COMMONWEALTH OF AUSTRALIA.

DEPARTMENT OF NATIONAL DEVELOPMENT.

BUREAU OF MINERAL RESOURCES GEOLOGY AND GEOPHYSICS.

RECORDS.

REPORT ON 1962 PLANT FOSSIL COLLECTIONS

by

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SUMMARY

I Samples from the Duaringa area Queensland collected from nine localities have been examined. The samples from the localities 1-6 and 9 contain plant fossils of Upper Bowen Coal Measures age. The fossil plants found at locality 7 suggest a Triassic age. At locality 8 a questionable fragment of Glossopteris was found and suggests a Permian age in general.

II Six samples from the East Bowen Basin have been examined, the samples 2 and 6 are indeterminate. The samples 1 and 3-5 contain plant fossils of Permian age.

III Plant fossils were collected at 14 localities in the Sarina region of Queensland by R. Jensen and party in 1962. All determinate plants are of Permian age. Tentative separation of Upper and Lower Bowen is made in some cases and the evidence on which the separation is made is discussed in each case.

IV Plant fossils from core 15 (6230-6230'4") of A.A.O. Westgrove No. 1 Queensland, indicate a Permian Age.

I. PLANT FOSSILS FROM THE DUARINGA 1:250,000 SHEET AREA, QUEENSLAND, COLLECTED BY E.J. MALONE AND PARTY, 1962

1. Locality 262: 8 m. N. of Melmoth Homestead.
Upper Bowen Coal Measures.

Specimens F 22172

Glossopteris angustifolia Bgt.
Cladophlebis roylei Arber
Glossopteris indica Sch.
Glossopteris conspicua Feist.

A typical Upper Bowen assemblage.

2. Locality 279: 1 m. E.N.E. of Melmoth Homestead.
Upper Bowen Coal Measures.

Specimens F 22173.

Glossopteris angustifolia Bgt.
Glossopteris conspicua Feist.
Modified leaves and scale leaves of G. angustifolia.
Vertebraria indica Royle.
Equisetalean stems.

3. Locality 756: 4 m. S.S.E. of Melmoth Homestead.
Upper Bowen Coal Measures.

Specimens F 22174 and F 22174 (a)

Glossopteris indica Sch.
Glossopteris angustifolia Bgt.
Glossopteris conspicua Feist.
Glossopteris jonesi Walk.
Cladophlebis roylei Arber.
Glossopteris damudica ?
"Dictyopteridium sporiferum" a male Glossopteris fructification.
F 2214(a) Taeniopteris sp.?

Glossopteris jonesi Walk. is a species very close to Taeniopteris. The Taeniopteroid tendency occurs in Upper Permian Glossopteridae. The Taeniopteris sp.? identified in specimen F 22174(a) might possibly be only the mid section of a leaf of G. jonesi.

The presence of Taeniopteroid forms and G. conspicua indicates Upper Permian age.

The "Dictyopteridium sporiferum" is a long, narrow organ whose surface is covered with circular sporangia. It is the same as examples from the Baralaba Coal Field which occur with Cistella bowenensis sp. nov. (White, MS) and may also be regarded as indicating Upper Permian age.

4. Locality 760 C: 3 m. N.N.W. of Melmoth Homestead.
Upper Bowen Coal Measures.

Specimens F 22175.

Equisetalean stems.

No age determination possible.

5. Locality 775: 5 m. W.S.W. of Melmoth Homestead.
Upper Bowen Coal Measures.

Specimens F 22176

Cladophlebis roylei Arber.
Glossopteris angustifolia Bgt.
Glossopteris conspicua Feist.

Upper Permian forms.

6. Locality 795: 6 m. N.W. of Melmoth Homestead.

Upper Bowen Coal Measures.

Specimens F 22177.

Glossopteris angustifolia Bgt.
Glossopteris indica Sch.
Cladophlebis roylei Arber.

7. Locality 291 a and c. Head of Springton Creek,
about 14 m. S.S.W. of Dingo.

Specimens F 22178

Fragmentary plant remains are present. The following are tentatively identified:

Equisetalean stems.
Danaeopsis sp. ?
Seed.
Cone Scale.
Linguifolium denmeadi ?
Conifer foliage.
Dicroidium Feistmanteli ?

Although the specimens are poor, the weight of evidence suggests Triassic age.

8. Locality 265:

Specimens F 22179.

Equisetalean stems.
? Glossopteris fragment.

Age ? Permian.

9. Locality 758: 1 m. S.S.W. of Melmoth Homestead.
Upper Bowen Coal Measures.

Specimens F 22180

Glossopteris indica Sch.
Glossopteris ampla Dana.
Glossopteris ampla scale leaves
Glossopteris angustifolia Bgt.
Glossopteris browniana Bgt.
Cladophlebis roylei Arber.
Equisetalean stems.
Samaropsis seeds ?.

Typical Upper Bowen assemblage.

II. PLANT FOSSILS FROM THE EAST BOWEN BASIN COLLECTED BY A.R. JENSEN AND PARTY, 1962

1. Locality P 93 F. *Glossopteris* fragments.
Equisetalean fragments.
Age Permian.

2. Locality P 45 F. Equisetalean fragments.
Indet. venation fragments.
Age indeterminate.

3. Locality P 22 F. *Glossopteris* fragments.
Vertebraria indica Royle.
Age Permian.

4. Locality M 654 F. *Glossopteris* cf. *G. intermittens* Feist.
Equisetalean stems and fragments.
Probably *Schizoneura australis* (some fragments resemble split pseudo-leaves).
Age Permian. If *Schizoneura australis* is present an Upper Permian age is indicated.

