

Aptos aptos (Schmidt, 1864)

N.B. The name *Aptos aptos* is used for congeneric specimens from all over the world; synonymy given here is restricted to Europe.

Ancorina aptos Schmidt, 1864: 33, pl. IV fig. 11; Schmidt, 1868: 17

Aptos adriatica Gray, 1867: 519

Aptos aptos; Schmidt, 1870: 268; Topsent, 1925a: 631; Lévi and Vacelet, 1958; Rodriguez and Gondar, 1978: 37; Acua et al., 1984; Solórzano, 1991: 22; Desqueyroux-Faúndez and Stone, 1992: 7, 94; Hooper and Wiedenmayer, 1994: 346; Kelly-Borges and Bergquist, 1994: 304, figs. 2a-b, pl. Ia.

?*Trachya pernucleata* Carter, 1870: 176

Tuberella tethyoides Keller, 1880: 277, pl. 14 figs. 7-9; Vosmaer, 1886: 327, pl. XXVI fig. 9; Topsent, 1896: 125.

Tethyophaena silifica Schmidt, 1880: 281.

Suberites spissus Topsent, 1892b: xxvii.

Suberites aptos; Von Lendenfeld, 1896: 140, pl. VII, XII.

Tuberella aptos; Topsent, 1898b: 127; 1900: 285, pl. VIII figs. 12-13.

Species Overview

Aptos aptos (Schmidt, 1864) is a greyish yellow or reddish dark brown, massively lobate, hard, sponge. Surface irregular, but without distinct papillae. Its main distribution is in Mediterranean waters, but it is reported also rarely from NW Spain.



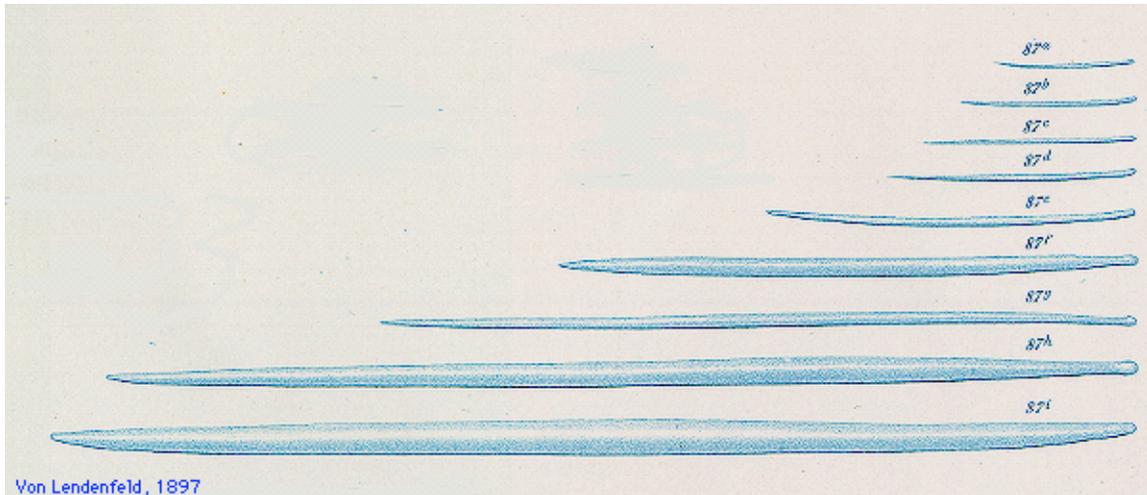
Desqueyroux-
Faúndez & Stone, 1992

Taxonomic description

Colour: Brown-yellow, occasionally pale yellow or greyish, or reddish dark brown. Interior yellow.

Shape, size, surface and consistency: Massive, lumpy, bluntly lobate, typically 3-5 cm in diameter, occasionally larger, fist-size. Surface irregular, hispid, occasionally smooth, seldom elevated in distinct papillae. Oscules up to 3 mm in diameter, few in number, contractile, occasionally elevated. Consistency compact, firm, hard.

Spicules: Strongyloxeas and styles. The strongyloxeas are characteristically thickest in the middle, thinning out towards the blunt apex: 750-1050 x 12-45 μm (possibly divisible into two size categories). Ectosomal small styles, occasionally subtylostyles: 150-700 x 1-8 μm , likewise divisible in two size categories.



Skeleton: Radiate architecture with spicule tracts of 1.5-2 cm length, 10-20 spicules in thickness, radiating from a focal point towards the surface. At the surface these bundles are strengthened and linked by a palisade of small styles, making a continuous ectosomal cortex of about 1 mm in thickness, which is however not macroscopically distinct and not fibrous. Inhalant canals traverse the cortex in a sinuous way. Below the cortex the choanosomal tracts are separated by subectosomal cavities.



Cell biology: The choanosome is rich in spherulous cells. The choanocyte chambers are small, eurypylous, 20-25 μm in diameter.

Ecology: Mostly known from deeper water, but occasionally occurring in the shallow sublittoral.

Distribution: A southern species occurring off the coasts of NW Spain and Portugal; elsewhere in the Mediterranean, Azores, Madeira and Canary Islands.

Etymology: Aptos (Greek) = invincible or strong, referring to the consistency.

Type specimen information: Syntype in the Graz Museum, LMJG 15705, Lagosta, Adriatic; dry fragment in the Natural History Museum, London, BMNH 1854.12.21.18 (as *Ancorina*); also slides in BMNH and ZMB (Mus. Berlin).

Remarks

This species is not well-known. It has been reported from many areas of the world, but it is almost certain that these concern other species of *Aptos*. A second, sympatric species of *Aptos* is *A. papillata* (Keller, 1880), equally ill-known, but distinguishable from the present species by the surface papillae, reddish colour and the possession of small tylostyles. A possible third species is "*Trachya*" *pernucleata* Carter (1870), here considered a junior synonym of *A. aptos*, but Kelly-Borges and Bergquist (1994) maintain it is a separate species of *Aptos*.

The BMNH type fragment has been redescribed by Kelly-Borges and Bergquist (1994).

Sources: Topsent, 1900; Kelly-Borges and Bergquist (1994).