A REVIEW

Pruning in peach

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Abstract : The temperate fruit trees need annual pruning when dormant *i.e.* before the bud break. The main objective in developing and perfecting a pruning method is to remove the non productive parts so as to divert the energy into those parts that are capable of bearing fruits. Performance of peach trees depends heavily on the proper pruning annually. The peach fruits are born on one year old wood which becomes barren afterwards and no flower bud differentiation or subsequent fruit formation takes place in this part of the branch. If the trees are not pruned annually, the volume of fruiting wood reduces each year and the fruiting shoot move higher and higher getting out of reach. The unpruned trees are oftenly subjected to over crowding between the trees in close planting, exhibiting reduction in productivity and fruit quality. Hence, proper pruning is quite instrumental in regulating the tree vigour, fruit quality and productivity potential in peach plants.

Key Words: Peach, Pruning, Heading back, Thinning out, Yield, Quality

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INTRODUCTION

The peach [Prunus persica (L.) Batsch] is one of the important stone fruit with wide range of climatic adaptations. Peach is the third most important temperate fruit cultivated in India. Presently, this crop is mainly cultivated in the states of Himachal Pradesh, Jammu and Kashmir and Uttarakhand. Pruning is an important horticultural operation to get higher yield of superior quality fruits. It prevents excessive fruiting, increases fruit size and facilitates light penetration into the interior of tree canopy, which improves fruit colouration (Mika, 1986). Pruning is an important cultural practice which affects tree growth, yield and fruit quality in peaches. The objective of pruning is to reduce the barren and unproductive parts having one or two buds and to facilitate the light penetration for excellent fruit quality and colour development. The stone fruit plants in general and peaches in particular are pruned in two ways i.e. heading back and thinning out. When only one-third to one-half terminal portions of the branches, having their basal portion intact are removed, it is heading back. The apical dominance of the twig is destroyed and the lateral buds are stimulated to grow. When the branches are considered

undesirable, they are removed entirely from the base or point of attachment with the main trunk without leaving any stub, it is thinning out (Kaur, 2010). The pruning operation encourages the initiation of multiple shoots which bear flowers and fruits. The severity of pruning varies depending upon the vigour of the shoot. Several researchers have used the terms light, moderate and severe pruning by removing one quarter, half and three quarter length of a shoot, respectively (Shukla *et al.*, 2007). The objective of the approach is efficient and judicious use of pruning to get maximum economic yield in peach. The relevant literature on the effect of pruning on peach has been reviewed under the following heads:

Tree growth:

The shoot extension, trunk growth, leaf emergence and leaf area are commonly used as the indices to evaluate the effect of different pruning severities on the growth characteristics. Song (1983) established a positive correlation between pruning severity and the vigour of shoots after dormant pruning of peach trees. He found that when 50 per cent of the one year old growth was removed in winter, the shoot vigour increased with the height and width of the crown

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