

## Disconnection between genetic and morphological diversity in the planktonic foraminifer *Neogloboquadrina pachyderma* from the Indian sector of the Southern Ocean

Submitted by Jean-Fran ois Coste on Tue, 01/08/2019 - 16:09

Titre	Disconnection between genetic and morphological diversity in the planktonic foraminifer <i>Neogloboquadrina pachyderma</i> from the Indian sector of the Southern Ocean
Type de publication	Article de revue
Auteur	Andr�, Aurore [1], Quill�v�r�, Fr�d�ric [2], Schiebel, Ralf [3], Morard, Rapha�l [4], Howa, H�l�ne [5], Meilland, Julie [6], Douady, Christophe J [7]
Editeur	Elsevier
Type	Article scientifique dans une revue � comit� de lecture
Ann�e	2018
Langue	Anglais
Date	Octobre 2018
Pagination	14-24
Volume	144
Titre de la revue	Marine Micropaleontology
ISSN	03778398
Mots-cl�s	Biogeography [8], Genetic types [9], Morphometric analyses [10], Morphospecies [11], Polar waters [12], Ribosomal DNA [13]
R�sum� en anglais	<p>Eight SSU rDNA genetic types have been described in the planktonic foraminifera <i>Neogloboquadrina pachyderma</i>, but the level of correlation between genetic diversity and morphological variation remains unknown in this morphospecies. In this study, we combine molecular and morphometric analyses of specimens of <i>N. pachyderma</i> sampled during two consecutive years across a latitudinal gradient in the Indian sector of the Southern Ocean. We observe that three genetic types of <i>N. pachyderma</i> inhabit the (sub-)polar waters of the southern Indian Ocean where they have equivalent regional distributions to those previously observed in the South Atlantic. The geographic ranges of these genetic types are largely overlapping. Our morphometric data show that contrary to other planktonic foraminiferal morphospecies, there is no relationship between genetic diversity and morphological differentiation in at least two of the austral representatives of <i>N. pachyderma</i> (Type III and Type IV) despite a high morphological variability and large genetic distance between these types. These genetic types of <i>N. pachyderma</i> in the southern Indian Ocean thus constitute true cryptic species of planktonic foraminifera.</p>
URL de la notice	<a href="http://okina.univ-angers.fr/publications/ua18557">http://okina.univ-angers.fr/publications/ua18557</a> [14]
DOI	10.1016/j.marmicro.2018.10.001 [15]
Lien vers le document	<a href="https://www.sciencedirect.com/science/article/pii/S0377839817302086?via%...">https://www.sciencedirect.com/science/article/pii/S0377839817302086?via%...</a> [16]

**Liens**

- [1] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=32458>
- [2] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=32459>
- [3] <http://okina.univ-angers.fr/ralf.schiebel/publications>
- [4] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=32460>
- [5] <http://okina.univ-angers.fr/he.ho/publications>
- [6] <http://okina.univ-angers.fr/jmeilland/publications>
- [7] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=32461>
- [8] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=26756>
- [9] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=26754>
- [10] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=26757>
- [11] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=26753>
- [12] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=26755>
- [13] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=26758>
- [14] <http://okina.univ-angers.fr/publications/ua18557>
- [15] <http://dx.doi.org/10.1016/j.marmicro.2018.10.001>
- [16] <https://www.sciencedirect.com/science/article/pii/S0377839817302086?via%3Dihub>

Publié sur *Okina* (<http://okina.univ-angers.fr>)