

should relate to this subject. There are also investigations in root development, biennial bearing, double grafting, non-setting of blossom, pruning, thinning, manuring, variety trials, fruit breeding, and many other problems. Extensive research in plant physiology, biochemistry, plant pathology and entomology is carried out in relation to the outdoor investigations. A noticeable feature of the preliminary research reports is the evidence of strong correlation between all branches of the research station. The influence of stock on scion, for example, is being investigated from different angles by the pomologists, the physiologists and the biochemists. Section 4 is a collection of articles which are intended to portray the results of the Station's scientific work in such a way that they may be used by practical fruit-growers. This is a very necessary activity of any research institution, and it is gratifying to note its increasing volume from year to year in East Malling's annual reports.

Hannah Dairy Research Institute

THE fifth annual report of the Hannah Dairy Research Institute describes the work being carried out at Kirkhill, Ayr, and its commercial and practical applications. The chairman of the Council of the Institute is Sir Robert S. Rait, principal of the University of Glasgow, who succeeded the late Sir Donald MacAlister. The work of the Institute has received increasingly wide recognition as shown by the requests received for its publications from all over the world. At home, the advice of the Institute is frequently sought in solving various practical dairying problems. Work has been carried out on the relative nutritive value of different proteins for milk production, on methods of eradication of bovine tuberculosis and the means by which the risk of milk-borne disease can be reduced to negligible proportions, and on the production of condensed and evaporated milks and canned cream. It is of interest to note that the basis of the Institute's experimental eradication scheme of bovine tuberculosis, namely, the provision of free tuberculin-testing and free advice to owners of dairy herds, has been recommended by the Committee on Cattle Diseases, Economic Advisory Council. The results of the experimental scheme have clearly demonstrated the feasibility of effecting a marked reduction in the incidence of tuberculosis amongst dairy cattle. The Institute appeals for funds to wipe out the present indebtedness and to provide an endowment fund which will produce an income of £2,000 a year.

Research on Preservation of Wood

VOL. 4 of the *Journal of the British Wood Preserving Association* has recently appeared (Printed for the Association, 166, Piccadilly, London, W.1. 1934). Sir John Stirling Maxwell has been re-elected chairman. The work of the Association has been maintained at the high standard set when it was founded, and the *Journal* records a number of interesting papers and discussions during the year dealt with. In view of the fact that bungalows and houses constructed entirely of Empire timbers are now to be seen under construction in Great Britain, Mr. O'Hea's

paper on timber buildings proved of considerable interest. Mr. O'Hea dealt with the three distinctive types of timber buildings in the three main parts of the world where they are commonplace, namely, the North American continent, Scandinavia and Russia, and then discussed the timber building in England. Other papers dealt with wood preservation in the service of the Post Office, the use of treated timber in railway stock construction and an excellent paper on the research institutes and forest products laboratories in which work on the preservation of timber is being carried out.

Mining in South Australia

WE have received from the South Australian Department of Mines a review of mining in that country for the half year ending December 31, 1933 (Adelaide: Government Printer, 1934). There is little of permanent interest about this review, but it states that the various Mining Acts have now been consolidated, a new Act to regulate mining on private lands has been passed, and further that copies of the regulations under the Mining Acts were gazetted on March 22, 1934, and can be obtained from the Department of Mines; although the publication under review has condensed some of the more important regulations, those interested are advised to refer to the full text of the regulations. It is stated that the most interesting development is the increase in the production of gold, which is more than double that of 1932, this increased output being of the greater importance on account of the greatly increased value of the gold produced. It appears from the statistics that the total value of mineral produced in 1933 shows a marked increase over the production for 1932.

Greenkeeping Research

THE Board of Greenkeeping Research has recently issued its Report for 1933. Most of the Board's activities are centred round its Research Station at St. Ives, Bingley, Yorks, where experiments on the qualities of various lawn grasses are in progress. During 1933, plots of *Poa annua*, *Agrostis* and *Festuca rubra* have received special investigation in order to determine their suitability for golf green purposes. Manurial experiments have been correlated with yield data. Various compounds are being tried as worm eradicators, whilst the success of the St. Ives leather jacket exterminator (a standardised emulsion of Jeyes' fluid and orthodichlorobenzene) must be very gratifying to its originators. The establishment of greens by means of vegetative propagation is receiving considerable attention, and the aeration of turf is a subject for further experiment. Advisory work is growing, and the financial statement shows a small surplus. Attention is directed to the *Journal* of the Board, which is published twice a year and may be obtained from the Station.

Our Nearest Neighbour

WHEN the star Proxima Centauri was discovered by Innes to have a parallax of 0.88", he realised that