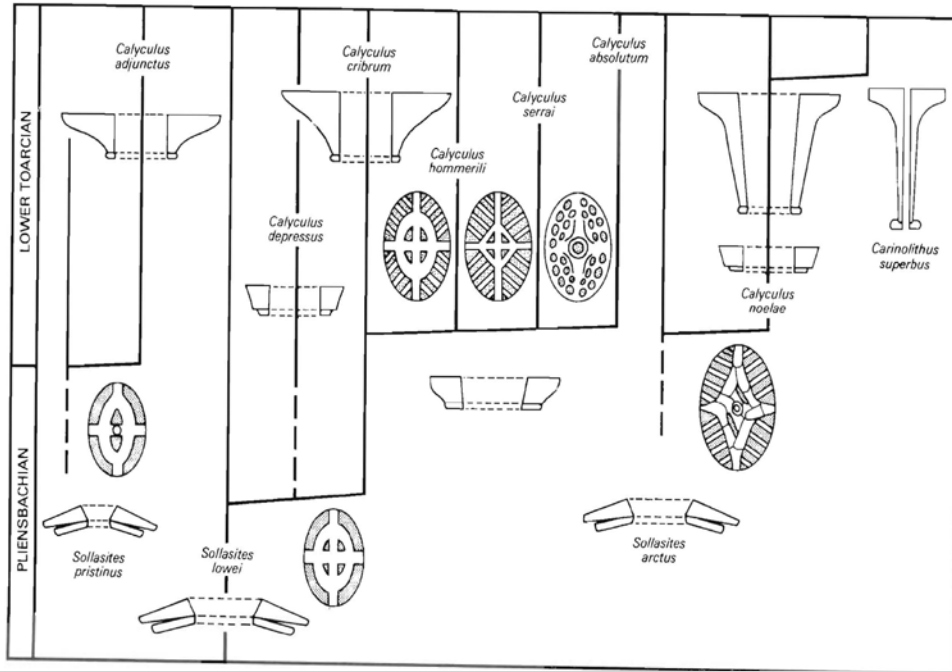
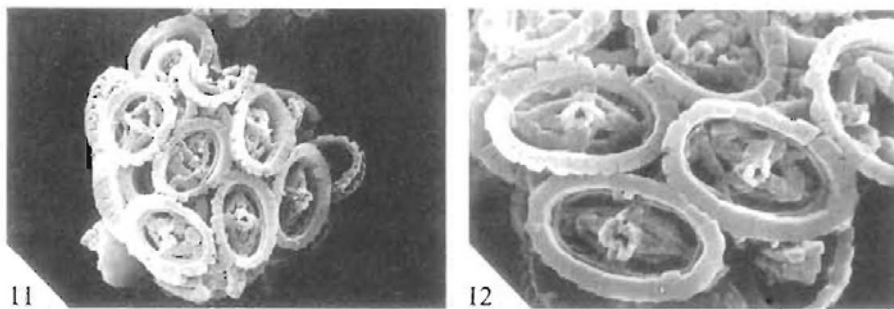


46. *Calyculus depressus* Bown (1987)



TEXT-FIG. 15. The polyphyletic evolution of *Calyculus*.

text-fig. 15



Pl. 7, figs 11 and 12;

**Diagnosis.** A small species of *Calyculus* with a narrow rim, only slightly extended vertically, and possessing a central area spanned by a cross and two curving longitudinal bars; the coccosphere is monomorphic.

**Description.** The thin, relatively high distal shield is formed from twenty-three elements; in distal view the elements are joined along radial sutures and in side view the sutures are initially vertical but bend to the left at their distal end, a feature typical of the *Calyculus* rim. The proximal shield is a thin, basal ring of around twenty elements,

spanned by a cross, bearing a central, hollow spine base, and two curving longitudinal bars. A collapsed coccosphere was observed bearing only one morphotype and comprising around twenty-five to thirty coccoliths.

**Dimensions.** L: (3.5)  $\mu\text{m}$ , W: (2.1)  $\mu\text{m}$ .

**Remarks.** A coccolith sharing the distinctive central complex of *S. lowei* and *C. cribrum* but which possesses a different rim structure possibly intermediate between the two. The evolutionary development from *S. lowei* to *C. cribrum* has been described by Crux (1987) and would involve a narrowing of the *Sollasites* rim followed by a vertical extension and distal flaring of the constituent rim elements. *C. depressus* represents a transitional rim type, which has considerably narrowed but only begun to extend vertically and shows very little distal flaring. *C. depressus* is similar to *C. hommerilii* (*Catillus hommerilii* Goy 1979) but lacks the additional lateral bars in the central area.

**Derivation of name.** From Latin *depressus*, low.

**Holotype.** UCL-2034-24 (PL. 7, fig. 11).

**Type locality.** Unterstürmig.

**Type level.** Lower Toarcian.

**Occurrence.** Trimeusel, *falciferum* Zone; Unterstürmig, Lower Toarcian.

Bown, P.R., 1987. Taxonomy, evolution, and biostratigraphy of late Triassic-early Jurassic calcareous nannofossils. *Special Papers in Palaeontology*, **38**: 1-118.