

WHY CENTRAL PROCESSING UNITS HAVE TO BE ORGANISED IN KERALA FOR COCOA CURING

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Introduction

It is estimated that production of Cocoa beans in India by 1985 will be well over 10,000 tonnes of which Kerala's contribution will be 75 to 80 per cent. The domestic requirement being limited we may have to export cocoa beans in substantial quantities. There is a growing demand for cocoa in the world markets. It is a favourable coincidence that in the case of cocoa none of the major consuming countries is a producer of this commodity. Like any other producing country therefore, it should be possible for India to find export outlets. Major limiting factors in this sphere are the quality of our produce and the ability to sell at competitive rates.

The quality of cocoa beans depends greatly on the method adopted and care taken in their fermentation and drying. It has been noticed that larger quantities of beans always ferment well and give good quality produce as compared to small lots. But almost all the cocoa holdings in Kerala are very small in size and the number of pods available with industrial holding at a time for processing is very few. Hence a pooled approach has to be attempted in the onfarm processing of cocoa in Kerala. A few suggestions are made in the following paragraphs. By adopting them, the variability in quality caused during fermentation and drying can be reduced to the minimum.

SUGGESTED METHODS

Collection of the material

It should be in the form of pods. This will enable grading out immature and disease affected pods and ensuring that only good quality beans are put for fermentation. The collectors must be given proper training in this field. In the collection centres, if the pods are rejected or paid only a lower price, the reason for the same can be explained to the cultivators to have a clear idea of the drawback of their crop husbandry and varietal variations in their field.

The present system of extracting beans from pods in the field by growers allows retaining the pod husk and infected pods in the field. By getting all the pods in the fermentary this may not happen.

The main attraction of this technique is that all the pod husk and infected pods can be collected near the fermentary. This will surely improve the phytosanitation and lesser incidences of black pod disease. As we are getting all the pod husk in collection centres it can be utilized effectively for other purposes like using a cattle feed.

Processing Units

By having centralized processing units, small holders can deliver their produce at the centres and this will solve the problem of installation of driers by individual farmers which would involve high initial cost which ordinary farmers are unable to afford. Only through the grouped processing units the small holders can achieve uniformity in quality. And due to the time saved by not being engaged in processing, the small holders can concentrate more on other farm operations.

As recommended by Williams (1974) the processing units should have a flexible design with various sizes that can easily handle vastly different quantities in the main and light crop seasons. Facilities for sundrying and artificial drying can be provided in centralised processing units to tide over situations arising out of prolonged periods of rain or cloudy weather. Provisions for storage can also be given there by establishing pucca godowns as per specifications.

Location of the Units

As far as Kerala is concerned, these processing units can be located in each district or even in taluks where cocoa is grown successfully. These units should be in rural areas having approachable roads with electrification facilities to the units. Each unit should have collecting centres throughout the district/taluk e.g. Panchayat Offices, Taluk Headquarters, Cooperative Societies and also near the markets where the cultivators assemble to sell their other produces. The collectors must be available in these locations in specified hours on given days to receive the pods.

Custodian of Units

It will always be better to run the units by small Co-operatives formed by the cocoa growers alone

(Continued on page 63)

RESEARCH NOTES

NEW RECORD OF *CREATONOTUS GANGIS* (LINNAEUS) ON TURMERIC IN INDIA

Cretonotus (Phalaena) *gangis* (Linnaeus) (ARC-E: LEPIDOPTERA) is a polyphagous minor using considerable damage to many crops like coffee, groundnut, jute, lucerne, sweet maize (Fletcher, 1919), sugarcane (Lakshmi, 1973), pomegranate (Raghunath and , 1977) and finger millet (Raghunath, et al, n India.

During the months from July to September, 1980 the incidence of *Cretonotus gangis* L. has been observed on Turmeric (variety : Duggirala) at Biccavolu (Andhra Pradesh). The larvae are found feeding on the underside of the leaves causing damage to the plant. From severe infestation defoliation has resulted. It was interesting to note that even though many wild shrubs and trees are present in this area the attack was confined to Turmeric plants.

In view of the damage caused by this pest, studies were made on the biology of this insect in the laboratory. The pre-oviposition, egg, larval and pupal periods were observed to be 2-3, 3-4, 18-28 and 14 days respectively. The total life cycle from egg to adult varies from 19 to 46 days. The longevity and fecundity were 3-4 days (males), 5-6 days (females) and 50-180 respectively.

The population of caterpillars were noticed and parasitized by an unidentified Tachinid (DIPLOPTERA) fly. The parasitic fungus *Aspergillus* sp. was found attacking a few number of caterpillars in the field here and there. Further studies on this pest are in progress.

(Continued from page 62)

In this district without interference of any personal interests. Or if it is difficult to organise cooperation of these sort, progressive farmers can be given incentives for setting up processing unit each in a concentrated area of cocoa production. But in any case, the price of cocoa pods and dried beans should be controlled by the State Government.

Utilization of bye-products

It is calculated and reported by Opeke and Odeh (1972) that for every tonne of cocoa beans processed, 9.8 tonnes of pod husks are discarded and discarded. According to them every part of cocoa pod is useful for the production of one or other bye-products.

A study of available literature shows that this host has not been recorded earlier for the pest mentioned, and the present observation constitutes a new record in India.

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The mucilage or pulp can be used to make Jams, Jellies and Vinegar. From sweetings acetic acid can be produced easily. This pod husk could be utilised for the preparation of cattle feed. It can also be composted and for using as a manure.

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