FLOWERING PATTERN OF *HEVEA* CLONES IN TRIPURA

The *Hevea* tree is reported to flower twice a year (Anon., 1953; Van Haaren, 1969). The first or main flowering in Malaysia is reported to be around February to April after the annual leaf shedding (wintering). Inflorescence appear in off-season, after the primary seed fall, in August to October. Flowering is dependent on wintering which again is dependent on the clone, age of plant, location, seasonal factors, etc. (George *et al.*, 1967). In the traditional rubber growing region (South India), wintering is observed from December to February and flowering follows. An off-season flowering during September to October has been reported in some trees (George *et al.*, 1980).

Though rubber cultivation has been in existence in Tripura for the last two and a half decades, very little information is available on the flowering characteristics of the *Hevea* tree in this region. The data on flowering of various *Hevea* clones give an indication of the synchronisation of flowering which could be of use in the design of polyclonal seed gardens. The data are also pre-requisite for breeding programmes involving hand pollination. The present study aims to understand the flowering pattern of fifteen clones of *Hevea brasiliensis* grown in Tripura.

An existing field experiment started in 1979 at the Regional Research Station, Tripura with 15 clones (RRII 5, RRII 105, RRII 118, RRII 203, RRIM 600, RRIM 605, RRIM 703, PB 86, PB 5/51, PB 235, Gl 1, GT 1, RRIC 52, RRIC 105 and Harbel 1) was selected for the study. The period of study was from April 1987 to July 1989. The number of trees available under each clone varied from 25 to 38. Observations on flowering were recorded once in 10 days. Quantification of flowering has been reported to be extremely difficult and there is no universally applicable measure of flowering in clonal species (Davy, 1987). Field observations were restricted to the date of commencement of flowering, duration of flowering, percentage of trees flowered under each clone, cessation of flowering and period of off-season flowering.

Data on the percentage of trees flowered under each clone are presented in Table 1. The clones PB 5/51 and PB 86 flowered early, the flowering commencing in January in both the cases during 1988. In all other clones flowering started during the first week of February. However, in clones RRIM 600, RRIM 605 and Gl 1 flowering started only during the second week of February. As inferred from the data (Table 1) the peak flowering had been during February and March in most of the clones. The flowering distribution during these two peak months is presented in the figure. Flowering continued from April to June in almost all the clones, except RRIM 703, RRIM 605, RRIM 600 and RRII 105. In these clones, flowering was over by May itself. Though RRIM 600 is reported to be a prolific seeder (Paardekooper, 1965), under Tripura conditions the flowering percentage of this clone had been minimum with only 30 per cent flowering during February and 28 per cent flowering during March and the flowering was restricted to mostly February and March. Clones RRIC 105 and RRIC 52 showed protracted flowering and so was the case with Gl 1, RRII 105, RRII 5 and RRII 203.