

Periphylla periphylla (Scyphozoa, Coronatae)

P. periphylla has two main categories of nematocysts, holotrichous isorhizas and heterotrichous microbasic euryteles, which are typical for all coronates. These main categories split in at least six different types according to their shape and size. The *P. periphylla* cnidocysts become increasingly large with medusa growth, and are the largest so far described from Scyphozoa. The largest type (giant eurytele) can reach even a length up to 100 µm.

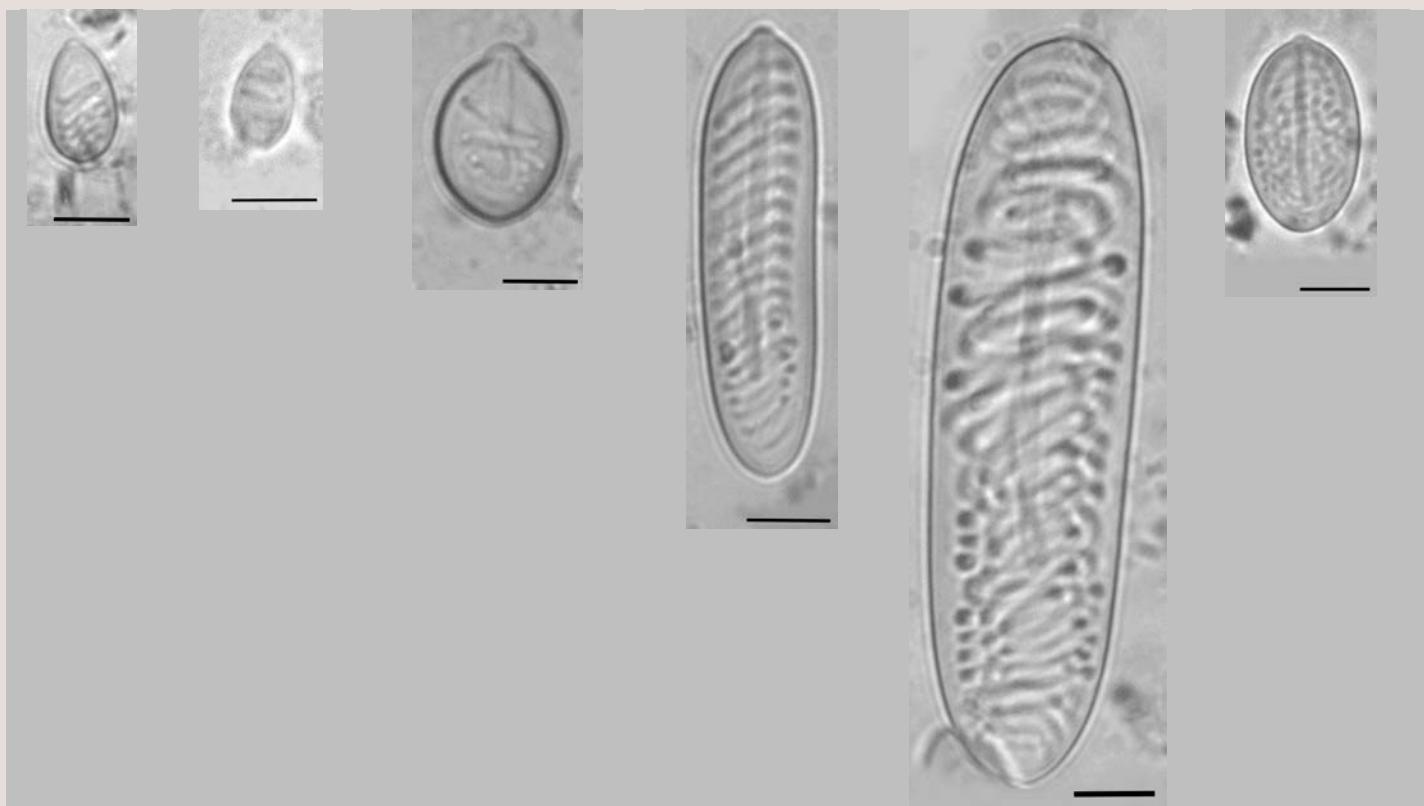
Six different types are shown in this pictorial chart below. For the examination tissue of fresh captured medusae were squeezed in glycerol on microscopic slides.



Periphylla periphylla,
an adult
medusa



Different nematocyst types:
holotrichous isorhiza (type a),
long ellipsoid heterotrichous eurytele (type 2b)
and giant ellipsoid heterotrichous microbasic eurytele (type 2c),
scale bar 10 µm



Holotrichous
isorhiza
(type 1a),
scale bar 10
µm

Small
holotrichous
isorhiza
(type 1b),
scale bar 10 µm

Round
heterotrichous
microbasic eurytele
(type 2a),
scale bar 10 µm

Long ellipsoid
heterotrichous
microbasic eurytele
(type 2b),
scale bar 10 µm

Giant ellipsoid
heterotrichous
microbasic eurytele
(type 2c),
scale bar 10 µm

Short ellipsoid
heterotrichous
microbasic eurytele
(type 2d),
scale bar 10 µm

References

- Werner B (1965) Die Nesselkapseln der Cnidaria. I. Klassifikation und Bedeutung für Systematik und Evolution. Helgoländer Wissenschaftliche Meeresuntersuchungen 12:1-39
- Jarms G, Tiemann H, Bämstedt U (2002) Development and biology of *Periphylla periphylla* (Scyphozoa: Coronatae) in a Norwegian fjord. Marine Biology 141(4): 647-657