

"*European Plantations.*—Since the taking-over of enemy-owned properties the European plantations have been mainly grouped under the Crown estates. Beyond these there are barely a dozen estates of any account owned by independent planters. The Department has been without the services of an Inspector for some months, until quite recently, in consequence of which there has not been that supervision of non-Native plantations that I could have wished. Nevertheless, inspections have been fairly frequent, and numerous notices have been served on owners, requiring them to destroy cacao-trees affected by bark-disease, burn empty cacao-pods, destroy lantana, &c., and in almost all instances the orders have been promptly complied with.

"On Monday, 12th July last—beetle-searching day—a simultaneous inspection of twelve plantations (one of several held during the year) took place, the object of which was to ascertain whether the weekly beetle-search was being carried out. As a result of this raid four prosecutions were instituted, and convictions obtained against all the defendants, on the charge of failing to require their coolies to make the weekly search.

"*Cacao.*—The cacao crops generally have been in excess of those of the previous year, the increase being attributable to the prevalence of specially suitable weather conditions. Unfortunately, there has been a tremendous slump in prices during the year, which has temporarily crippled the local industry. No applications to plant new areas have been received, and some three years have now elapsed since any new clearings have been made.

"*Bark-disease.*—There has been less evidence of disease among the cacao than has been the case for some years. The reason for this may be found in the fact that the Criollo variety—a very delicate type of cacao peculiarly susceptible to disease—has all but disappeared from the island. In its place, hybrid varieties of Criollo and Foresterio are now usually grown, it having been proved beyond doubt that hybrid cacaos are much hardier and better able to withstand the attacks of bark-disease.

"*Coconut Plantations.*—These plantations are for the most part in a satisfactory state. There are a few exceptions, comprising some of the smaller cultivations in the Lotopa, Papasea, and Vailima neighbourhoods. In these localities the beetle appears to be most persistent. On Mugele's plantation in particular there are trees that have been attacked again and again within the past five years, and have as many times recovered. Even here, however, the position is much better than was formerly the case. The plantations comprising the Crown estates, taking them on the whole, are looking very well, and I have no doubt the copra-output has been very good. Next year I anticipate it will be better still.

"*Beetle-traps.*—Traps as a means of controlling the beetle were abolished between four and five years ago. Some half-dozen of these traps were nevertheless retained for observation purposes on the Vaitele and Vailele Crown estates, under strict European supervision. About three months ago Mr. Forsell, manager of Vaitele, and, later still, Mr. Meecham, manager of Vailele, both informed me that the traps had been dismantled because the results obtained were not of sufficient consequence to justify the cost of upkeep—one of the several reasons why we decided to abolish the traps five years ago. No disease or pest of importance other than the beetle affecting the coconut-palms has been reported.

"*Flying-foxes.*—The generally accepted opinion appears to be that the flying-fox is more numerous than ever, and there can be no doubt that the loss inflicted by this pest in its attacks upon the fruit-trees is very considerable. Breadfruit, mangoes, papayas, young coconuts, the vi (*Spondias dulcis*), &c., all suffer from its depredations to a greater or less extent, and in some cases it is found necessary to pluck the fruits before they reach the ripe stage in order to save them. Having regard only to the question of control, the flying-fox is perhaps the biggest pest-problem we have to face. The bats cannot be destroyed to any very great extent by shooting, for the reason that they soon become wary from a sense of danger at the sound of the gun, and at all times throughout the day fly very high. Steps have been taken to ascertain the possibility of the introduction of a virus.

"*Rats.*—Complaints regarding the damage inflicted by rats continue to be heard. The loss occasioned through the activities of this pest is in all probability as great as ever. Here, fortunately, the problem is a comparatively simple one. Poisoning is the most effective method to employ, as I have demonstrated in a practical manner on more than one occasion. Our planters apparently do not realize the fact, and allow the rodents to go on increasing until they gain the upper hand, at which stage we begin to hear loud complaints about the extent of their depredations. I am convinced that if the poisoning were carried out in a systematic manner we should in the future hear very little about the losses due to this cause.

"*Milkweed (Asclepius).*—This plant, which was first noticed in Samoa about three years ago, and is believed to have been the cause in several cases of mysterious death among the grazing-stock, has received attention from the Department during the year. Our Inspectors have had instructions to acquaint the Natives, who are now generally aware of the danger, besides which a notice has been printed in the *Savali* warning the Natives to look out for it, and to destroy it when found. A description has also been published in the *Samoa Times*. A specimen of the plant is kept in the office for inspection by visitors.

"*Lantana.*—Since taking over the work in connection with lantana the Department has sent out large numbers of notices for the eradication of this pest, which remains a source of trouble on many of the plantations.

"*Fumigation* is carried out under the Customs Department. An officer from the Agricultural Department attends the arrival of steamers to ensure that the regulations regarding the fumigation are strictly observed. There is a common practice among passengers of bringing oranges and other fruits ashore, and as far as possible we endeavour to have this fruit fumigated. A species of fruit-fly has been observed from time to time in Samoa for some years past, but apparently it does little damage, and it is probable that the species is unable to survive the wet season. Plants arriving from overseas are subjected to fumigation, and are dipped or sprayed with a suitable fungicide before they are allowed to be removed. Importations of plants from Fiji are prohibited.