

Tuberculosis in Cyprus

THE final report on investigations on tuberculosis in Cyprus, conducted by Dr. N. D. Bardswell for the National Association for the Prevention of Tuberculosis, has been issued (*Tubercle*, 20, 97, 165; 1939). An intensive study of the disease in the Larnaca district indicates that actually the incidence of pulmonary tuberculosis is low, 140 cases in a population of 42,000, with an average death-rate of 0.69 per 1,000 population. There is little non-pulmonary, and no bovine, tuberculosis, and the disease in distribution is sporadic and largely familial. These figures fall far short of estimates by the Cyprus authorities prior to the National Association's mission. The Cypriot has a high resistance to the disease, which appears to be transmitted to an unusual degree from one individual to another. This is dependent upon the national habits; families almost invariably live and sleep in one room, and, in winter, houses are always completely closed at night. The standard of living of the people is low and poverty almost universal, though the nutrition of the people appears to be adequate. Tuberculosis in the Larnaca district and in Cyprus generally, though low in incidence and benign in type, is difficult to control owing to the general conditions existing in the island. The most effective measures would be the establishment of dispensaries in various parts of the island, and of a small sanatorium for education and treatment of the more favourable cases. A comprehensive tuberculosis scheme on these lines is in process of organization.

The Government Laboratory

REPORTING on the work of the Government Laboratory for the year ending March 31, 1939, the Government Chemist, Dr. J. J. Fox, surveys the scientific work which is carried on at the laboratory in Clement's Inn Passage, at the Custom House, London, at the chemical stations at certain seaports, at the Geological Survey Museum, at the Office of Works Stores, and at the War Office Supply Reserve Depot, Deptford. Substantially more than half a million examples were dealt with, although the number was about seven thousand less than in the preceding year. As is well known, these samples are drawn from an extremely wide range of products; foodstuffs and medicinal substances are tested for purity and for conformity with specification; beverages, oils, etc., are assessed for duty, metals, coal, rubber, cement and many other materials purchased by Government Departments are submitted to examination, and expert assistance is rendered in the detection of fraud. In addition, the Government Laboratory makes a very substantial direct addition to chemical science as a result of the many investigations which its normal work necessitates, of its participation in international oceanic research, of the pure research work which is constantly in hand, and of the personal contributions of members of the staff to the deliberations of various councils and committees which deal with scientific and industrial problems.

Farm Electrification

THE recent trends in research and development which characterize farming to-day are discussed in an article contributed to the *Electrical Review* of September 15 by A. G. H. Dent. The types of farming in Great Britain are now very varied; there are few large fields of wheat and barley; but the average farm produces dairy produce, poultry, market gardening and livestock and a certain amount of grain for consumption by the livestock. The electrical authorities giving a supply to some areas have little difficulty in showing farmers that they can get an economic return by using electricity, but in other areas the problem is a difficult one. The cost of giving facilities to a farm at some distance from the supply may be high, and there may be little evidence of an annual return which would justify the authorities in giving these facilities. Notwithstanding drawbacks, the development of rural electrical supply in Great Britain has reached a position comparable with that in any other country. We are glad that the British Electrical and Allied Industries Research Association is now examining the standardization problem of supply to isolated farms and is putting into action schemes of experiment and research applied to various farm processes. These schemes cover both agricultural and horticultural experimental work. The plans of research are both technical and economic in character. They aim at establishing the best and most practical technique of doing a farming operation, the most suitable apparatus for the job and the proper method of application. On the economic side, the aim is to find the exact cost of the electrical method in comparison with other methods and to find out what modifications of practice are desirable to obtain the maximum efficiency from the electrical method.

Science and Fruit Growing

RECENT issues of the *American Fruit Grower* contain several brief announcements of successful applications of science to the fruit-growing industry. The issue for May describes the use of solidified carbon dioxide in addition to the usual wet ice for the cooling of strawberries during transit from Louisiana to New York. The new method saves 25-40 per cent in refrigeration costs, and has the additional advantage that the gas resulting from evaporation enhances the keeping quality of the fruit. Prof. M. A. Blake of the New Jersey Experiment Station shows, in the same issue, that stout vegetative growth of the apple shoot is more to be desired for fruit bud production than long slender shoots. The formation of such buds depends upon the presence in the wood of more starch and sugars than are utilized in growth and respiration. This excess cannot be stored while succulent or rapid growth continues, but only after growth in length is arrested. R. J. Cohen, in another direction, has used the oil from grapefruit seeds as a mordant in textile dyeing, whilst Dr. W. M. Neal has tested the residue from such seeds as a possible food for livestock. The