

## **A new evidence of passing the Maastrichtian–Paleocene boundary by larger benthic foraminifers: The case of *Elazigina* from the Maastrichtian Tarbur Formation of Iran**

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We describe a new Maastrichtian species of the benthic foraminifer *Elazigina siderea* from Tarbur Formation. Its main characters are the presence of heavy feathered umbilical sutures, a wide umbilical plug, and umbilical piles. This species, formerly reported from Turkey as *Smoutina cruysi*, constitutes the oldest known record of the genus *Elazigina*. *Elazigina siderea* sp. nov. comes from the Arabian domain and its presence is probably related to the migration of the Cretaceous foraminifer *Orbitokathina*. Prior to this study, the oldest representatives of this genus were only known from the Paleocene. Therefore, the presence of the new taxon in the Maastrichtian suggests the genus *Elazigina* passed the Cretaceous–Paleogene boundary, and survived to the environmental crisis associated with a great biosphere mass extinction that wiped out most of the Late Cretaceous larger foraminifers. This is supported by shell features displayed by *Elazigina siderea* sp. nov., interpreted as adaptation to thrive under elevated trophic levels, like the species of another benthic foraminifer *Laffitteina*.

**Key words:** Foraminifera, Globothalamea, Rotaliida, extinction, Cretaceous, Iran.

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