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AN ALTERNATIVE METHOD FOR PROTECTION OF YOUNG RUBBER PLANTS FROM SUNSCORCH

High day temperature, extended soil moisture stress, low atmospheric humidity and frequent heat strokes make the summer season in Kanyakumari district of Tamil Nadu quite distinct from other areas in the traditional rubber growing region of India (Soman *et al.*, 1996). Under the combined effect of these stress conditions, up to 40 per cent young plants were affected by sunscorch in plantations where no protective measures were adopted in summer (unpublished data). Providing shade baskets made of bamboo or plaited coconut leaves for young plants, mulching the plant base and lime washing are effective protective measures against sunscorch. However, limitations in the availability of dried leaves/grass for mulching (Lakshmanan *et al.*, 1995) and conventional raw materials for providing shade baskets often necessitate the search for alternative materials. A method attempted for protecting young rubber plants from sunscorch using coir pith and waste plastic sac is described in this communication.

An experiment was laid out in randomised block design with three replications for each treatment with 36 plants per plot. Polybag plants of RRII 105 were planted during June, 1994 and the treatments were imposed during November, 1994. The treatments included were : T_1 – control (no mulching or lime washing), T_2 – lime washing alone, T_3 – mulching alone, T_4 – mulching together with lime washing, T_5 – shading with plastic sac (no mulching and lime washing and T_6 – shading with plastic sac and mulching with coir pith.

Lime washing (T_2 and T_4) was done on the brown portion of the young stem with lime mixed with gum arabic and mulching (T_3 and T_4) was done with dry leaves. Used plastic sacs (T_5 and T_6) of size

Table 1. **Mean percentage of plants affected by sunscorch and the extent of bark damage**

	Treatment	Percentage of plants affected		Length (cm) of bark damaged
T_1	Control	39.58	$(38.94)^a$	37.00^a
T_2	Lime washing alone	27.08	$(31.33)^b$	13.50^b
T_3	Mulching with dry leaves	22.92	$(28.55)^b$	15.75^b
T_4	Mulching and lime washing	6.17	$(11.65)^c$	12.17^b
T_5	Shading with plastic sac (alone)	25.00	$(30.00)^b$	14.00^b
T_6	Shading with plastic sac and mulching with coir pith	6.25	$(14.48)^c$	12.76^b
	CD (P=0.05)	8.37		

Figures in parentheses are the arc sine transformed values. Treatment means followed by same alphabets are not significantly. (P=0.05) different in LSD test