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DA 1000 m

DÈS 1000 m  
FROM 1000 m

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FROM 1000 m



it consists of a set of cells with filtering functions that grow very slowly without any predefined structure this allows forms to be generated that are never identical

it has 8 to 14 hooks and 2 to 31 back teeth there are no front teeth the body reaches a length of about 1.5 inches and the tail length is about one-fourth the length of the body the neck is narrower than the division between the trunk and the tail on its large oval eyes there are colored spots

the slow beat of its ruffled membranes propels it down to approximately 5000 meters the translucence of its body reveals its internal organs including the digestive tube

some particles migrate from the spongiform spherules toward the prey and consume it

from 1000m below a fragment (about 450bp) of the mitochondrial gene was amplified by the polymerase chain reaction COI-3 5'-GTNTGRGCNCAYCAYATRTTYA CNGT-3' and COI-6 5'-GGRTARTCNSWRTANCGNC GNGGYAT-3' 94°C for 60s 30-40 cycles at 92°C for 40s at 40°C for 60s at 72°C for 90s amino acid sequences were deduced by reference to the modified genetic code of

they reproduce both sexually and asexually the sexual stage is seen in the summer months asexual reproduction takes place by budding and fragmentation

the ectoderm is covered by a protective layer of slime excreted by glands the gastroderm surrounds a cavity which serves as a stomach and is only accessible by the mouth opening captured quarry is pre-digested in the gullet by strong enzymes and fully decomposed the space between the inner and outer skin is taken up by the mesoglea a thick transparent layer made from collagen and connective tissue pervaded by numerous small canals which are used for transport and storage of nutrients 27°35.866' N 91° 49.544' W from 1000m

they do not possess a specific circulatory system  
neither do they have any organs for breathing gas  
exchange and the excretion of the waste products  
of cell metabolism (ammonia) occur over the body's  
entire surface which is pervaded by a net of neurons

histological examination of the arms revealed the presence of a thick layer of dermal mutable connective tissue which is probably an energy-efficient way to maintain its feeding posture against the current this layer is connected to the nerve cord suggesting that the passive mechanical properties (stiffness) is controlled by the nervous system in the distal parts of the arms each segment has a pair of sticky tube feet and a sophisticated system of spines and hooks which are connected to muscles and collagenous tendons

length of up to 2.7 meters its colored spots are  
bioluminescent photophores that help disguise its  
eyes the only opaque part of its body

its suckers are also lanterns paired with finger-like cirri that are coated with mucus waves of bioluminescence under neural control the mean speed of propagation of the luminescent waves is  $16.8 \pm 8.8$  cm/s the impulse propagates in the radial nerves and in the nerve net bio-luminescence pacemakers have periods between 0.33 and 0.69s

when alarmed by a passing predator it can inflate its body swelling into a transparent sphere or draw its head and arms into its cavity that it fills with ink disappearing into the darkness

the apical float is connected to the rest of the colony by a long stem which functions as a gastrovascular cavity and links several different organs a series of muscular swimming bells allows locomotion further along the stem there are clusters of organs the largest structures are digestive bodies with flexible mouths that expand to engulf prey adjacent to these stomachs are muscular tentacles with capsules that discharge barbed tubes whenever it comes into contact with anything foreign

in the spermatozoa of both species the apical portion of the nucleus is completely devoid of chromatin and is delimited by a thickened nuclear envelope with a fibrillar appearance as adults they lack a functional digestive system and derive their nutrition from chemoautotrophic symbionts hosted in a specialized tissue located in their elongated trunk region 9°50.447' N 104°17.493' W 2500m

the nature of this association has provoked much speculation yet it has never been fully explained oocytes are inseminated internally and stored in paired ovisacs germinal vesicle breakdown nuclear fusion and embryonic development all occur after release from the mother

the respiratory quotient of gut ovary shell was found to be about 0.6 to 0.7 5000m (abyssal)

the function of the filaments remains unknown but hypotheses have been formulated

(it won't be possible to know what they told each other about death on the way to the station)

then there is a whole sequence that doesn't belong to the verbal expression humid tongues attached to the bottom of plexiglas tubes where it is impossible to go for now compelled as we are to awake to return

plains 1800-2000m and 2850m tmao contents 103  
 $\pm 9$  (bathyal)  $197 \pm 2$  (abyssal)  $32 \pm 0$  (surface)  $141 \pm 16$   
(bathyal)  $215 \pm 14$  (bathyal)  $244 \pm 23$  (abyssal)  $76 \pm 16$   
(surface)  $203 \pm 35$  (bathyal)  $299 \pm 28$  (abyssal)  $22 \pm 2$   
(surface)  $164 \pm 15$  (bathyal)

## FONTI/SOURCES

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