

**ADDITIONAL RECORDS OF *CHAMPSODON VORAX* AND *CHAMPSODON CAPENSIS*  
(ACTINOPTERYGII: PERCIFORMES: CHAMPSODONTIDAE)  
FROM THE EASTERN MEDITERRANEAN SEA**

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**Abstract.** On 25 September 2012, seven individuals of *Champsodon vorax* Günther, 1867 and five individuals of *Champsodon capensis* Regan, 1908 were caught during a bottom trawl activity, from a depth of 30–100 m in the Gulf of Antalya, Turkey. Both species are Lessepsian migrants, previously reported in the eastern Mediterranean Sea. *C. vorax* is being reported for the first time from Turkey, whereas *C. capensis* is recorded for the first time in the Gulf of Antalya.

**Keywords:** Lessepsian migrants, *Champsodon vorax*, *Champsodon capensis*, Champsodontidae, Gulf of Antalya, eastern Mediterranean Sea

The monogeneric family of Champsodontidae is native to the Indo-Pacific region. In the western part of its range it is widely distributed in the Suez Canal and Red Sea, from the Seychelles to Mauritius, and from Kenya to the Eastern Cape State of South Africa in the Indian Ocean (Nemeth 1994, El-Ganainy et al. 2005, Goren et al. 2011, Froese and Pauly 2012). This family contains 13 species of small (less than 15 mm SL), characterized by having a large head and mouth, an elongate compressed body densely covered with small denticulate scales, a short spinous dorsal fin, and small pectoral fins (Heemstra 1984, Nemeth 1994). Species of this family, commonly known as gapers (Nemeth 1994), are considered bottom dwellers, preferring sandy-muddy bottoms at depths of 30–552 m (Nemeth 1994, El-Ganainy et al. 2005).

Gapers differ from each other by a combination of characters, which mainly include the scale pattern on various parts the body, arrangement and number of dorsal sensory papillae, degree of notching of the premaxillae, and the gill raker counts on the first arch. In describing scale patterns, the “chin” refers to the ventral region between the dentaries and the “breast” refers to the triangular area anterior to the pelvic fin bases (Nemeth 1994).

Recently, champsodontid species have been reported in the eastern Mediterranean: *Champsodon nudivittis* (Ogilby, 1895) was reported from the Iskenderun Bay, Turkey, in 2008 (Çiçek and Bilecenoglu 2009), off the coasts of Ashdod, Israel (Goren et al. 2011), in the Finike

Bay, Turkey (Ergüden and Turan 2011), in the Gulf of Antalya, Turkey (Gökoğlu et al. 2011), and off the coasts of Rhodes Island (Greece), southeastern Aegean Sea (Kalogirou and Corsini-Foka 2012).

*Champsodon capensis* Regan, 1908 was reported from Iskenderun Bay, Turkey (Dalyan et al. 2012), and *Champsodon vorax* Günther, 1867 was reported from Lebanon (Bariche 2010, 2011).

In this study, *C. vorax* and *C. capensis* were recorded in the coast of Antalya, in the eastern Mediterranean Sea. *C. vorax* is reported for the first time from Turkey, whereas for *C. capensis* this finding is a westwards expansion of its known distribution range.

A total of 12 specimens of *C. vorax* and *C. capensis*, seven and five individuals respectively, were collected, by a trawler, off the coast of Antalya (36°49'57.21"N, 30°50'57.10"E) in the eastern Mediterranean Sea, at a depth of 30–100 m. The specimens were preserved in 4% formalin and deposited at the Akdeniz University, Fisheries Faculty, Fish Museum (ID: 103, and 104, respectively). All biometric characteristics were measured using a calliper following Nemeth (1994) (Table 1).

Short description of *Champsodon capensis*: Body elongate, compressed laterally. Snout length almost equal to eye diameter. Mouth oblique, maxilla extending to below rear margin of eye; no scales on “chin”; “breast” scaled, no scaled triangular place between pectoral and pelvic fin. 3 and 7 pairs of sensory papillae in two rows on head dorsally (Fig. 1).

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Table 1

Morphometric measurements and meristic counts (min–max) of the *Champsodon vorax* and *Champsodon capensis* specimens from the Gulf of Antalya, Turkey

	Parameter	<i>Champsodon vorax</i>	<i>Champsodon capensis</i>
Morphometric measurements [mm]	Total length	100–127	100–120
	Fork length	91–122	95–115
	Standard length	105–110	87–102
	Body width	11–13	10–14
	Head length	22–30	23–30
	Head width	9–12	8–13
	Eye diameter	4–5	4–5
	Snout–eye length	8–11	8–10
	Body depth	12–18	13–18
	Preorbital distance (mean)	7	6
	Postorbital distance (mean)	12	11
	Interorbital distance (mean)	9.5	8.5
	First dorsal fin length (mean)	10	13
	Second dorsal fin length (mean)	42	40
	Anal fin length (mean)	46	34
	Predorsal length (mean)	56	34
	Preanal length (mean)	54	52
Meristic counts	Spines of first dorsal fin	IV	V
	Rays of second dorsal fin	II + 18	II + 19
	Rays of anal fin	18	18
	Rays of pectoral fin	12	12
	Rays of caudal fin	16	16
	Rays of ventral fin	I + 5	I + 5
	Spines of first dorsal fin	IV	V

Short description of *Champsodon vorax*: Elongate body, compressed laterally. Large head and mouth, “chin” and “breast” scaled; triangular patch of scales between pectoral and pelvic fin bases extending ventroposteriorly as thick line toward vent (Fig. 1).

