

Taxonomic note – New Upper Cretaceous nannofossil taxa from the Turonian of New Mexico, USA

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1. Introduction

As part of a study on the nannofossils of the Western Interior Seaway (USA), we discovered assemblages that we interpreted as shallow-water (possibly hyposaline- and/or turbidity- and/or instability-tolerant) pioneers of the Turonian marine transgression, in a core from the San Juan Basin of New Mexico (Schueth & Lees, 2019). These assemblages—which had been remarked on previously by Howe *in* Sikora et al. (2004), although the new taxa were never described—were unusual in initially having low diversities and being dominated by holococcoliths, including new species. Alongside these were several new and seldom-reported heterococcolith taxa. Up-section, these assemblages gave way to the typically diverse, cosmopolitan, open-marine nannofloras of the Coniacian and Santonian.

Here, we provide the holotype images of our new taxa (that were described in Schueth & Lees, 2019), along with illustrations of the rarely-reported, potentially shallow-water taxa in the assemblages.

2. Taxonomic list

Ahmuellerella frankiae Lees, Schueth & Howe *in* Schueth & Lees, 2019

Bifidalithus geminicatillus Varol, 1991

Braarudosphaera bigelowii (Gran & Braarud, 1935) Deflandre, 1947

Calculites anfractus (Jakubowski, 1986) Varol & Jakubowski, 1989

Gartnerago waszczakii Lees, Schueth & Howe *in* Schueth & Lees, 2019

Orastrum colligatum Henderiks & Ziveri, 1997

Orastrum schollei Lees, Schueth & Howe *in* Schueth & Lees, 2019

Pharus clarescopoli Lees, Schueth & Howe *in* Schueth & Lees, 2019

Saepiovirgata biferula Varol, 1991

Tortololithus caistorensis Crux *in* Crux et al., 1982

Wisea Lees, Schueth & Howe *in* Schueth & Lees, 2019

Wisea sanjuanensis Lees, Schueth & Howe *in* Schueth & Lees, 2019

References

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Plate 1

