Discoaster salisburgensis Stradner (1961) *var. villosus* Bralower & Self-Trail (2016)

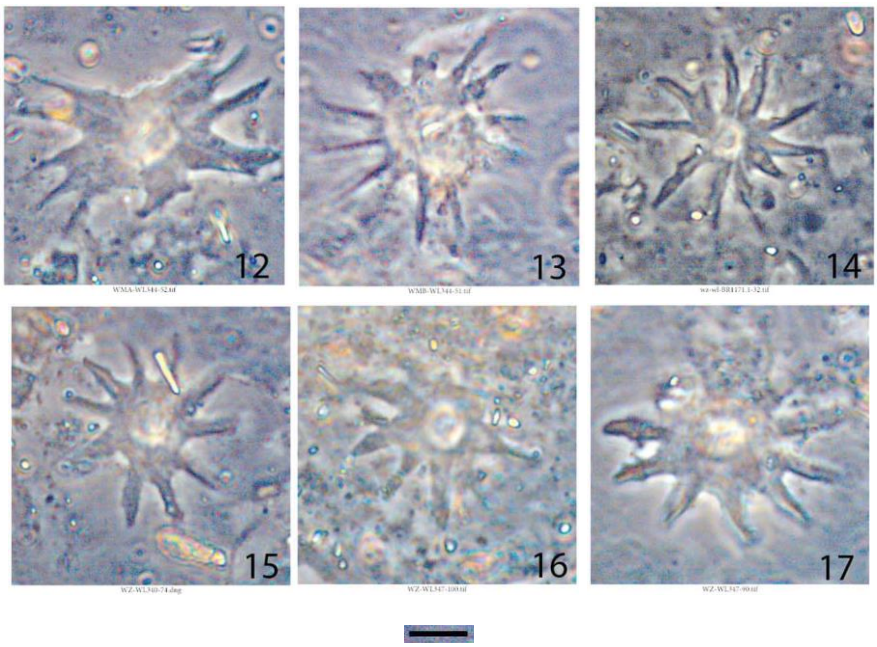

Fig. 4, 12-17

Figure 4, 12–17. *Discoaster salisburgensis* var. *villosus* var. nov. 12, 13. WL344ft; 14. BR1171.1ft; 15. WL340ft; 16, 17. WL347ft. All images taken in phase contrast light, magnification 1250X. Scale bar in plate 21 is 5 μm.

Derivation of Name: From the Latin *villosus*, meaning shaggy, referring to the unkempt appearance of the irregularly shaped rays.

Description: *Discoaster salisburgensis* var. *villosus* is a medium to large *Discoaster* that has 10-14 asymmetrically spaced, sharply tapering rays with a variable free ray length that can be ½ to 2/3 of the total ray length. Some rays have the appearance of being partially melded together and some rays appear to bend into a different plane, making photography difficult (Fig. 4, 17). A prominent knob is present on one side of the nannolith.

Differentiation: *Discoaster salisburgensis* var. *villosus* var. nov. most closely resembles *D. salisburgensis* var. *anartios*, which also has irregularly shaped rays and a prominent knob. However. *D. salisburgensis* var. *anartios* has more rays (15-20) and the free ray length is significantly less than that exhibited by *D. salisburgensis* var. *villosus* var. nov.

Holotype: Fig. 4, 14.

Paratype: Fig. 4, 13.

Type Locality: Bass River core, New Jersey, USA

Type Level: Lower Eocene, 1171.1 ft. (Zone NP10)

Occurrence: Lower Eocene, Zones NP9b and lower NP10; South Dover Bridge (MD), Wilson Lake (NJ), and Bass River (NJ) cores.

Bralower, T.J. & Self-Trail, J.M., 2016. Nannoplankton malformation during the Paleocene–Eocene Thermal Maximum and its paleoecological and paleoceanographic significance. *Paleoceanography & Paleoclimatology,* **31(10):** 1423-1439.