**FIRST RECORD OF *CAYTONIA* IN AUSTRALIA.** *Memoirs of the Queensland Museum 42(2): 448. 1998:-* An axis bearing two rows of shortly stalked ovule-bearing cupules and attributable to *Caytonia* has been observed in Lower Jurassic sandstones belonging to the Marburg Formation, at Durikai in SE Queensland. Support for the identification is provided by impressions of *Sagenopteris rhoifolia* in the same beds (Hill et al., 1966). Though not as yet found in organic connection *Caytonia* and *Sagenopteris* regularly co-occur and are usually regarded as being the seed-bearing organ and foliage of the same taxon (Taylor & Taylor, 1993).

Division PTERIDOSPERMAPHYTA
Order CAYTONIALES H.H. Thomas
Family CAYTONIACEAE Pilger & Melchior

**Caytonia tierneyi** sp. nov.

*Etymology.* For Paul Tierney the collector.

*Material.* Holotype: QMF39005, Durikai 38°12'S, 151°37'E. Paratype: QMF35881, same locality.

*Diagnosis.* An unbranched axis bearing two rows of alternating co-planar, shortly stalked, transversely elliptical cupules each bearing several ovules.

*Description.* Axis at least 11.5mm long bearing two rows of cupules each about 1.0-1.2mm x 2.0mm, borne on stalks up to 1mm long. Both axis and cupule stalks have a median groove on their abaxial surfaces. (Figs 1, 2).

*Remarks.* The new species differs from others of *Caytonia* in that the cupules are elliptical rather than spherical and are arranged alternately instead of oppositely or suboppositely on their axis (Thomas, 1925).

FIG. 1. Inflorescence of *Caytonia tierneyi* sp. nov. with one cupule containing ovules. Holotype QMF39005. Scale bar 1mm.

FIG. 2. Mould of an inflorescence of *Caytonia tierneyi* sp. nov., Paratype QMF35881. Scale bar in mm.

## Acknowledgements

Natalie Camilleri and Alex Cook are thanked for the photographs.

## Literature Cited

HILL, D., PLAYFORD, G. & WOODS, J.T. 1966. Jurassic fossils of Queensland. (Queensland Palaeontographical Society: Brisbane).

TAYLOR, T.N. & TAYLOR, E.L. 1993. The biology and evolution of fossil plants. (Prentice Hall: Edgewood Cliffs).

THOMAS, H.H. 1925. Caytoniales, a new group of angiospermous plants from the Jurassic rocks of Yorkshire. Philosophical Transactions of the Royal Society of London 213B: 299-363.

*H. Trevor Clifford, Queensland Museum, PO Box 3300, South Brisbane 4101, Australia; 10 March, 1998.*