

**Pseudoamorphous organic material in palynological preparations from Mesozoic & Cenozoic sediments
in the North Sea, Norwegian Sea and Barent Sea**

**David Bailey
BioStrat Limited**

Abstract

Amorphous organic material in palynological and palynofacies samples is generally accepted to be structureless in transmitted light microscopy, being the byproduct of bacterial degradation of marine phytoplankton under dysoxic or anoxic conditions. However, most palynodebris illustrated as AOM in published articles is not consistent with this definition. Evidence is presented to demonstrate that these particles, or groups of particles are not structureless, but possess consistent morphological features and show a strong similarity to the protonemas and young gametophytes of modern bryophytes.