CONFERENCE ON CULTURE COLLECTIONS OF MICRO-ORGANISMS IN LONDON

A SPECIALISTS' Conference on Culture Collections of micro-organisms was held at the London School of Hygiene and Tropical Medicine between August 5th and 8th, 1947, and was attended by delegates from the United Kingdom, Australia, Canada, Eire, New Zealand, South Africa and the British Colonies. Suitable delegates from India were not able to be present, and it is with the object of informing Indian microbiologists of the recommendations made by the Conference that this article has been written.

The establishment of the "British Commonwealth Collections of Micro-organisms" was recommended as the first step to co-ordinate the activities of existing culture collection and to encourage the formation of new ones. A permanent committee is to be formed with its secretariat in London; each Dominion will be represented on the Committee, and overseas members will, where necessary, appoint deputies resident in England to attend meetings of the Committee.

National Committees are to be set up in each Dominion to carry out within their own countries the same co-ordinating work that the Permanent Committee does for the Commonwealth as a whole. It is desirable that members of these Committees should be scientists responsible for the day-to-day administration of the collections since many of the problems to be worked out will be technical. National or regional collections should be maintained and, where necessary, new ones developed to fulfil new needs. Collections may be required to supply organisms for one or more of the following purposes: teaching, both academic and applied research, and industrial processes. The Conference discussed at some length the advisability of having separate collections to serve different interests (agriculture, medicine, industry) but it was finally agreed that such a division was not desirable and that wherever possible a taxonomic classification should be used for separating the activities of collections so that one collection will maintain bacteria, another fungi, a third algæ, and so on. This will have the advantage that workers in a collection need be trained only in one branch of microbiology, and in this branch they will become more expert than workers who have to deal with several branches.

Culture collections should not be an end in themselves, they should be the means to an end. They constitute a wealth of material for research of all kinds; therefore the qualified staff should consist essentially of research workers enlisted for their drive and ability rather than their knowledge of taxonomic relationships which they will pick up quickly when working in a collection. Collections should be centred at research or teaching institutes and the widest possible contacts should be maintained with research workers outside the collections; in this way it may be possible to delegate the maintenance of certain groups of organisms to specialists so that the cultures sent out will carry the authority of recognised experts.

The National and Permanent Committees will assist collections by distributing technical information, especially that relating to the preservation of micro-organisms.

The compilation of catalogues of different collections will be encouraged by the National Committee and, with the object of preparing a Commonwealth Catalogue in loose-leaf form, a uniform page-size is to be adopted (the actual size will be decided by the Permanent Committee). Recommendations were made about the details to be included in the catalogue of bacteria and fungi. To make the collections better known to workers a directory of Commonwealth culture collections is to be prepared, and this will give information about the kind of micro-organisms maintained in each collection.

When a culture is sent to a collection it should be accompanied by a detailed description and a reprint of any published work on it. Acceptance of a culture is left to the discretion of the curator who will see that the culture received conforms to the description sent. If the donor is not sufficiently interested to prepare an adequate description it is unlikely that the organisms will be of value to a collection.

The framework of the British Commonwealth Collections of Micro-organisms Organisation is sufficiently flexible to allow changes to be made as they may be needed. What the Conference did was to provide a nucleus; it is up to the Permanent and National Committees, supported by the collections, to develop the plan; by hard work and active co-operation it can be made the greatest Collection of Collctions.

ATMOSPHERE ON MARS

HARVARD Observatory has announced that the first definite clue to the composition of Mars' atmosphere has been uncovered.

The amount of carbon dioxide is similar or greater than that found on earth, it was disclosed in a report from Director C. P. Kuiper of McDonald Observatory.

"It is quite a very important result," said Doctor Fred Whipple, Harvard Professor of Astronomy, "it means that, at last, we have some definite identification of the Martian atmosphere. All we knew before was that the atmosphere on Mars contained a small amount of moisture."

The discovery was made possible by the war-time development of an infra-red photocell, a sort of superscope. With this device, Kuiper reported that an infra-red spectrum of Mars was recorded at McDonald Observatory and the carbon dioxide "found to be present in an amount similar to that on earth". Because of the pressure effects on the band intensity, he said, the carbon dioxide content of Mars' atmosphere will actually be somewhat larger than that of the earth, if the total pressure on Mars is less than on earth, as is [illegible]"