First records of *Gambierdiscus excentricus* and *Ostreopsis lenticularis* in the Cape Verde Archipelago (Macaronesia, Central Eastern Atlantic)
were: depth (D) 84-110 µm, width (W) 70-105 µm, and length 35-40 µm. The thecal plate formula was: Po 4’ 6”’ 6c’’ 5”’ 2’’’. Thecal plates were smooth with fine round to oval pores. Apical pore plate Po was oval with a fishhook-shaped slit and was ventrally displaced. First apical plate, 1’, was very small. Ratio between plates 2’/3’ and 2’/4’ suture lengths ranged from 2 to -2.5. Plates 1’ and 6’ were very small and facing the posterior part of the cell due to the torsion of the flagellar area which formed a hollow. From this hollow, two flagella emerged, the longitudinal one being perpendicularly projected. The Sp was in the hypotheca, out of the sulcus. The 2”’ plate was about twice as long as wide (Fig. 3).

Ostreopsis lenticularis Y. Fukuyo cells were broadly oval in apical and antapical views, lenticular-shaped, biconvex, and flattened, with the cingulum straight in lateral view. Measurements ranges were: depth (D) 60-105 µm, width (W) 53-74 µm and the DV/W ratio 1.13-1.42 (mean 1.27). The thecal plate formula was: Po 4’ 6”’ 6c’’ 5”’ 2’’’. The apical pore plate Po was long and narrow, slightly curved with the outline of the cell. The fourth apical plate (4’) was elongated and hexagonal, located mostly on the left side of the cell. The second apical plate (2’) was narrow and elongated, and located below the APC, extending dorsally to the Po plate, and reaching about the mid-position of the 3’ plate. Plates 5”’ were pentagonal and reached half of the DW axis (Fig. 4). The thecal surface was smooth and plates presented numerous pores of two types (Fig. 5). Large pores and small pores visible with the light microscope with epifluorescence and with SEM. Analyses of the LSU rDNA D1-D3 corroborated previous identifications of Gambierdiscus and Ostreopsis species. The analyses of samples from 32 sampling sites showed that O. lenticularis was widely distributed in Sal, Sao Vicente and Boa Vista but was not observed in Maio and Santiago. Ostreopsis lenticularis cell densities ranged from 50 per sample to 1 x 10⁶ cells per 100 cm². G. excen tricus was distributed in all the islands visited except for Maio. Gambierdiscus excentricus concentrations ranged from a few cells per sample to 150 cells per 100 cm².

Potentially toxic species of the genera Gambierdiscus and Ostreopsis are reported for the first time in the Cape Verde Islands. The presence of these species would explain the ciguatera cases that have been previously documented for this archipelago.

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References

Authors
Emilio Soler Onís & Juan Fernández Zabala, Observatorio Canario de HABs, FCPCT-ULPGC, Parque Científico Tecnológico Marino de Taliarte, C/ Miramar, 121. 35214 Taliarte, Las Palmas. Spain
Ana S Ramirez, Facultad de Veterinaria, ULPGC, Campus Universitario Cardones de Arucas, 35413 Arucas, Spain

Corresponding author: esoler@fcpc.tlpgc.es