

Achomosphaera alaicornu
Corrudinium incompositum
Homotryblium floripes
Horologinella spinata
Lingulodinium machaerophorum
Operculodinium centrocarpum
Phthanoperidinium eocenicum
Systematophora placacantha

All of these species have been recorded from Late Eocene sections in south-eastern Australia.

The assemblage is placed in the Upper *N. asperus* zone because of the frequent occurrence of *Aglaoreidia qualumis* and *Kuylisporites waterbolki*, the presence of only the large variety of *Myrtaceidites verrucosus*, and the absence of species indicative of the Middle *N. asperus* zone.

Middle *Nothofagidites asperus* Zone - The assemblages from sidewall core 28 at 4400 feet and sidewall core 27 at 4600 are assigned to this zone. The shallower sample is commonly fossiliferous and contains a moderately diverse spore-pollen assemblage. Assignment of these samples to the Middle *N. asperus* zone is based on the occurrence of *Triorites magnificus* (found only in this zone), of *Tricolpites thomasi* (found most commonly in this zone), and of *Proteacidites rectomarginis* (not known to occur below this zone). In addition, the assemblage contains the following species that in the Bass Basin do not occur above the Middle *N. asperus* zone.

Bysmapollis emaciatus
Beaupreaidites elegansiformis
Proteacidites adenanthoides
Proteacidites crassis
Proteacidites incurvatus
Proteacidites leightonii
Proteacidites reticulatus
Santalumidites cainozoicus
Tripoporollenites helosus

Specimens of the following dinoflagellates occur also in the assemblage from 4400 feet.

Achomosphaera alaicornu
Eisenackia ornata
Lingulodinium machaerophorum
Operculodinium centrocarpum
Spinidinium sp.
Spiniferites cingulata
Spiniferites ramosa
Tectatodinium sp.

INTERPRETATIVE