

The best preserved assemblage is from the coal at 6208 feet from which specimens of *Proteacidites recavus*, *P. scitus* and *P. stipplatus* were recovered. Specimens of *Proteacidites annularis* and *P. obscurus*, however, represent the most commonly occurring proteaceous forms and *P. pachypolus* is very rare. The ratio of specimens of *Nothofagidites* spp. to those of *Haloragacidites harrisii* is 9 to 1, which depicts the abundance of the *Nothofagidites* pollen and also provides supplemental evidence for assigning this assemblage to the Lower *N. asperus* zone. Other species present and not known to occur below the Lower *N. asperus* zone in the Bass Basin are *Gothanipollis bassensis* and *Periporopollenites magnus*.

*Proteacidites asperopolus* Zone - The last (youngest) occurrences of *Intratroporopollenites notabilis*, *Periporopollenites polyoratus*, *Proteacidites grandis* and *Myrtaceaidites tenuis* are recorded in the assemblages from 6530 and 6608 feet. This fact, coupled with the presence of *Anacolosidites acutullus*, *A. oculatus*, *Drytopollenites semilunatus*, *Liliacidites bainii*, *Proteacidites alveolatus*, *P. obesolabrus*, *P. tuberculiformis* and *Tricolpites incisus* substantiate assignment of this interval to the *Proteacidites asperopolus* zone. In the shallower sample the ratio of *Nothofagidites* spp. to *Haloragacidites harrisii* is about 1 to 1, (compared to 9 to 1 at 6208 feet) although neither pollen is abundant and specimens of *Proteacidites pachypolus* are rare; in the deeper sample specimens of *H. harrisii* are more common than those of *Nothofagidites* spp. and specimens of *P. pachypolus* are quite frequent. No microplankton found in this zone.

Upper *Malvacipollis diversus* Zone - The assemblage from 6700 feet is placed conditionally in this zone mainly because it lacks forms indicative of the *P. asperopolus* zone. Rare specimens of *Myrtaceaidites verrucosus*, *Santalumidites cainozoicus* and *Tripurites spinosus*, species which occur initially (oldest) in the upper part of the Upper *M. diversus* zone, are present in the assemblage. Specimens of *Proteacidites pachypolus* are sparse as are those of *Nothofagidites* spp., whereas those of *Dilwynites* spp. are fairly common. The assemblage from 6700 can be no older than late Upper *M. diversus*, but it could be younger.

Middle-Lower *Malvacipollis diversus* Zones - Samples from 7075 to 7674 feet are sparsely fossiliferous with low species density, consequently the subdivision of the interval into definitive Middle and Lower *M. diversus* zones was not possible in Dondu-1. Preservation is fair to poor throughout the interval and more commonly the latter. Microplankton are present also in most samples.

The sample from 7075 lacks forms diagnostic of the Upper *M. diversus* zone such as *Myrtaceaidites tenuis*, *Proteacidites pachypolus* and *Santalumidites cainozoicus* but contains *Intratroporopollenites notabilis*, and *Spinozonocolpites prominatus*, which demonstrate that the assemblage can be no older than Lower *M. diversus*. Only two forms of dinoflagellates - *Diphyes colligerum* and *Areoligera* sp. - were found in the assemblage. The presence of *Proteacidites leightonii* leads one to favor a Middle rather than a Lower *M. diversus* zone assignment, but this evidence alone is inconclusive.