STUDYING THE PERFORMANCE OF CHILLI (*Capsicum annuum* L.) CROP IN FARMERS' FIELDS AND ANALYSING THE PRODUCTION AND MARKETING POTENTIAL IN SECTOR-03 OF KALUTHAWALAI VILLAGE

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ABSTRACT

This field research was conducted during the period of March 15, 2007 to September 17, 2007 in sector-03 of Kaluthawalai, Manmuni South Erruvil Pattu in Batticaloa district, in order to study the performance of chilli crop in farmers' field and analysing the production and marketing potential in sector-03 of Kaluthawali village.

Three farmer's fields were selected in Kaluthavali village and ten plants were selected randomly in each field. Totally 30 plants were selected for this study. Performance of chilli plants were observed under farmer's management practices. Recorded data and collected questionnaire data were analyzed in this study.

The data on canopy height, primary branch number, leaf length and leaf width, fruit width and fruit length, number of pods per plant and total yield were collected in this experiment and were statistically analyzed to determine the level of significance. The selected plant of PC variety in this study showed significant variation ($p<0.05$) in growth parameters such as canopy height at 50% flowering, canopy height at 1st harvesting and canopy height at 3rd harvesting , primary branch number, fruit weight and fruit length.

The correlation studies revealed that some characters studied were positively correlated: they were canopy height and yield per plant; primary branch number and yield per plant; fruit length and yield per plant; fruit width and yield per plant; some other characters were negatively correlated: they were days to flowering and canopy height; days to fruiting and primary branch number; fruit width and fruit length and days to fruiting and fruit weight.

By and large; it is clearly seen that selected plant of PC variety showed a wider variation in several traits of agronomic importance and hence, selection would be positively approached for particular characters and these specific measures use in

chilli improvement programme, although yield and adaptability are the first and foremost criteria.

Farmer's details, cultivation information of Kaluthawali-3 village, market potential and traders and consumer information were analyzed in this study. From the farmers point of view the major problem faced by them was the market price fluctuation. Farmers were cheated by traders by the reason of low purity level of chilli crop.

Considering the result in general, it can be suggested that a genotype similar to PC variety is suitable for Batticaloa district. Farmers faced problem in marketing due to variation in fruit quality with respect to colour, shape, size, etc. Crop improvement program in present variety is a need to rectify the defects in order to encourage production, productivity and market potential.

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