

**STUDYING THE PERFORMANCE OF CHILLI CROP IN
THE FARMER FIELDS AND ANALYZING OF
PRODUCTION AND MARKETING POTENTIAL IN THE
NORTHERN SECTOR OF KALUWANCHIKUDY
VILLAGE**



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EU/IS/2002(A)/AG/75



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ABSTRACT

This project was conducted during the period from 17th of March to 20th of September, 2007 in Kaluwanchikudy North sector in Batticaloa district to examine the performance and variability of chilli plants and study the production potential and marketing potential of chilli in Kaluwanchikudy North area.

Three farmer fields were selected and ten plants were selected from each field randomly at the same growth stage for the experimentation. The chilli crop performance was measured and observed every other week up to 6th harvest.

Farmers in selected area used "PC" chilli population which is heterogeneous in nature for their chilli cultivation. This strain is common and popular among farmers. Seeds were collected from crop grown under uncontrolled pollination.

The qualitative characters such as Stem colour, Nodal anthocyanin, Plant growth habit, Branching habit, Leaf colour and shape, Flower position, Corolla colour, Anther colour, Calyx margin, Calyx annular constriction, Fruit colour at intermediate stage, Fruit set, Fruit colour at mature stage, Fruit shape, Fruit shape at pedicel attachment, Fruit shape at blossom end, Fruit surface and Seed colour were observed and the quantitative characters such as Plant height, Branch number, Number of flowers per axil, Leaf length and width, Fruit length and girth, Fruit weight, Days to 50% flowering, Days to fruiting and Yield were measured from the selected plants of each of the selected fields.

Collected data were subjected to statistical analysis of variance using SPSS (Statistical Package of Social Science) and Micro Soft Excel computer package.

The correlations among quantitative characters were analyzed to determine the level of significant in correlation between the characters. The correlation study among the measurable characters of selected chilli plants showed that the characters studied positively and negatively correlated with each others.

The qualitative characters of selected plants were observed to determine the magnitude of variation and deviation from the original PC variety. Most of the qualitative characters except number of flowers per axil, corolla colour, anther colour and seed colour in selected chilli plants showed wide variation and deviated from the original PC characters.

Variation in some important quantitative characters between the fields and with in the field were analyzed. Wide variation was realized between the fields and within the field.

The necessary data were collected from selected chilli farmers, consumers and trades by the questionnaire survey for studying production potential and marketing potential of chilli in Kaluwanchikudy north sector. According to the analytical result of data obtained from questionnaire survey the production potential and marketing potential of chilli growing in Northern sector of Kaluwanchikudy area is low due to low productivity a result of improper management and non uniformity in fruit quality viz colour, shape, size etc.

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