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Fossil Plants FROM THE BOULIA DISTRICT, WEST QUEENSIAND.



by

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Fossil plants were collected by the Georgina Party in 1957 from localities B 196, B 349, B 404, B 417, B 524 on the Boulia four mile sheet and from locality G II on the Glenormiston four mile sheet. All localities are in the Boulia Shire. Numbers referred to are plotted on the individual aerial photographs and appear on the photoscale compilation sheets of the Boulia and Glenormiston four mile sheet areas. Specimens are housed in the Bureau's museum, Canberra.

I. Locality B 196 from Wilgunya Formation, photo 5087, run 14, near No. 3 bore, Lucknow.

Indeterminate wood impressions.

2. Locality B 349 from Strathelbiss Sandstone, photo 5153, run 12, 6 miles north of Strathelbiss homestead.

Blocks of very well preserved fossil wood were collected from this locality. Microscope sections were made to investigate internal structure. These showed the wood to be of Conifer type with very regular arrangement of tracheids. Annual rings are clearly seen. Medullary rays one cell wide and several cells deep occur throughout the wood. There are no resin canals. In longitudinal section the bordered pits on the tracheid walls appear to be in single rows and not much compressed.

Wood of this type cannot be used for age determination as it is of the general type found in Coniferous plants from late Palaeozoic to Recent times.

3. Locality B 404 from Longsight Sandstone, photo 5109, run 4, at Herrods Tank, Buckingham Downs.

This specimen contains several leaves of Taeniopteris spatulata McClelland. This is a plant most characteristic of Jurassic strata, but it occurs as well in Upper Triassic and survives into Cretaceous beds in the Styx River Series in Queensland.

4. Locality B 417 from Longsight Sandstone, photo 5047, run 14, from the bottom of a well near Sandy Creek bore, Herbert Downs.

The specimens from this locality are indeterminate.

5. Locality B 524 from Longsight Sandstone, photo 5109, run 4, Herrods Tank.

The following plants are identified from this locality:-

a. Cladophlebis australis (Morris).

Some of the very large and well preserved fronds of this fern might be referred to cf. Cladophletis distans or cf. C. Huttoni, but the smaller examples mingled with them are typically Cladophletis australia and there is no reason to suppose that the larger are a different species. There is characteristically a great deal of variation in size and form of fern pinnules in any species.

Cladophlebis australis (Morris) is a most characteristic plant of Jurassic strate. It occurs as well in the Late Triassic and persists into Cretaceous beds in the Styx River Series in Queensland.

b. Elatocladus cf. plana (Feist).

Purely vegetative fronds of this type have a wide range from Late Triassic to Cretaceous strata, and are therefore of little value for age determination.

- c. Small triangular cone scale or seed. Indeterminate.
- d. Indeterminate round seeds which may be of a Cycad type.
- e. Indeterminate stems, wood and plant fragments.

The age of the plant assemblage in B 524 could be Late Triassic, Jurassic or Lower Cretaceous.

6. Locality G II from Longsight Sandstone, photo 5109, run 3 Glenomiston, east of Smoky Creek.

At this locality Elatocladus of plana Felst. occurs with Taeniopteris spatulata McClelland and indeterminate round seeds. There are also indeterminate wood and stem impressions. These plants indicate a Late Triassic or Jurassic or Lower Cretaceous age.