*Champsodon capensis* is similar to its Mediterranean congeners in having no scales on the “chin”, a fully-scaled “breast”, with a triangular patch of scales between the pectoral- and pelvic fin bases, and usually a scaled belly from anterior to vent.

*Champsodon capensis* is widely distributed in the Suez Canal and the Red Sea, from the Seychelles to Mauritius, and from Kenya to the Eastern Cape of South Africa in the Indian Ocean (Nemeth 1994, El-Ganainy et al. 2005, Goren et al. 2011, Froese and Pauly 2012). It was reported in the Iskenderun, off the Turkish Mediterranean shores. A total of 24 individuals of *C. capensis* were caught in 2010 from the Iskenderun Bay (Dalyan et al. 2012). Since then, 6 individuals of this species—those presented in this study—were caught in the Gulf of Antalya.

*Champsodon vorax* is a species known from few localities in the Indo-Pacific, namely the Maldives, western Australia (Northern Territory), Indonesia, Philippines, Vietnam, China Sea, and Guam (Kami 1971, Nemeth 1994,

Froese and Pauly 2012). In the Mediterranean, *C. vorax* have been recorded off the coast of Batroun, northern part of Lebanon at depths of 30–150 m (Bariche 2010, 2011). The presently reported finding is the first record of the species in Turkey.

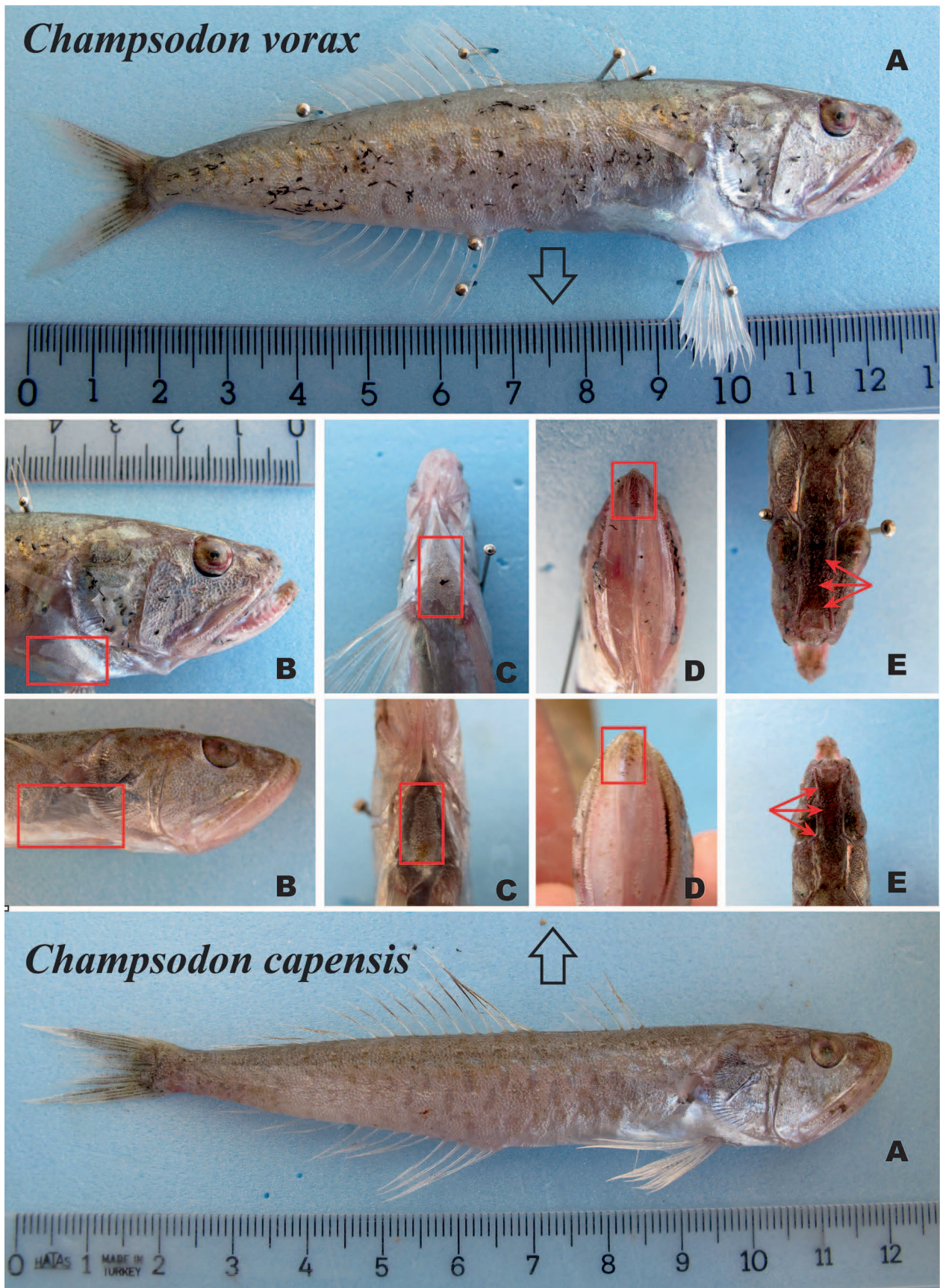
All descriptive characters, measurements, and counts of all specimens of *C. vorax* caught from the Turkey coastal waters followed closely those given for *C. vorax* from a number of localities (Nemeth 1994) and from Lebanon (Bariche 2011).

