who must have reached the age of twenty-one, are entitled to use the abbreviation Grad.Inst.P. The grade is non-corporate and is intended to be the normal step to associateship of the Institute.

Soil and Climatic Factors in Plant and Animal Nutrition

THE first of the specialist conferences, recommended by the British Commonwealth Scientific Official Conference of 1946, was held in Australia in 1949 to consider "Plant and Animal Nutrition in Relation to Soil and Climatic Factors". A general report of the proceedings appeared in 1950; but the papers presented, together with the recommendations and resolutions passed, have now been published in full (pp. 490. London: H.M. Stationery Office, 1951; 20*s*. net). The various aspects considered cover a wide field, and some idea of their scope may be obtained from the titles of the five sessions held: review of present knowledge of the climatic and soil factors affecting nutrition of plants and animals; effects of specific soil and climatic factors on the nutrition of plants; nutritional problems of the animal as determined by plant and soil; pasture management; and influence of plant and animal on soil fertility. From the papers presented, it is evident that a wealth of information has already been obtained in each field; but in its recommendations the conference stresses the necessity for closer co-ordination of research if full use is to be made of the knowledge acquired and the gaps in that knowledge filled. In particular, the need for co-operation is urged between, on one hand, specialists in soil science, agronomy, plant physiology and biochemistry and, on the other, animal research workers. As a practical outcome of the deliberations, a number of specific lines of work which call for immediate investigation are suggested, together with outlines of the type of experiment which could be usefully conducted on a long-term basis.

Fall in World Malaria

WHEN the effectiveness of DDT against mosquitoes was realized, and particularly when the value of residual films of this insecticide was discovered, hopes were raised that at last a method had been found which would make possible the control of rural malaria at a practicable cost. A recent article by E. J. Pampana (*Bull. Org. Mondiale de la Santé*, 3, 557; 1951), written at the suggestion of the Executive Board of the World Health Organization, summarizes the results of a number of large-scale campaigns in Africa, America, Asia and Europe in which the use of residual insecticides figured prominently. It makes encouraging reading. In treated regions of Brazil, notified cases of malaria fell from 18,297 in 1945 to 976 in 1949; in one typical village in British Guiana, the spleen index fell from 71·6 per cent in 1945 to 4 per cent in 1948; in Ceylon, infant mortality in 1949 was only 62 per cent of what it was in 1946; in Greece, the most malarious country in Europe, where morbidity varied from 1 to 2 millions a year between 1930 and 1940, malaria has now "ceased to constitute a serious public health problem". A conspicuous gap in the reports is left by tropical Africa where, as yet, very little seems to have been done. Two problems loom ahead: a possible breakdown in the method if the mosquito becomes tolerant to the insecticide, and a great upswing in human populations if these measures continue to prosper.

Antihistaminic Agents in Allergy

A VALUABLE publication, "Antihistaminic Agents in Allergy" (*Ann. New York Acad. Sci.*, **50**, Art. 9, 1013; 1950; 3 dollars) records the papers given at a conference on this subject held in October 1947. Although about half the papers deal with antihistaminic agents, the remainder deal with histamine itself; and among these a paper by Sir Henry Dale, entitled "The Pharmacology of Histamine", includes a brief survey of evidence for the occurrence of histamine and its liberation and participation in natural reactions. The volume as a whole records the results of a great deal of research, and the bibliographies appended to each paper indicate how extensive the study of histamine and antihistaminic agents has been.

A Royal Head from Ancient Egypt

THE Freer Gallery of Art, which forms part of the Smithsonian Institution, Washington, D.C., possesses an interesting royal Egyptian head, and the late Dr. George Steindorff was asked to describe it. His findings have been published by the Gallery in a little booklet, under the title of "A Royal Head from Ancient Egypt", which runs to thirty pages of text and twenty-nine full-page illustrations and is a commendable little study (Occasional Papers, **1**, No. 5; Pub. 4022; 1951). Dr. Steindorff has taken the opportunity not only to make a study of the particular sculpture in question, but also to illustrate for purposes of comparison the various styles in sculpture that appear at different times in Egyptian history. The result is a very useful little brochure for those interested in portrait sculpture who do not happen to be specialists in Egyptian archæology.

Ancient Polynesians as Navigators

AN article by T. G. F. Mann (*Irish Astro. J.*, **1**, No. 4; 1950), with the title "The Polynesian, Master Mariner and Astronomer", outlines the extraordinary navigational ability of the early Polynesians in their voyages through the central and eastern Pacific, the islands of which are peopled by a race which displays very remarkable similarities in appearance, character, language and traditions. It appears that they used the stars as compass, chart and chronometer, and the Pleiades and Antares were especially utilized. It is remarkable that they fixed the northern solstice about June 25, and this was determined by the appearance of the Pleiades at about 5 a.m. 22° above the horizon. A description of their method for determining degrees is given and, crude as it may seem, it was sufficiently accurate to enable the navigators to find their directions for thousands of miles across unknown seas. It is believed that the people in the Hawaiian group were able to measure the altitude of Polaris by means of a gourd filled with water. It is very remarkable, as the author points out, that when the Western mariner was largely confined to the Mediterranean, creeping cautiously along its seaboard, the Polynesians regularly covered thousands of miles of open sea.

Properties and Uses of Photoelectric Cells

AN illustrated booklet, "Electric Eyes", by A. J. Fawcett and published by the Tintometer, Ltd., Salisbury, contains an elementary and somewhat entertaining account, suitable for the non-technical reader, of the properties, use, advantages and disadvantages of the photoelectric cell. Part 1 deals