

Siganus rivulatus



Taxon	Family / Order / Class / Phylum
<i>Siganus rivulatus</i> Forsskål, 1775	Siganidae / Perciformes / Actinopterygii / Chordata

COMMON NAMES (English only)

Marbled spinefoot
Rabbitfish

SYNONYMS

Teuthis sigana (Forsskål, 1775)
Scarus siganus (Forsskål, 1775)
Amphacanthus siganus (Forsskål, 1775)
Siganus siganus (Forsskål, 1775)
Teuthis siganus (Forsskål, 1775)
Teuthis sigan (Klunzinger, 1871)



Siganus rivulatus

Photo: Bella Galil

SHORT DESCRIPTION

A demersal, gregarious, herbivorous fish commonly 5-25 cm long (max. 27 cm). The oval body, laterally compressed, has a grey-green to brown back, a light-brown to yellow abdomen and fine yellow lines on each side. It has a small first dorsal spine directed forward and usually covered with skin. The caudal fin is forked. It has small embedded scales.

BIOLOGY/ECOLOGY

Dispersal mechanisms

Planktonic eggs and larvae.

Reproduction

Spawning occurs between May and August.

Known predators/herbivores

Large groupers.

Resistant stages (seeds, spores etc.)

None.

HABITAT

Native (EUNIS code)

A3: Sublittoral rock and other hard substrata, A4: Sublittoral sediments, marine infralittoral and sublittoral soft and hard bottoms to 60 m depth.

Habitat occupied in invaded range (EUNIS code)

A3: Sublittoral rock and other hard substrata, A4: Sublittoral sediments, subtidal soft and hard bottoms, often covered by algae. Young specimens feed at high tide on algae-covered shallow rocky platforms. Larvae live near the surface, metamorphosis occurs after about 20 days when they form schools of thousands in very shallow water and then migrate into deeper waters (4-10 m) upon reaching 2-3 g.

Habitat requirements

Euryhaline, temperature tolerance 15-28°C.

DISTRIBUTION

Native range

Western Indian Ocean: Red Sea, Gulf of Aden, Eastern Africa.

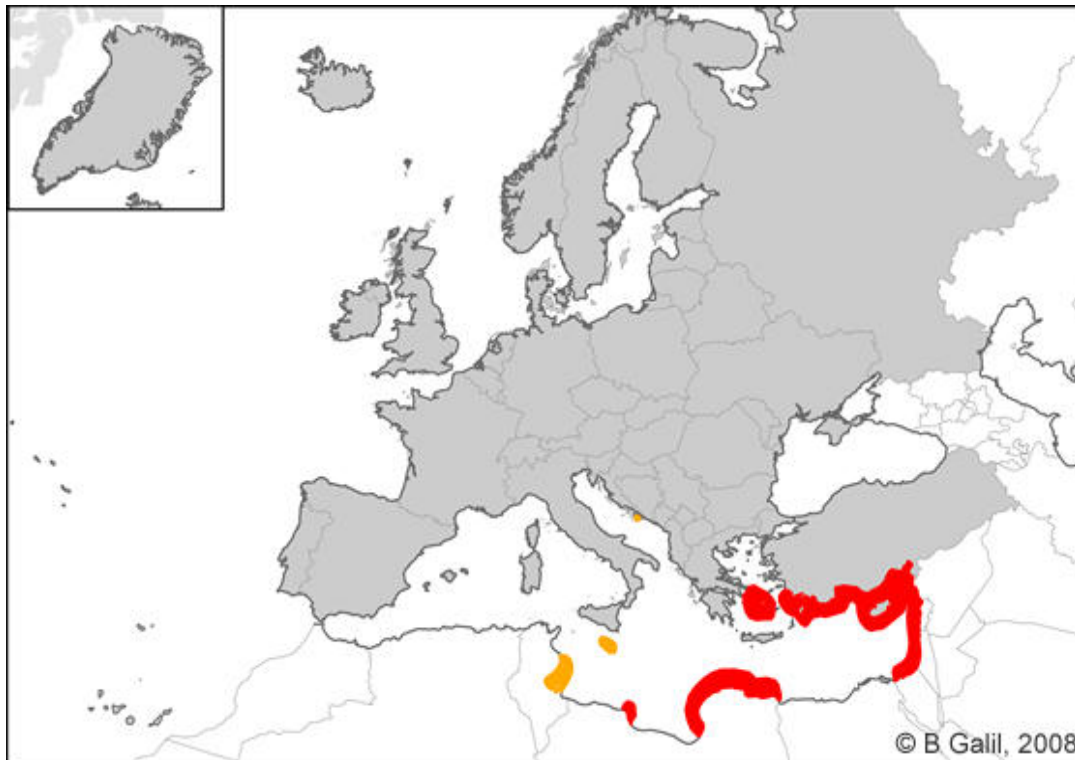
Known Introduced Range

Eastern and central Mediterranean.







Trend

First collected in the Mediterranean in 1924 off the coast of Israel, subsequently in Cyprus (1928), Syria (1929), Rhodes I., Greece (1932), southern Turkey (1942), and in 2002 in Croatia. May still be spreading autochthonically as adults, or as current-borne planktonic eggs and larvae.

MAP (European distribution)



Legend

	Known in country		Known in CGRS square		Known in sea
	Key distribution area		Infrequent		Unestablished

INTRODUCTION PATHWAY

Entered the Mediterranean through the Suez Canal, forming early stable populations off the Levantine coast.

IMPACT

Ecosystem Impact

The siganids are the most abundant herbivorous fish in shallow coastal sites in the Levant, and comprise much of the fish biomass along its rocky habitats. They have replaced native herbivorous fish. Their grazing pressure on the intertidal rocky algae has a significant impact on the structure of the local algal community, locally eradicating algae.

Health and Social Impact

The spines of the dorsal and pelvic fins are venomous, causing painful injuries to the unwary.

Economic Impact

The siganids are of moderate commercial importance for inshore fisheries, caught by gill-nets, trammel-nets and beach seines, and were cultured on an experimental scale in Egypt, Israel and Cyprus.

MANAGEMENT

Prevention

Erect a salinity barrier in the Suez Canal in order to reduce the number of Red Sea aliens arriving in the Mediterranean.

Mechanical

Unknown.

Chemical

Unknown.

Biological

Unknown.

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