

LETTERS TO THE EDITORS

The Editors do not hold themselves responsible for opinions expressed by their correspondents. No notice is taken of anonymous communications.

Biological Research in the West Indies

At present, considerable interest is being evinced about development of the Colonies of the British Empire, particularly the West Indies. Plans have been, and probably still are being, made for utilizing the resources of the West Indies.

In 1939 I had the privilege of leading a strong scientific expedition to Jamaica and I returned with an idea which was shelved with the advent of war. In view, however, of the active developments now taking place, it would seem a proper moment to translate the idea into words. The Imperial College of Tropical Agriculture in Trinidad provides all that is required for training purposes in agriculture, forestry and animal husbandry, but the College is not intended to provide extensive facilities for general research in pure botany and zoology. A marine station exists in Bermuda, but it has, I believe, been closed for some years. In addition, there is the Carnegie marine station in the Tortugas, and a station under the control of Harvard University in the Panama zone.

The West Indies in peace-time are about our most accessible sub-tropical Colony, with a good service of boats and an excellent climate. The building of a tropical research station in this part of the globe would seem to be long overdue. At present most of the research work is being carried out by scientific workers from American universities, and while it may be agreed that the Caribbean is more truly their province, nevertheless the British West Indies look to Great Britain as their fountain-head. The present position, therefore, has many features which are to be deplored; but I believe that they could easily be rectified.

The proposed scheme envisages the building of a tropical research station in Jamaica, which it is hoped would be financed and controlled by a joint committee drawn from the staffs of British universities. The essential part of the scheme is the provision of special facilities and courses for undergraduates from any of the British universities. These courses would have to take place during the long vacations. It is hoped that shipping companies would provide concessions for such parties of students. Arrangements could also be made for members of the permanent staff to exchange for a year with biological lecturers from contributing universities, to the mutual advantage, it is hoped, of both. The station would have to combine research with teaching, and the staff would therefore be under an obligation to assist any of the West Indian schools. Courses comparable to those at Plymouth, Port Erin, Millport, would be arranged for senior schoolchildren during the shorter holidays at Christmas and Easter.

The research programme of the station would deliberately avoid problems in agriculture or animal husbandry, though it would certainly include fishery problems. The staff would be expected to devote themselves to research in pure botany and zoology: numerous problems are available in both these subjects. The proposed station could be described most satisfactorily as a combination of the marine laboratory at Plymouth and the botanical research station at Buitenzorg.

In order to provide the fullest possible scope both for research and teaching, it is suggested that the station be built in two parts, one part up in the Blue Mountains, perhaps on the disused site of the Cinchona station, or in the gardens at Castleton, while the other part would probably be best sited at Montego Bay or on the Pallisadoes. The mountain station would be under the control of a botanist and the lower one under the control of a zoologist. The distribution of staff might be arranged in the following manner:

Mountain station: Botanical director, entomologist, zoologist (reptiles and amphibians) and geneticist.

Lower station: Zoological director, oceanographer, algologist, marine zoologist and fishery expert.

In addition, there might be a floating staff consisting of a geologist, ecologist, mycologist, plant systematist, physiologist and experimental zoologist who would work at either station depending on their current problems. The number of these required would depend upon the scientific interests of the two directors.

It would be desirable for the Hope and Castleton gardens to come under the control of the botanical director, subject to the approval of the Government of Jamaica.

It is fully realized that this scheme is ambitious, and even if it is approved and started the complete staff might not be available for some time. In extenuation it may be pleaded that boldness at the outset is more likely to secure ultimate success. It might prove desirable that the Government of Jamaica, acting directly or indirectly, should contribute financially, but a fundamental part of the scheme is control by the British universities committee. Further discussion might indicate a desire from some of the Canadian universities to co-operate, and there are other details that remain to be worked out. The station is not intended to be a small technical university, nor is it meant to compete in any way with the Imperial College of Tropical Agriculture in Trinidad. A close liaison would inevitably exist between the station and the Institute of Jamaica.

The provision of such a station would give a great stimulus for research in the Caribbean and also at the same time an opportunity for future generations of scientific workers from the British Isles, Canada and the West Indies, to obtain at first hand knowledge of plants and animals which at present can only be provided by text-books.

Universities and Government are unlikely to approve finance for such a scheme at present, but if approval in principle is now given the details could be worked out and erection of the station could commence at the first favourable moment.

Broompark,
Oban, Argyll.

V. J. CHAPMAN.

Ribonucleic Acids in Animal Tissues

THE original view that ribonucleic acids (yeast nucleic acid, phytoneucleic acid) are to be found exclusively in plant tissues, and desoxyribonucleic acid (thymonucleic acid, animal nucleic acid) exclusively in animal tissues is now known to be no longer tenable.

Apart from the ribose mononucleotides and dinucleotides which are known to play an important part in the metabolism of animal cells, ribopolynucleotides (nucleic acids) have been detected histochemically in animal tissues¹, and one such ribo-