5. Locality M 604 F. Equisetalean fragments.
Seeds (? *Samaropsis*)
? *Glossopteris* venation fragments.
Age probably Permian.

6. Locality P 6 F. Indeterminate.

III. PLANT FOSSILS FROM THE MACKAY AND PROSERPINE 4-MILE AREAS, EAST BOWEN BASIN, COLLECTED BY A.R. JENSEN AND PARTY, 1962

Details of localities and identifications of fossils are as follows:-

1. Locality M 572: Mackay 4-mile sheet, photo run 5, photo 93.

Specimens F 22266.

Glossopteris indica Sch.
Samaropsis seeds.
Equisetalean stems.
Equisetalean leaf sheaths, possibly of Schizoneura australis Eth. fil.

Age: Permian. If Schizoneura australis is correctly identified, an Upper Bowen age is indicated. The specimens are poorly preserved and there is some doubt about the identification.

2. Locality M 654: Mackay 4-mile sheet, photo run 7, photo 53.

Specimens F 22267.

Schizoneura australis Eth. fil. (?)
Glossopteris communis Feist.
Phyllotheca australis Bgt.
Glossopteris indica Sch.
Nummulospermum bowenensis Walk.

Age: Permian, ? Upper Bowen as in M 572 on identification of S. australis from poor material.

3. Locality M 140: Mackay 4-mile, photo run 2, photo 25.

Specimens F 22268.

Equisetalean stems.

Age: indeterminate.

4. Locality M 506: Mackay 4-mile, photo run 7, photo 55.

Specimens F 22269.

Indeterminate.

5. Locality M 675: Mackay 4-mile, photo run 7, photo 53.

Specimens F 22270.

Gangamopteris clarkeana Feist
Gangamopteris cyclopteroides Feist.
Equisetalean stems.
Nummulospermum bowenensis Walk.

Age: Permian. Lower Bowen ?

It is believed that Gangamopteris cyclopteroides Feist. does not occur in Upper Bowen. Large leaves unmistakably of the species are confined to Lower Bowen. Gangamopteroid leaves do occur in Upper Bowen. Some are fertile leaves of Glossopteris and others are examples of other species. In no instance have typical leaves of Gangamopteris cyclopteroides been found associated with plants indicative of Upper Bowen.

6. Locality M 751: Mackay 4-mile, photo run 4, photo 63.

Specimens F 22271.

Equisetalean stems.

Age: Indeterminate.

7. Locality M 754: Mackay 4-mile, photo run 3, photo 51.

Specimens F 22272.

These specimens are very poor.

Glossopteris ampla Dana.
Glossopteris indica Sch.
Noeggerathiopsis ?
Samaropsis dawsoni Shirley
Gangamopteris cyclopteroides ?
Equisetalean stems.

Age: Permian, ? Lower Bowen. The tentative identification of G. cyclopteroides suggests Lower Bowen. It was hoped that Samaropsis dawsoni, which was found in lower and not in Upper Bowen in previous collections might be used to separate Lower Bowen. However, these large seeds have been found in the Baralaba Coal Measures in Borehole N.S.2 associated with Upper Bowen forms (J.F. Dear, see File Q/1, 30th April, 1962).

8. Locality M 765: Mackay 4-mile sheet, photo run 2, photo 25.

Specimens F 22273.

Small Equisetalean stems
Indeterminate plant fragments.

Age: Indeterminate.

9. Locality P 40: Proserpine 4-mile sheet, photo run 8, photo 41.

Specimens F 22274.

Equisetalean fragments.

Age: Indeterminate.

10. Locality P 52: Proserpine 4-mile sheet, photo run 8, photo 43.

Specimens F 22275.

Noeggerathiopsis hislopi Bunb.
Equisetalean stems.
Glossopteris venation fragments.

Age: Permian, ? Lower Bowen. Noeggerathiopsis hislopi of the type present here has so far been found only in Lower Bowen collections of the Bureau. The species is a form species and not very satisfactory for close determination of age as similar forms (which may not, however, be even co-generic), range into Triassic.

11. Locality P 174: Proserpine 4-mile sheet, photo run 7, photo 55.

Specimens F 22276.

Equisetalean stems.

Age: Indeterminate.

12. Locality P 150: Proserpine 4-mile sheet, photo run 7, photo 57.

Specimens F 22277.

Equisetalean stems.

Noeggerathiopsis hislopi Bunb.
Samaropsis dawsoni Shirley

Age: Permian, ? Lower Bowen, on presence of typical Lower Bowen type of Noeggerathiopsis hislopi.

13. Locality P 153: Proserpine 4-mile sheet, photo run 7, photo 55.

Specimens F 22278.

Equisetalean fragments.

Age: Indeterminate.

14. Locality P 17: Proserpine 4-mile sheet, photo run 9, photo 13.

Specimens F 22279.

Equisetalean fragments.
Noeggerathiopsis ?
Glossopteris fragments.

Age: Permian ? Lower Bowen, on presence of typical L. Bowen Noeggerathiopsis ? but the specimens are poor.

IV. PLANT FOSSILS IN A.A.O. WESTGROVE NO. 1 BORE, QUEENSLAND

Plant fossils are present in Core 15 of Westgrove No. 1 Bore at a depth of 6230 feet to 6230 feet 4 inches.

Large well preserved leaves of *Glossopteris ampla* Dana indicate a Permian age for the fossil horizon.