spent considering the recommendations of a Termite Sub-Committee which had been set up at an early stage of the Conference. These recommendations stressed the urgent need for research work on termites, particularly in the Colonies.

During the course of the Conference, delegates visited Whipsnade, Rothamsted Experimental Station, the Pest Infestation Laboratory of the Department of Scientific and Industrial Research at Slough and the new entomological Field Station of the Imperial College of Science and Technology at Silwood Park. These visits, combined with certain social occasions, served to give delegates that chance of informal discussion which is perhaps the most valuable part of a conference of this nature.

FOSSIL FLORA OF KERGUELEN ISLAND

THE biological interest of Kerguelen Island (latitude 49° S., longitude 69° E.) has been well known to botanists since 1847, when the young Joseph Hooker, as junior surgeon in Ross's famous voyage to the Antarctic in the *Erebus and Terror*, contributed a description[1] of the botany of this island gained as the result of the expedition's first winter in the southern hemisphere (May–July, 1840). The extreme poverty of the flora was its most noticeable feature, only eighteen species of flowering plants having been found by Hooker, and of these only eight covered any considerable expanse of ground. These included the remarkable endemic crucifer, *Pringlea antiscorbutica* (the Kerguelen Island cabbage), and a peculiar umbellifer related to the 'balsam bog' of the Falkland Islands. In comparable latitudes in the northern hemisphere much richer floras were known to occur, the vegetation of Spitsbergen, for example, containing records in 1847 of forty-five species of flowering plants on a comparable area. This, coupled with the isolated position of the island in the middle of the Antarctic Ocean, almost equidistant from South Africa and from Australia, the presence of the endemics and the vegetational affinity with the even more distant Falkland Islands (off Cape Horn), are all problems of lively plant-geographical interest to us as to Hooker. Problems of equal interest are those raised by the very marked changes of climate which have occurred in these now desolate latitudes in fairly recent geological time. Hooker himself was profoundly impressed by seeing not only coal but also fossilized tree trunks of considerable size (one is specifically mentioned by Ross as 7 ft. in circumference), although the existing vegetation cannot boast even a shrub, still less a tree, and this circumstance was certainly one of the more powerful reasons which predisposed him to the immediate acceptance of the idea of evolution when it came.

The fossil woods brought back by the Ross expedition were not further investigated until 1921, when Edwards[2] of the British Museum identified them as coniferous. Shortly after this in 1934 Seward and Conway[3] identified araucarian twigs and cone scales in some macroscopic plant remains brought back by de la Rue in 1931. This material also contained the remains of a moss and some indeterminate fragments of dicotyledonous leaves and ferns.

An additional contribution is now available in the eighth part of vol. 2 (pp. 129–142) of the Reports of the British, Australian and New Zealand Antarctic Research Expedition of 1929–31, published at Adelaide, 1947, under the title of "Plant Microfossils from the Lignites of the Kerguelen Archipelago by Isabel C. Cookson" (price 4*s.* 6*d.*). This is one of the few applications of the pollen analysis technique to fossil floras of the southern hemisphere, and though carried out on very limited material the results add greatly to previous knowledge while holding out considerable hope of more to come.

As was to be expected from Seward and Conway and from Edwards, araucarian pollen predominates. This is, however, not the only gymnosperm present. Five distinguishable species, undoubtedly belonging to the Podocarpaceæ though of less certain generic identity within that family, are listed under the form genera of *Disaccites* (*Podocarpidites*), *Polysaccites* (*Microcachryidites*) and *Disaccites* (*Phyllocladidites*). Angiospermous pollen is also present though more sparingly, five species only being so far recorded, three of which appear to be dicotyledons and two monocotyledons. In contrast there are ten varieties of Pteridophyte spores, probably of ferns, but not identifiable generically. There are likewise two species of ascomycetous fruit body.

While the available information does not yet permit of a generalized palæoecological statement to be made of this most interesting region it seems clear that gymnosperms and ferns predominate in the lignites so far examined, the age of which is on that account thought to be Tertiary. It is greatly to be hoped that this work will be further extended by a systematic study of additional collections and through the whole thickness of the deposits.

[1] Ross, J. C., "A Voyage of Discovery and Research in the Southern and Antarctic Regions during the Years 1839–43" (London, 1847).
[2] Edwards, W. N., *Ann. Bot.*, **35**, 609 (1921).
[3] Seward, A. C., and Conway, V., *Ann. Bot.*, **48**, 715 (1934).

BIOLOGY AND CONTROL OF THE PEA MOTH

THE pea moth, *Laspeyresia nigricana*, Steph., is a widely distributed pest of garden and field peas in Great Britain and central and southern Europe, while in North America it has spread to all main pea-growing areas. In England the most severe losses occur in the pea-producing counties of Lincoln, Essex and Kent. D. W. Wright and Q. A. Geering, of the Horticultural Research Station and School of Agriculture, Cambridge, have published a useful paper on the biology and control of the pea moth (*Bull. Entom. Res.*, **39**, pt. 1, 57; 1948).

It appears that the moths show no special preference for ovipositing on or near the flowers or pods. The larva feeds on the young seeds in the pod and bores a hole through the pod-wall for the purpose of reaching its food. The hole heals over, however, in a few days, leaving a small blister. When fully grown the larva spins a thin, web-like cocoon immediately below the soil surface, wherein pupation takes place. The majority of the moths emerge before the end of July in the following year. Normally there seems to be only a single generation of this insect in Britain.

The trials that were carried out indicate that different varieties of peas differ widely in their