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SOME COMMENTS ON "NOTES ON PLANT
FOSSIL IN CORE 18, PORT CAMPBELL
NO. 2 BORE" BY MARY E. WHITE

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PORT CAMPBELL NO.2 BORE" BY MARY E. WHITE.

(Mrs.?) Mary E. White in Bureau of Mineral Resources Records 1960/76 (Plant Fossils in Core 26, Rosedale No.1 Borehole Victoria) postulated a Middle - Upper Triassic/Rhaetic age for core from 5359-61'.

In commenting upon this (Vic. Mines Department Unpub. Report 1960/104) I was principally concerned with the validity of the reasoning for the Triassic dating, not the competency of the species determination, although the counterpart of the specimen in question is held here.

I am unable to have any opinion re the determination of Hoeggerathiopsis hislopi as no Port Campbell core 18 (8838'-40') sample in our store has yielded any fossil impressions other than minute carbonaceous remains probably attributable to plants. I am surprised that Dr. Fisher makes no mention of microfossil examination of this core, as confirmation or otherwise of the species determination might easily be thus obtained. A preparation from core 18 in these laboratories has yielded no acid insoluble microfossils but in view of the large amount of core recovered (16') it is quite possible that further sampling (now being undertaken) may reveal pertinent microfossils. The deepest Port Campbell No.2 marine microplankton isolated here are from 8562' and probably Cretaceous, but core from 8611-13' appears to belong to non marine Mesozoic Otway group sediments regarded as "Jurassic" or Lower Cretaceous (Cookson & Dettman 1958)

It must also be noted that Hedwell (1954) in postulating a Lower Jurassic age for Mesozoic non marine beds noted the presence of ^{individual} species indicating a Triassic age, and recent work in Eastern Victoria ("The Occurrence of Otozamites in Victoria" Mines Dept. Unpub. Rept. 1960/130) indicates that certain non marine Mesozoic deposits are pre Cretaceous.

However, the determination as Hoeggerathiopsis for the leaf impression from 8840' if confirmed would have an important bearing on the age determination, as this genus is characteristically a late Palaeozoic form. The determination is said to "leave little doubt as to its identity", but it must be pointed out that the very nature of the species makes confusion with typical Mesozoic species of similar form quite possible.

McCoy and other early workers confused similar Palaeozoic and Mesozoic leaves. Although (Mrs.) White in her second note has altered her original Permian determination to infer a Middle Triassic age on the basis of Indian occurrences (Lele 1955), other Australian occurrences of Noeggerathiopsis appear to be limited to the Palaeozoic.

In short the note may be a valuable contribution to age determination, but should be regarded at the present as a guide for further investigations until substantiated by further evidence.

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