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**IMPROVEMENT OF CHILLIE VARIETIES FOR
THE EASTERN REGION OF SRI LANKA****P. Ganashan***(Regional Agricultural Research Centre, Karadian-Aru)*

In the Eastern Region, chillie cultivation is predominantly undertaken in the regosols and non calcic brown soils. To improve production, a breeding programme was undertaken to combine the desirable characteristics of the varieties MI-1 and PC-1.

The segregating populations of the cross PC 1 \times MI-1 were found to be more promising, and they were screened under farmers field conditions to identify genotypes with high adaptability. Pedigree method of breeding was followed.

The contrasting characteristics of the parents with differences in plant height, fruit bearing position, fruit dimensions, the colour of immature and mature fruits, and their resistance to diseases and environmental stresses, have generated the release of a vast array of genotypic combinations. Most of the morphological characters of MI-1 showed dominance over that of PC-1.

On an average 9% natural cross pollination was observed in the parental varieties. The segregating genotypes were grouped into various character combination classes numbering 108 and the promising types were studied. Segregants with erect fruit position showed greater resistance to leaf curl diseases than those with drooping fruits. Some of these showed perennial habit of growth.

Some of the selections KA 2, KA 2-9, KA 2-27, KA 6-5, KA-11, KA 28, appear promising in the Eastern Region. The selection KA 6-5 has a high rate of growth in the early stages even with limited soil moisture availability and it continuously produces pods with adequate soil moisture levels.