Pomegranates Intercultural Operations

Intercropping

Intercropping in the first 2-3 years after planting may be practiced. During this period, pulses, vegetables or green manuring crops can be grown.

Bahar Treatment

Pomegranate flowers continuously when watered regularly. The plants under such conditions may continue bearing flowers and bear small crop irregularly at different period of the year, which may not be desirable commercially. To avoid this trees are given **bahar** treatment. In this treatment, the irrigation is withheld two months prior to the bahar followed by light earthing up in the basin. This facilitates the shedding of leaves. The trees are then medium pruned 40-45 days after withholding irrigation. The recommended doses of fertilizers are applied immediately after pruning and irrigation is resumed. This leads to profuse flowering and fruiting. The fruits are ready for harvest 4-5 months after flowering.

In tropical condition, there are three flowering seasons, viz., January-February (ambia bahar) June-July (mrig bahar) and September-October (hasta bahar). The choice of flowering/fruiting is regulated taking into consideration the availability of irrigation water, market demand and pest/disease incidence in a given locality.

The fruits of **ambia bahar** are ready for harvest in the month of June to September. As the fruit development takes place during dry months, they develop an attractive colour and quality thus suitable for exports. Similarly due to dry weather, the incidences of pest and disease attack are limited. However, ambia bahar can be taken only areas having assured irrigation facilities.

The **mrig bahar** crop is harvested in the month of December to February. Usually this bahar is favoured as the flowering and fruiting period coincides with rainy season or immediately after rains, and the crop is taken with out much irrigation. As the fruits develop during the rainy season and mature during winter, the colour and sweetness of the fruit is affected.

The fruits from **hasta bahar** are harvested during the month of March to April. They have very attractive rind with dark coloured arils. Since the availability of the fruits during this season is limited, they fetch high value. Optimum water stress cannot be developed during this period as withholding of irrigation coincides with the rainy season. This leads to poor flowering and thus affects the yield.

Training and pruning

Initially the side shoots up to 10-15 cm are removed at the time of planting. After planting, the trees are allowed to grow vigorously for the initial period of 18 months. During this period, these trees are trained leaving 4-5 well-distributed shoots all around forming main structure of the plant. All the sprouts arising on these shoots are removed up to 30, 60 and 100 cm during the first 6, 12 and 18 months respectively.

The pomegranate has a tendency to produce water shoots and suckers from the base. These suckers arise as multiple stems, which grow vigorously without branching and reach the top. They bear very little crop. Hence, the suckers should be removed as soon as they arise.

The fruits are borne terminally on short branches known as spurs. These spurs arise on the mature shoots. The spurs may bear fruits for 3-4 years but with advance in age they lose capacity to bear and are therefore pruned. These older spurs are to be cut down and new spurs encouraged. Also, those inward growing shoots are removed. It is most desirable to encourage the growth of new shoots on 1-3 year old main branches.