



MarLIN

Marine Information Network

Information on the species and habitats around the coasts and sea of the British Isles

A cushion star (*Porania (Porania) pulvillus*)

MarLIN – Marine Life Information Network
Marine Evidence-based Sensitivity Assessment (MarESA) Review

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Please note. This MarESA report is a dated version of the online review. Please refer to the website for the most up-to-date version [<https://www.marlin.ac.uk/species/detail/27>]. All terms and the MarESA methodology are outlined on the website (<https://www.marlin.ac.uk>)

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See online review for
distribution map

Porania (Porania) pulvillus on the Manacles, Lizard Point,
southwest Cornwall..

Photographer: Robert Keen

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Distribution data supplied by the Ocean
Biogeographic Information System (OBIS). To
interrogate UK data visit the NBN Atlas.

Researched by	Saskiya Richards	Refereed by	Admin
Authority	(O.F. Müller, 1776)		
Other common names	-	Synonyms	-

Summary

Description

Porania pulvillus is a cushion starfish that reaches up to 11-12 cm in diameter. The upper (aboral) surface is usually bright red but may be purple, orange or yellow and is marked with a pattern of white or yellowish spots and bands that radiate from the centre. The colour of the underside (oral surface) is pale in contrast. The aboral surface is smooth with a greasy texture and is scattered with clusters of white, yellowish or translucent soft papillae that act as gills. *Porania pulvillus* has five short, broad arms that narrow towards the ends and extend from a large, convex, central disc. Each arm is edged with two rows of small ossicles (marginal plates) on either side. The ossicles of the upper row are smooth whereas those of the lower row each bear 3-5 spines giving a narrow, fringe-like appearance. The underside of each arm has a narrow ambulacral groove bearing numerous suckered tube feet and has a margin of two rows of spines on either side. The central oral region is marked by radiating grooves between the axes of each arm.

Recorded distribution in Britain and Ireland

Porania pulvillus is widespread on all coasts except on the North Sea coasts of England. It is particularly abundant in west Scotland.

Global distribution

Porania pulvillus is distributed from Iceland and northern Norway southwards to the Bay of Biscay

and northern Spain in the eastern Atlantic, and from Newfoundland to Carolina in the western Atlantic.

Habitat

Porania pulvillus is found on rocks and the holdfasts of kelp and on muddy, mixed and coarse substrata between 10-300 m. Occasionally, this species may be found at depths up to 1000 m.

↓ Depth range

0-1000 m

🔍 Identifying features

- Large, convex, central disc.
- Cushion starfish up to 12 cm in diameter.
- Upper surface coloured bright red, purple, orange or yellow mottled with white or yellow spots and streaks.
- Clusters of white, yellow or translucent papillae on upper surface.
- Each of the 5 arms fringed with 3-5 spines on each ossicle.
- This species lacks any pedicellariae.

Additional information

Porania pulvillus is a gonochoristic species that reproduces by external fertilization via a planktonic larval stage. It feeds on detritus and the soft coral *Alcyonium digitatum*. Jenkins *et al.* (2001) reported that *Porania pulvillus* was little affected by scallop dredging.

✓ Listed by

Further information sources

Search on:

    NBN WoRMS

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