https://doi.org/10.35463/j.apr.2022.01.05 ACTA PALAEONTOLOGICA ROMANIAE (2022) V. 18 (1), P. 49-50

LARGE BENTHIC FORAMINIFERA *PFENDERICONUS GLOBULUS* SIREL & DECEVILER IN SIREL ET AL., 2020 (PRIABONIAN OF TURKEY): A JUNIOR SYNONYM OF *PFENDERICONUS MINDANAOENSIS* MATSUMARU, 2017 (THANETIAN? OF THE PHILIPPINE ARCHIPELAGO)

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Received: 6 September 2021 / Accepted: 27 September 2021 / Published online: 4 October 2021

Abstract *Pfendericonus mindanaoensis* Matsumaru, 2017 from the Thanetian? of the Philippine Archipelago and *Pfendericonus globulus* Sirel & Deceviler (in Sirel et al. 2020) from the Priabonian of Turkey display the same internal structure, similar dimensions and both are characterized by possessing wedge-like adult chambers. These species are thus considered synonymous and therefore based on priority date of publication, *P. globulus* should be considered a subjective junior synonym of *P. mindanaoensis*.

Keywords: Foraminifera, conical agglutinated taxa, taxonomy, synonymy, Paleogene

INTRODUCTION

The genus *Pfendericonus* represents an exclusively Paleogene genus within the group of agglutinated conical foraminifera (Hottinger & Drobne, 1980). Within this group, *Pfendericonus* represents a comparatively simply structured taxon (e.g. lacking exoskeleton). Originally it was described as a subgenus of *Chrysalidina* later elevated to genus status by Loeblich & Tappan (1987). The type-species is *Lituonella makarskae* van Soest, 1942 from the Eocene of Croatia. A second species was introduced by Hottinger & Drobne (1980) as *Chrysalidina* (*Pfendericonus*) *kahleri* from the late Paleocene-early Eocene of Pakistan. Both species are high-spired (height-diameter ratio H/D > 1), but *P. makarskae* has a larger test and higher number of both chambers and pillars. In Recent times, two new species of globular test morphology (H = D) have been described as *Pfendericonus mindanaoensis* by Matsumaru (2017) and *Pfendericonus globulus* by Sirel & Deceviler in Sirel et al. (2020). The present contribution deals with these two species concluding that no characters were found for distinction hence proposing their synonymy

MICROPALEONTOLOGIC PART

Pfendericonus mindanaoensis Matsumaru 2017

Fig. 1a-b

This species was described by Matsumaru (2017) from the Island of Mindanao, Philippine Archipelago and two specimens were figured. The two illustrated specimens of *Chrysalidina* sp. (Matsumaru, 2017, pl. 4, figs. 10-11) are here also considered to belong to *P. mindanaoensis*. The description includes a low-conical test (almost globular; diameter up to 1.36 mm) displaying wedge-like chambers and a test diameter up to 1.36 mm. The age was indicated as Selandian (= "Tertiary a0 stage of larger foraminifera" senus Matsumaru). Comparing the assemblage of this stage which includes species such as *Broeckinella arabica* Henson (=? Vania *anatolica* Sirel & Gündüz), *Coskinon rajkae* Hottinger & Drobne, *Idalina sinjarica* Grimsdale (Assemblage 2 in Matsumaru, 2017), a Thanetian age is more likely (e.g., Pignatti et al., 2008; Di Carlo et al., 2010).

Pfendericonus globulus Sirel & Deceviler in Sirel et al. (2020)

Fig. 1c-d

This species was described by Sirel & Deceviler in Sirel (2020) from the Priabonian of northwest Turkey. The description includes a subspherical (globular) test (diameter up to 1.2 mm), wedge-like chambers and "incomplete spur-like septa". Other occurrences were reported from the early Oligocene of Turkey.

The following synonymy is adopted herein for *Pfendericonus mindanaoensis*:

Genus *Pfendericonus* Hottinger & Drobne, 1980

Type-species: *Lituonella makarskae* van Soest, 1942

Pfendericonus mindanaoensis Matsumaru, 2017

2016 *Pfendericonus* aff. *makarskae* van Soest – Serra-Kiel et al., p. 54, fig. 40.8-40.15.

*2017 *Pfendericonus mindanaoensis* n. sp. – Matsumaru, p. 146, pl. 4, figs. 8-9, 10-11 (as *Chrysalidina* sp.).

2020 *Pfendericonus globulus* n. sp. – Sirel & Deceviler in Sirel et al., p. 12, fig. 5pars, fig. 6E-F, fig. 11A-J.

CONCLUSIONS

Since no characters were found to clearly distinguish the two species, *P. globulus* is herein considered to be a junior synonym of *P. mindanaoensis*. Besides the occurrences in the western Pacific realm (Philippine Archipelago) and northwestern Turkey, this species might also be present in the Eocene (Bartonian-Priabonian) of Oman

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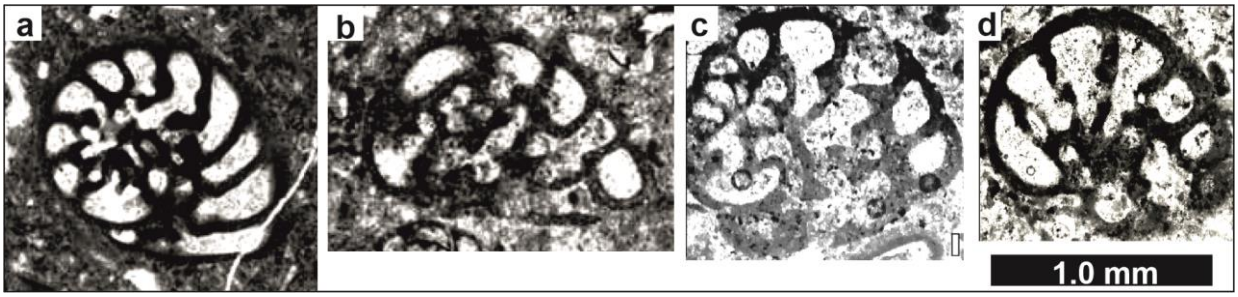

Fig. 1 a-b *Pfendericonus mindanaoensis* (from Matsumaru, 2017, pl. 4, fig. 11, figured as *Chrysalidina* sp. and pl. 4, fig. 8, holotype specimen) of Selandian or Thanetian age from the Island of Mindanao, Philippine Archipelago. **c-d** *Pfendericonus globulus* Sirel & Deceviler (from Sirel et al., 2020, fig. 11I and 11J) from the Priabonian of NW Turkey.

where it has been recorded as *Pfendericonus* aff. *makarskae by Serra-Kiel et al. (2016, p. 55: "possible* attribution to a new species"). The comparably long stratigraphic range (Selandian?-Thanetian? to early Oligocene) is striking, also the lack of any data from the early Eocene.

ACKNOWLEDGMENTS

The two reviewers Lorenzo Consorti (Rome) and Francois Le Coze (Saint-Étienne) provided helpful comments. Michael Sandy (Deyton/Rakovski) shaped up the English.

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