Coppicing of gliricidia trees in black pepper in Matale District

Shade condition of a pepper cultivation is an important yield determinant. Matale is the second largest pepper -growing district where gliricidia is the predominant support tree. The study was conducted in the main pepper growing Divisional Secretariat divisions: Tenna, Ukuwela, Matale, Yatawatta, Pallepola, Rattota, Hunuketaela and Naula in the year 2001 to investigate, (1). Whether pepper farmers follow the recommended lopping instructions (2). Reasons for adopting different methods of gliricidia pruning in different areas and their advantages and disadvantages.

Eighty farmers were selected at random, 10 from each division. Survey lands were observed and farmers were interviewed on gliricidia pruning practices. These practices were the frequency of pruning (thrice a year is the recommendation for the district); height of pruning; pruning method (either single or multiple stem) and thinning out of sprouts after lopping. Only 5% of the sample farmers adhered to the recommended frequency. Sixty percent of them removed their gliricidia shade once a year and the subsequent thinning out of the excessive branches was limited to 30%. Thirty percent of the sample delayed pruning by more than one

year. A regional-wise difference was observed in shade pruning. Farmers in the drier areas preferred to remove shade once a year before rains, allowing vines to undergo a stress period expecting higher yields. In the wet region of the district gliricidia lopping was confined mostly to the post harvesting period with irregular lopping frequencies due to irregular bearing pattern and labor scarcity. The height of the gliricidia trees was maintained in the range of 4.5 - 6 meter in 80% of the sample lands. Seventy five percent of farmers, excluding those of Pallepola, preferred to leave a distance (in the range of 0.3 -0.75 meter) between the main stem and the lopped point. The higher the distance the higher the number of branches initiates, giving excessive shade. In Rattota area a pruning system was adopted to leave one stem expecting even reception of sunlight, although leaving of two stems was also seen in individual holdings.

Farmers should be educated on the importance of shade pruning. Farmers' own pruning methods from single to multiple stem cuttings with different frequencies seem to be associated with their positive experiences and climatic variability. The different practices have to be further tested and recommendations be given according to region-wise rather than giving a blanket recommendation for the entire district.