- 1. Preservation of dry cashew kernels: Readers might remember our reference to the growing importance of the cashew nut industry in our notes for February and the article on cashew nut cultivation in the June issue. We now understand that one important difficulty experienced in connection with this industry is the proper preservation of the kernels to keep them free from vermin infestation before they reach the overseas consumer. Some insects infecting stored-products are occasionally found doing damage while in transit and the commodity becoming deteriorated f tches a price far below normal rates. Exporters in Mangalore and Rajahmundry are said to be experiencing this difficulty. We could suggest to them to persue the suggestions given in the two bulletins Nos. 12 and 24 issued by the British Empire Marketing Board on Insect infestation of stored cacao and Insect infestation of dried fruit. Remedial and control measures to be effective must begin in the exporting country and the most important of the recommendations are:
- (1) The kernels to be shipped should be quite dry, uninfested and free from insect germs; this latter is managed by fumigation and pre packing, sterilisation by steam, other gases, etc., and certain exporters have some patent methods for this purpose;
- on so that infestation may not start there;
- (3) The containers in which the kernels are packed should be absolutely insect proof; insect proof packing will also prevent later infestation.

Sandal spike investigations: Very good progress appears to have been made in the investigation of this serious disease of sandal which is causing a loss of over 5 lakhs of rupees every year. The investigations are carried on by a Committee of experts and the different aspects of the investigations are carried out under the joint auspices of the Madras Forest Department, the Indian Institute of Science, Bangalore, and the Forest Research Institute, Dehra Dun. The periodical reports on the progress of the work are being published by the Sandal Spike Working Committee under the editorship of Dr. V. Subrahmanyam of the Institute of Science, Bangalore. The main lines of investigation appear to be to find out the real cause and nature of the causative agent and the methods to control the disease. For this purpose, biochemical, entomological and field experiments are being conducted and the results checked. The theories regarding transmission of the disease and the agents responsible for the same have not however been definitely fixed, though very valuable data seem to have been collected.

Marketing of Groundnuts in S. Arcot: We are gratified to note that a scheme for the satisfactory marketing of the groundnut produce

in S. Arcot has been inaugurated by the Director of Agriculture and the Registrar of Co-operative Societies. The ryots in the district often stand in need of advances for their agricultural needs unless they dispose of their produce for any price they get at the time and at present they are often compelled to sell the stock to money lenders at a very low rate. The scheme provides for advances by a Co-operative Society to cultivators on the security of the produce purely for agricultural purposes and in return the ryots agree to sell their stock to the Co-operative Loan and Sale Society. When the produce is sold only the amount of the loan relating to the groundnut crop is deducted and the balance paid to the ryot. The Central Society has a godown at Cuddalore and an Agricultural Demonstrator specially trained for this work who helps the Central Society in its business. He also sends periodical information to the other demonstrators in the district regarding current prices at Cuddalore. With the increase of such busi ness the Co-operative Department is expected to open sub-depots in more centres in different parts of the tract. This scheme appears to have been approved at a recent informal conference of the ryots in Villupuram when both the Director of Agriculture and the Registrar of Co-operative Societies were present. An arrangement like this for products other than groundnut wherever possible will go a great way in helping small holders in the rural areas to find a good market for their purpose.

Reviews.

I

"Artificial Fertilizers" (By E. J. Russell, Bull. No. 28 of the Ministry of Agr. & Fisheries, London, 1932). This monograph written in a popular and readable style, is intended to summarize our present knowledge of the effects of artificial fertilizers on ordinary farm crops. Much of the information is drawn from English experiments, especially those conducted during the last 70 years at the Rothamsted Experimental Station, of which the author is the director. The pamphlet opens with a historical survey of the discovery of artificial fertilizers and their popularisation by Sir John Bennet Lawes of Rothamsted by application to various crops like, wheat, barley etc., and proceeds to deal in detail with different kinds of nitrogenous, phosphatic and potash fertilisers with special reference to their physiological effects on the plant and the optimum proportions to be applied to various crops commonly grown in England. The information relative to the manuring of individual crops is brought together, in a valuable chapter at the end under the caption "Manuring of farm crops". A short note is also appended on compound or mixed patent fertilizers. Though the brochure is mainly intended for British farmers and most of the trials reported are those carried out in Britain or on the continent, still it is written so as to appeal to a wider circle and especially the pages dealing with the physiological effects of the fertilizer ingredients on the plant metabolism will be read with interest, as they summarise recent work on the subject. A great deal of work has been done in the different provinces of India on the response of economic crop plants to application of fertilisers and manures, but the information is not at present available