



## Molecular phylogeny of the foraminiferal genus *Uvigerina* based on ribosomal DNA sequences

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### Résumé en anglais

*Uvigerina* is a common genus of benthic foraminifera, often used as a proxy for paleoclimate and paleoenvironment reconstructions. Better understanding of the phylogeny of *Uvigerina* would improve its proxy value and would allow us to check whether its different morphospecies are real species or ecophenotypes only. Here, we used partial small-subunit ribosomal DNA (SSU rDNA) sequences to examine the phylogenetic relationships within *Uvigerina* and between this genus and other rotaliids. Our analyses show that the family Uvigerinidae forms a well supported clade branching as a sister group to Bolivinidae and Cassidulinidae. Studied individuals of Uvigerinidae include three species described as *Uvigerina* - *U. mediterranea*, *U. elongatastriata* and *U. peregrina* - as well as *Rectuvigerina phlegeri* and *Trifarina earlandi*. As *U. peregrina* is more closely related to *R. phlegeri* and *T. earlandi* than to the other two *Uvigerina*, the taxonomic status of these species needs to be revised. At the intraspecific level, we studied a morphologically highly variable population of *U. peregrina* from the Oslo Fjord. For the sequences obtained from this population of *U. peregrina*, we found almost no divergence inside the internal transcribed spacer (ITS), which is the most variable part of ribosomal DNA. This indicates a high morphological plasticity of *Uvigerina* species, which should be taken into consideration when using this genus as a proxy in paleoecological reconstructions.

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**Liens**

- [1] <http://okina.univ-angers.fr/magali.schweizer/publications>
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=6628](http://okina.univ-angers.fr/publications?f[author]=6628)
- [3] [http://okina.univ-angers.fr/publications?f\[author\]=6830](http://okina.univ-angers.fr/publications?f[author]=6830)
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