According to the above-mentioned results, the number of Champsodontidae family members increased to three off the Turkish Mediterranean shores. A rapid geographical expansion of both species, along the northeastern Levantine coast of the Mediterranean is very likely. *Champsodon vorax* may possibly extend its range westwards, along the Mediterranean shores of Turkey.

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**Fig. 1.** Comparison of morphological details of *Champsodon vorax* (on top) and *Champsodon capensis* (bottom) from the Gulf of Antalya, Turkey: entire fish (**A**); Area of pelvic and pectoral fin bases (**B**); “Breast” (**C**); “Chin” (terminology after Nemeth 1994) (**D**); Dorsal view of head (**E**)

## REFERENCES

- Bariche M.** 2010. *Champsodon vorax* (Teleostei: Champsodontidae), a new alien fish in the Mediterranean. *Aqua* **16** (4): 197–200.
- Bariche M.** 2011. First record of the cube boxfish *Ostracion cubicus* (Ostraciidae) and additional records of *Champsodon vorax* (Champsodontidae) from the Mediterranean. *Aqua* **17** (4): 181–184.
- Çiçek E., Bilecenoglu M.** 2009. A new alien fish in the Mediterranean Sea: *Champsodon nudivittis* (Actinopterygii: Perciformes: Champsodontidae). *Acta Ichthyologica et Piscatoria* **39** (1): 67–69. DOI: 10.3750/AIP2009.39.1.14
- Dalyan C., Yemişken E., Eryılmaz L.** 2012. A new record of gaper (*Champsodon capensis* Regan, 1908) in the Mediterranean Sea. *Journal of Applied Ichthyology* **28** (5): 834–835. DOI: 10.1111/j.1439-0426.2012.02019.x
- El-Ganainy A.A., Yassien M.H., Ibrahim E.A.** 2005. Bottom trawl discards in the Gulf of Suez, Egypt. *Egyptian Journal of Aquatic Research* **31** (Special issue): 240–255.
- Erguden D., Turan C.** 2011. Occurrence of the nakedband gaper, *Champsodon nudivittis* (Ogilby, 1895) (Osteichthyes: Champsodontidae), in Finike Bay, eastern Mediterranean, Turkey. *Journal of Applied Ichthyology* **27** (6): 1397–1398. DOI: 10.1111/j.1439-0426.2011.01824.x
- Froese R., Pauly D.** (eds.) 2012. FishBase. [version 06/2012] <http://www.fishbase.org>
- Goren M., Stern N., Galil B.S., Diamant A.** 2011. On the occurrence of the Indo-Pacific *Champsodon nudivittis* (Ogilby, 1895) (Perciformes, Champsodontidae) from the Mediterranean coast of Israel, and the presence of the species in the Red Sea. *Aquatic Invasion* **6** (Suppl. 1): S115–S117. DOI: 10.3391/ai.2011.6.S1.026
- Gökoğlu M., Ünlüsayın M., Balcı B.A., Özvarol Y., Çolak H.** 2011. Two alien fish in the Gulf of Antalya: *Apogon queketti* Gilchrist, 1903 (Apogonidae) and *Champsodon nudivittis* (Ogilby, 1895) (Champsodontidae). *Zoology in Middle East* **54**: 138–140.
- Heemstra P.C.** 1984. Champsodontidae. P. 734–735. In: Smith M.M., Heemstra P.C. (eds.) *Smiths' sea fishes*. Springer-Verlag, Berlin, Germany.
- Kalogirou S., Corsini-Foka M.** 2012. First record of the Indo-Pacific *Champsodon nudivittis* (Ogilby, 1895) (Perciformes, Champsodontidae) in the Aegean waters (eastern Mediterranean Sea). *BioInvasions Records* **1** (3): 229–233. DOI: 10.3391/bir.2012.1.3.10
- Kami H.T.** 1971. Check-list of Guam fishes, supplement I. *Micronesica* **7** (1–2): 215–228.
- Nemeth D.** 1994. Systematics and distribution of fishes of the family Champsodontidae (Teleostei: Perciformes), with descriptions of three new species. *Copeia* **1994** (2): 347–371. DOI: 10.2307/1446983

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