



**A report on the discussion of the master's thesis submitted by the
researcher / Reem Muhammad Ali Muammar**

On Monday, 3/4/2024, Shaban 23, 1445 AH, March 4, 2024 AD, the public discussion of the master's thesis in marine geology submitted by researcher Reem Muhammad Ali Muammar, entitled

**“The Recent Foraminifera from the southern Part of the Red Sea, Yemen
“A Taxonomic and Comparative Study”.**

The thesis was supervised by Dr. Muhammad Abdullah Al-Wasabi and Dr. Abdulkarim Ahmed Al-Subbary

The discussion and judging committee consisted of:

- 1- Assoc.Prof. Dr. Ahmed Ali Al-Aydrus - Sana'a University - Internal Examiner - Chairman
- 2- Assoc.Prof. Dr. Saeed Omar Wasel- Hodeidah University - external examiner - Member
- 3- Prof. Dr. Muhammad Abdullah Al-Wasabi - Sana'a University - Main Supervisor - Member

The researcher presented her thesis, reviewed the problem and objectives of the research, its importance, and the most important previous studies, in which she presented the most prominent results she reached, summarizing the results and interpretations, and concluded her presentation by presenting the most important recommendations and proposals. The thesis formed part of a database for future studies on climate change in the Red Sea, in which the types of flukes found in the study sites are considered one of the most important pieces of evidence for inferring climate change.

After the student finished presenting her thesis, the discussion committee, in turn, resumed discussing the student and setting a number of questions and inquiries about the thesis.

After discussion and deliberation, the committee awarded the student a master's degree in marine geology, specializing in “microfossils,” with a grade of distinction of 95%.

The discussion was attended by Professor Dr. Basim Al-Khribash, Dean of the College, Vice-Deans, and a number of faculty academic members and students of the College, in addition to many guests and interested researchers.

Supervisors

Prof. Dr. Muhammad Abdullah Al-Wasabi

Prof. Dr. Abdulkarim Ahmed Al-Subbary



Abstract

This study aims to identify the foraminiferal taxa in the collected samples until the species level and compare them with the identified species in the previous studies.

Six bottom sea sediment samples were collected from depths ranging between 100 to 400m of the southern Red Sea coastal region, Yemeni coastline. 100 grams of each of these samples were treated for extracting the foraminiferal content. A total of 195 foraminiferal species are identified and described by light binocular microscope. These species are belonging to 100 genera, 54 families, 25 superfamilies and 7 suborders. 180 of these species are benthic foraminifera, while 15 species are from planktonic foraminifera. Photos of identified species were taken by 12 Mega Pixel digital camera.

Foraminiferal assemblages were dominated by hyaline calcareous tests, which was represented by 50% followed with porcelaneous calcareous that represented by 37% and agglutinated, which occupy 13%.

In this study, the abundance in the genera population was of *Quinqueloculina*, *Nouria*, *Reussella*, *Amphicoryna*, *Challengerella*, *spiroloculina*, *Pyrgo*, *Ammonia*, *Textularia*, *Fissurina*, *Bolivina*, *Reophax*, *Globigerinella*, *Globigerinoides*, *Globorotalia* and *Globigerina*.

When comparing the species that were recorded in the present study with those that were recorded in previous ones, it was noted that there is coincide in many of them, while some species that had not previously been recorded were recorded here, and other species that were previously recorded and were absent in this study. This may



be referred in general to changing of the environmental conditions in particular the depth which present samples were collected.



