Studies on severity of pruning on vegetative and fruiting attributes of grapes cv. Red Globe for aiming winter crop

Harikanth Porika, M. Jagadeesha, Dinesh Nagar and C. Deepika

Received November 21, 2014 and Accepted January 7, 2015

ABSTRACT: The effect of pruning severity on vegetative and fruiting attributes of grapes cv. Red Globe for aiming winter season crop was studied at Orchard, Tamil Nadu Agricultural University, Coimbatore during June, 2012. The vines were pruned at four different levels in a Randomized block design with five replications. Results revealed that, all the vines which were pruned at 2 bud level registered lesser number of days for bud sprouting (14.80 days), flowering (28.40 days), flowering to last harvest (93.00 days), the maximum weight of pruned material (1.25 kg/vine) and shoot length at 5th, 10th and 15th (14.12 cm, 36.57 cm and 64.47 cm, respectively) leaf stages. Whereas, the total leaf area per shoot (2733.70 cm²), internodal length at 4th-5th (3.90 cm) and 5th-6th (4.36 cm) and cane diameter (9.55 cm) were recorded in vines pruned for 50% of canes to 2 bud level and 50% of canes to 6 bud level. The maximum number of bunches/vine (26.20), yield/vine (18.85 kg/ vine) was observed when all the canes pruned to 6 bud level, where as the average bunch weight (749.92 g) was recorded in vines pruned for 50% of canes to 2 bud level and 50% of canes to 6 bud level. The berry traits such as number of berries per bunch (178.70), berry weight (8.04 g), berry diameter (23.14 mm) and berry volume (7.79 cm³) were significantly superior in vines pruned for 50% of canes to 2 bud level and 50% of canes to 6 bud level. It was revealed that pruning 50 per cent of the canes for vegetative growth and remaining 50 per cent of canes for fruit yield was found to be better for berry traits and bunch weight, where as pruning to 6 bud level for 100% was found to be better for yield traits whereas for vegetative characters pruning all the canes to 2 bud level (100%) for vegetative growth was found to be better.

Key Words: Grapes cv. Red Globe, pruning, fruiting, vegetative, yield, berry.