

# ON THE OCCURRENCE OF FOSSIL INSECTS IN THE MESOZOIC ROCKS OF WESTERN AUSTRALIA

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Plate 46.

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## SUMMARY

A new insect-bearing horizon is placed on record. A beetle elytron, the pronotum of possibly the same species of beetle, and a cockroach forewing are described. The probable age of the sediments is discussed.

A small collection of insect fossils has been made in the Hill River area of Western Australia. As additional diagnostic material has not become available, the occurrence of this new insect-bearing horizon is placed on record. The only well preserved insect remains are beetle elytra. Impressions of other insects are fragmentary and not clearly defined.

Fossil insects have been obtained from the following localities:

Hill River, 1 mile sheet.

Grid reference 192521. Four beetle elytra and pronotum of a beetle.

191523. One beetle elytron and pronotum of a beetle.  
Forewing of a cockroach.

241550. One beetle elytron.

The cockroach forewing, F.52316, is too poorly preserved for specific description but it does show some diagnostic features. Sc was very short and apparently unbranched. The stem of R is almost straight after the initial basal curvature, and the branches of R are mostly simple. Such a combination of characters would place the species in the Mesoblattinidae and possibly in the genus *Austroblatulla*, described from the Triassic of Denmark Hill, Queensland. The Mesoblattinidae have a range from late Paleozoic to Jurassic.

As cockroaches are not known to occur in the Australian Permian, although other insect remains are common, a Triassic age seems most probable for the stratum on the basis of this one fossil.

Beetles occur first in Australia in the Upper Permian of Belmont, New South Wales, but are not common until the Triassic. As elytra are not one of the most diagnostic characters used in the classification of beetles, the classification of fossil elytra is rather arbitrary. One well preserved elytron from locality 191523 is compared with that of a species, placed in the genus *Mesothoris*, from the Triassic of Denmark Hill, Queensland. A well preserved pronotum is considered to be another part of the same fossil species.