,74
Ventral-anal fin distance	18,91	21,09	20,09	1,04
Height of dorsal fin	13,93	18,29	17,15	1,81
Height of anal fin	13,52	15,50	14,79	0,75
Length of pectoral fin	16,01	18,90	17,54	1,15
Length of pelvic fin	12,93	13,94	13,61	0,39
Length of upper caudal-fin lobe	15,06	19,22	17,74	1,59
Length of median caudal-fin rays	11,25	12,68	12,22	0,56
Length of caudal peduncule	17,28	19,40	18,59	0,82

Depth of caudal peduncle	9,67	10,65	10,22	0,37
Snout length	6,69	7,66	7,19	0,43
Eye diameter	5,20	6,31	5,62	0,45
Interorbital width	8,10	8,97	8,61	0,40
Head width at interorbital region	11,37	12,69	12,22	0,51
Head depth at interorbital region	13,30	14,72	13,95	0,66
Head length	24,43	27,36	26,45	1,17
Meristic data				
Lateral line scales	113	116	115	
Transverse line scales (above lateral line)	28	29	28	
Transverse line scales (below lateral line)	20	20	20	
Branched dorsal-fin rays	10	10	10	
Branched anal-fin rays	8	8	8	
Gill rakers	17	19	18	

Discussion

Faunistic studies are important for biodiversity conservation studies. The number of freshwater fish species identified internal waters of Turkey is increasing every day [9], [10]. Potential distribution areas, abundances, and population structures of the species need to be determined. Knowing the distribution of the species in the species protection action planning makes the decision making the process easier.

The *S.coruhensis*, distributed in northern Anatolia, has lost a significant part of its populations in the last 30 years, and the IUNC protection category is near threatened (NT) [11]. Consequently, the existence of the species needs to determine the restricted and narrowed habitats of this species. Salmo genus species are very sensitive to any changes in water. Anthropogenic effects limit the spread of the species very quickly. At the same time, the presence of this species is an indication that the water quality in the region is excellent. This study made an important contribution to the distribution range of the species.

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