

Practice Quiz for Lecture 9

Latin and Greek in Scientific Terminology

Identify ten words from Latin or Greek in the following passage, breaking them down into their constituent parts and providing the definition of each stem (2 marks per word regardless of length).

Note: The *-ed* suffix is from Old English and can be omitted; it is added to nouns to mean 'having', 'possessing', 'affected by', or 'characteristic of' (e.g. for *reproduced* you need only account for re- + pro- + DUC-).

- Steart, David C., Alan R.T. Spencer, Russell J. Garwood, Jason Hilton, Martin C. Munt, John Needham, and Paul Kenrick. 2014. 'X-Ray Synchrotron Microtomography of a Silicified Jurassic Cheirolepidiaceae (Conifer) Cone: Histology and Morphology of *Pararaucaria collinsonae* Sp. Nov.' *PeerJ* 2 (October): e624. doi:10.7717/peerj.624.

We document a new species of ovulate cone (*Pararaucaria collinsonae*) on the basis of silicified fossils from the Late Jurassic Purbeck Limestone Group of southern England (Tithonian Stage: ca. 145 million years). Our description principally relies on the anatomy of the ovuliferous scales, revealed through X-ray synchrotron microtomography (SRXMT) performed at the Diamond Light Source (UK). This study represents the first application of SRXMT to macro-scale silicified plant fossils, and demonstrates the significant advantages of this approach, which can resolve cellular structure over lab-based X-ray computed microtomography (XMT). The method enabled us to characterize tissues and precisely demarcate their boundaries, elucidating organ shape, and thus allowing an accurate assessment of affinities. The cones are broadly spherical (ca. 1.3 cm diameter), and are structured around a central axis with helically arranged bract/scale complexes, each of which bares a single ovule.

o. *at/tent/ion/al*: 'to' + 'to hold' + 'state of' + 'pertaining to'

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.