CLIMATE UNCERTAINTIES AND EARLY ESTABLISHMENT OF YOUNG RUBBER PLANTS IN TRADITIONAL RUBBER GROWING REGIONS OF INDIA

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Observations indicated that climate uncertainties are increasing the number of casualty of young plants immediately after field planting. Symptoms of drought are manifested on young plants during summer and life saving irrigation is increasingly being practiced in very young holdings even in the traditional rubber growing regions to tide over drought. In addition to the already recommended summer management practices, tilling of the plant basin at the end of the rainy season increased soil moisture storage, reduced casualty during summer and enhanced growth of young plants. This may be a good practise to manage drought in young plantations.

Keywords: Casualty, Climate uncertainty, Drought, *Hevea brasiliensis*, Life saving irrigation, Soil moisture, Tillage.

The impact of climate change on agriculture varies with crop, region and cultivation techniques. Variabilities in local climate rather than global climate patterns are more relevant in determining the impact of weather events on crop production. Daily, monthly and seasonal patterns of temperature and precipitation are likely to be affected by climate change (Reilly *et al.*, 2000). Rainfed crops are more vulnerable to the variations in climate such as changes in precipitation regimes, temperature, sunshine hours and relative humidity. Reddy and Hodges (2000) emphasized the need for altering cultural practices and engineering techniques to tackle climate change effects on crop production. Considering the changing climatic scenario in the rubber growing regions of the world, the current agronomic practices being followed in rubber cultivation may be inadequate to meet the challenges of future climate.

The impact of uncertain weather pattern will be more pronounced during the establishment and early growth of young rubber plants. Traditionally monsoon season is the ideal planting season of rubber in India. In recent years, uncertainty in rainfall and other weather factors is making the scheduling of various farm operations like planting, difficult even in traditional rubber growing regions. Occurrence of unexpected

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