## The geographic distribution of *Schilderina achatidea* (Gray, 1837) (Mollusca: Gastropoda:

Cypraeidae)

speaker: Frank Nolf

## **Abbreviations:**

**CFN:** Private <u>c</u>ollection of <u>F</u>rank Nolf (Oostende, Belgium)

CJV: Private collection of Johan Verstraeten (Oostende, Belgium)

PEMARCO: Pêche Maritime du Congo

The **geographic distribution** of *Schilderina achatidea* (Gray, 1837) extends from Galicia (N Spain) in the north to Cape Fria (Namibia, SW Africa) in the south.

Specimens from the Mediterranean Sea cannot be differentiated from E Atlantic shells morphologically and there is no reason to distinguish subspecies populations in the range between Spain and Namibia.

One exception: S. achatidea verdensis (Lorenz, 2017)

The so-called 'subspecies' such as *oranica* Crosse, 1896, *inopinata* Schilder, 1930 and *longinqua* Schilder & Schilder, 1938 do not belong to isolated waters and are not separated by geographic barriers.

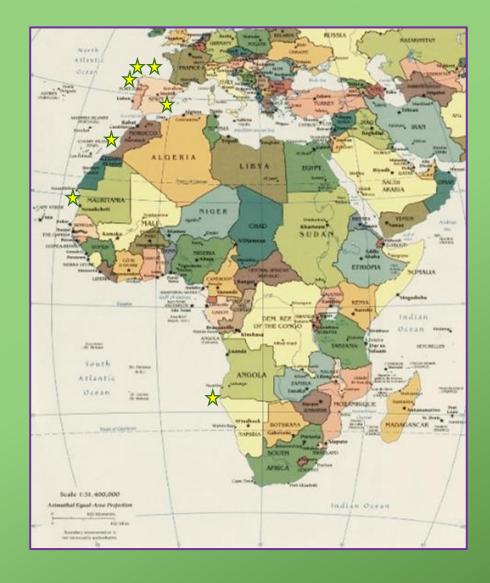
F.A. Schilder (1930) described the subspecies *Schilderina* achatidea inopinata on a unique specimen '*from West Africa* (without exact locality)' and F.A. Schilder & M. Schilder (1938) created the subspecies *S. achatidea longinqua*, also based on a unique specimen from '*Port Alexandre*, *S Angola*'.

Half of the parameters mentioned by Lorenz to differentiate *S. achatidea* from *S. achatidea* inopinata refer to identical characteristics, the other half to minor differences which are not constant in the same area.

Slight differences regarding 'callus on base', 'aperture', 'orange band' and 'transverse band' are restricted to certain specimens in a population mainly depending on habitat, the kind of food and growth stage. Even the use of taxonomically invalid 'forms' or 'variations' shouldn't be an option.

Lorenz & Hubert (2000) justified the West African "*longinqua*", not as different subspecies, but merely as a varietal name. In addition, they rejected the name "*inopinata*", earlier used for elongate specimens with pale tan margins and a rather coarse dorsal freckling, because such characteristics are found in all populations of *S. achatidea*.

Lorenz (2017) reintroduced the subspecies name '*inopinata*' for all shells from West African coasts, in contradiction to his earlier opinion, but he considered the subspecies name '*longinqua*' as synonym.



Localisation of samples of *Schilderina achatidea* (Gray, 1837) treated in the present study



Schilderina achatidea 'Ionginqua' (Schilder & Schilder, 1938).

Cape Fria, Namibia, SW Africa. Trawled by Belgian fishermen (PEMARCO).

Living among seaweed at a depth of 25 m. 1970. CFN. 29.25 mm.



Schilderina achatidea 'Ionginqua' (Schilder & Schilder, 1938).

Cape Fria, Namibia, SW Africa. Trawled by Belgian fishermen (PEMARCO).

Living among seaweed at a depth of 25 m. 1970. CFN. 32.55 mm.



Schilderina achatidea 'Ionginqua' (Schilder & Schilder, 1938).

Cape Fria, Namibia, SW Africa. Trawled by Belgian fishermen (PEMARCO).

Living among seaweed at a depth of 25 m. 1970. CFN. 33.63 mm.



Schilderina achatidea 'longinqua' (Schilder & Schilder, 1938). Cape Fria, Namibia, SW Africa. Trawled by Belgian fishermen (PEMARCO). Living among seaweed at a depth of 25 m. 1970. CFN. 36.58 mm.



Schilderina achatidea 'longinqua' (Schilder & Schilder, 1938).

Dredged by Spanish fishermen off Mauritania, NW Africa - 18° N/ 17° W. 1962.

CFN. 36.14 mm



Schilderina achatidea 'longinqua' (Schilder & Schilder, 1938).

Dredged by Spanish fishermen off Mauritania, NW Africa - 18° N/ 17° W. 1962.

CFN. 38.29 mm



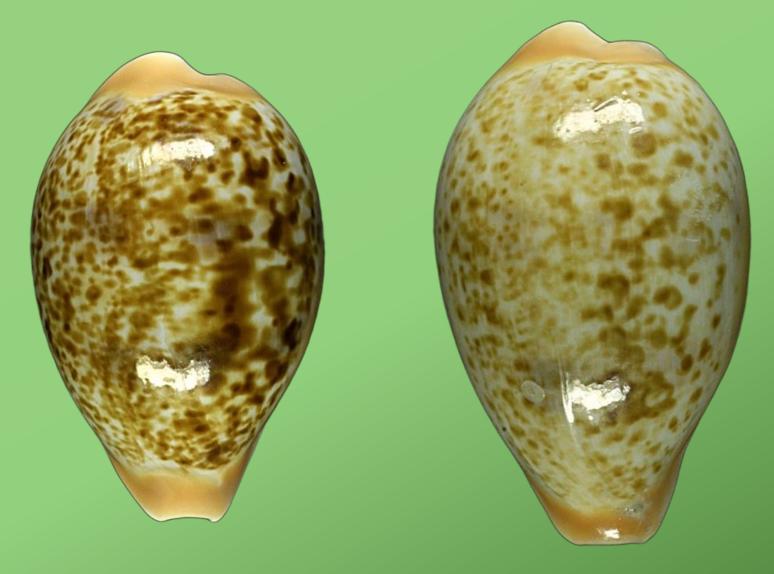
Schilderina achatidea 'inopinata' (Schilder, 1930).
Trawled by fishermen off Agadir, Morocco, NW Africa. 1976.
CFN. 34.59 mm.



Schilderina achatidea 'inopinata' (Schilder, 1930).
Trawled by fishermen off Agadir, Morocco, NW Africa. 1976.
CFN. 37.07 mm.



Schilderina achatidea 'inopinata' (Schilder, 1930).
Trawled by fishermen off Agadir, Morocco, NW Africa. 1976.
CFN. 39.37 mm.



Schilderina achatidea (Gray, 1837).
Fuengirola, Málaga, southern Spain. Dredged by fishermen at a depth of 70 m.
On rocks. June 1991. CFN. Left: 36.56 mm. Right: 39.60 mm



Schilderina achatidea (Gray, 1937).
Off A Guarda, Ria de Pontevedra, Spain. Trawled at a depth of 200 m.
In mud. March 2015. CJV. 41.12 mm.



Schilderina achatidea (Gray, 1837).

3 km off A Guarda, Galicia, Spain. Trawled by fishermen at a depth of 70 m. December 2002. CJV. 38.46 mm.

Conclusion: there are no visible morphological differences between specimens from the Mediterranean Sea and East Atlantic waters and there is certainly no reason to believe in the existence of different subspecies.