

On possibility of using recent Atlantic tropical shelves Foraminiferal ecological data in Palaeoecology.

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Comparative analysis of the Atlantic shelves tropical faunas material of the Central and Southern American Coast (reg. 1) and West African Coast (reg. 2) shows that in spite of their great similarity owing to their common geological history up to Mesozoic period (140 common species, 13.7% of vicariating species) they have the noticeable difference of their faunas at present (Preston index of difference is 0.48, each of them having 2 their own endemic genera, % of endemic species is 27 in 1 reg., 18 --in 2). The arid 2 reg. influenced by the cold flows (temperature difference is 5 degree C) is less reach in the whole species number (199 against 245 in the 1st one), in tropical species (7.0% against 19. 2%)(% of tropical-subtropical species is the same – 42. 2%), but more rich in tropical-lowboreal (16.0% against 10.20%) and tropical-boreal ones (11.6% against 9.7%). The sudden increase of the number of species with comparatively more wide geographical and bathymetrical range at some stations indicates the influence of the cold water and leads to the mixed character of their fauna. Thus at the st. 166 near Cape Blan the % of tropic-boreal (14.4) and tropic-lowboreal species (28.7) is much higher comparatively with the other surrounding stations (3-4 and 19-21 accordingly). The number of tropical(10%) and subtropical(35%) species here is also high, the whole species number increases, shell dimensions are sharply smaller (higher rate of reproduction). All these features could be explained by the position of this station at the convergence line of the Canary flow and Equatorial counter-flow. The similar changes of the ancient fauna permits to reconstruct the palaeoflows and local palaeoenvironmental features (for instance upwelling).