

# PROGRESS WITH RESEARCH ON TEA IN THE MID COUNTRY

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The Mid-Country Station, 56 acres in extent, is situated at Hantane Estate, 3 miles from Kandy. Begun in 1960 as a clonal testing station, it has rapidly developed into a centre of research and advisory activity to cater for the special needs of the mid-country tea districts of the Central Province. Being originally a part of Hantane Estate, the location of the station is reasonably representative of the tea districts it serves as regards elevation, soil and climate.

## **History**

The Board of the Tea Research Institute decided in 1958 to set up a station in the Kandy District. A committee composed of Major Gordon Pyper (Chairman), Messrs A. Mackenzie, P. M. Lacey, S. A. Gilman and J. A. T. Swayne were appointed by the Kandy District Planters' Association to go into the question of the siting of a clonal testing nursery, to suit the requirements of the TRI and also where the conditions of climate and soil were representative of Estates in the Kandyan districts. This committee made their recommendations to the TRI who examined them and decided that the sites selected were found to be unsuitable for one reason or another. A further attempt to select a suitable site for a TRI station for the Kandyan Mid Country was made in October, 1959. A committee composed of representatives of the Planters' Associations of the mid-country districts, Major Gordon Pyper (Kandy), Messrs A. Mackenzie (Matale), J. Ritchie (Hewaheta), R. Krishnamoorthi, D. W. G. Burroughs (Deltota), H. V. A. Doudney (Kegalla) as well as TRI officials unanimously agreed that parts of field Nos 6 and 7 of Hantane Estate, Kandy, were very suitable for the siting of a clonal testing station for the mid-country districts, on account of its central location, elevation (2500 ft), availability of water, proximity to Hantane Estate factory, its terrain and soil characteristics.

## **Administration**

The station is administered by the Mid Country Scientific Officer. The District Advisory Officer (Mid Country) and technical assistants in Plant Propagation and Technology are responsible to their respective Heads of Divisions at St Coombs. The Entomology Research Unit in Pest Ecology is in the entire charge of the Mid Country Scientific Officer, who is directly responsible to the Director.

## **Buildings**

At present the small laboratory building affords only limited accommodation for the research staff, but it is hoped that with the completion of the new store-rooms we may be able to ease the present problems of inadequate accommodation. A new building for manufacturing tests was completed in early 1966 and is now being put to excellent use. The question of housing for the research staff is being attended to. There are already four staff bungalows and two twin minor staff quarters. A new road built in 1966 has considerably improved the approach to the station.

## **Objectives**

In 1960 the Tea Research Institute took over 22 acres of field Nos 6 and 7 of Hantane Estate and began experimentation on vegetative propagation of clones including research into all aspects of nursery culture under mid-country conditions. The original objective was threefold, 1 - to study all aspects relating to the development of VP tea in mid-country areas, particularly of the Kandyan Districts, 2 - to make planting material available to estates, small holders and Government colonization schemes, and 3 - eventually, to serve as a location for an advisory service for the mid country. The scope of work at this station was soon extended to provide not only for the investigation of the agricultural factors relating to the successful evaluation of vegetatively propagated teas and their qualities under mid-country conditions, but also for the establishment of a centre for advisory and extension activities of the mid-country planting districts. Subsequently, the station was also used for research work on the ecology of insect pest populations of tea, with particular reference to the Shot-hole Borer and an Entomology Research Unit in Pest Ecology was established in early 1966.

The need to increase the extent of the station to cope adequately with these new objectives and the consequent development in research, advisory and extension activities was felt in 1964. Negotiations with George Steuart & Co. Ltd., Agents and Secretaries for The Hantane Investment Co. Ltd., to purchase 56 acres of land from Hantane Estate for the Mid-Country Station were successfully completed in 1966 and the legal matters regarding the transfer of the property are in progress.

## **Research**

The research work at the Mid-Country Station in Kandy is supplementary to that carried out by the TRI at St Coombs, St Joachim, Passara and Kottawa.

## **Vegetative Propagation**

The clonal testing work at the station is far advanced in its agricultural aspects. Seventy seven tea clones, including several from mid country estates, recognized TRI clones and other promising estate clones are being tested to investigate their yield potential, quality and ability to resist drought, pests and diseases under mid-country conditions. Research on nursery techniques continues and additional clonal material is being included in the recent investigations.

## **Clonal Manufacture**

The manufacture of teas from experimental clones was begun in early 1966. The evaluation of the quality of clones, grown and manufactured under the mid-country conditions, is being done systematically and the results of these experiments should be valuable in deciding on suitable clones for use in the mid country.

## **Advisory Service**

With the appointment of the District Advisory Officer for the mid-country in September 1966, it is now possible to pay greater attention to the agronomic problems of mid country estates. We are now in a position not only to encourage visiting planters to the station, but also to visit estates more frequently whenever required to do so.

Another important function of the District Advisory Officer is to assist estates in conducting their own extension experiments. A programme for the establishment of a well distributed series of extension experiments for the mid country has been drawn up and the first of these experiments on shade and fertilizer application have already been laid out on Hantane, Kirimetiya, Kellebokka and Wattekele Estates, with the collaboration of the respective Heads of Divisions.

### **Entomology Research Unit in Pest Ecology**

The establishment of the Entomology Research Unit in Pest Ecology at the Mid Country Station in 1966 fulfilled a long felt need for fundamental research into tea Pest Ecology. Initially started as a project to study the population ecology of the Shot-hole Borer in 1962, it is now carrying out intensive research on the population ecology of other tea pests as well ; the interaction of pest populations and the growth of the host crop ; and the effect of the various agronomic practices on pest populations. Research on the biology and dispersal of the Shot-hole Borer has already provided important information leading to the effective timing of spray programmes for the control of this pest. All possible approaches to the control of the Shot-hole Borer by employing cultural, biological, insecticidal or a combination of all these control methods — integrated control — are being actively investigated.