

Patch Budding in Aonla

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Introduction

The aonla (*Phyllanthus emblica*) has been cultivated in India since time immemorial and recognized as 'Amritphal'. Aonla belongs to Phyllanthaceae family and it is also known as Indian gooseberry or Myrobalan. Aonla fruit contain gallic acid (polyphenols), antioxidant properties and high nutritive value. It is richest source of vitamin C. It has various uses i.e. in medicine, as a nutrient, as food, industrial uses, etc.

Aonla is deciduous tree of medium height, usually 5-8 m. The leaves are simple, light green in colour, resembling pinnate leaves. The flowers are greenish yellow. The fruit is nearly spherical with greenish yellow colour

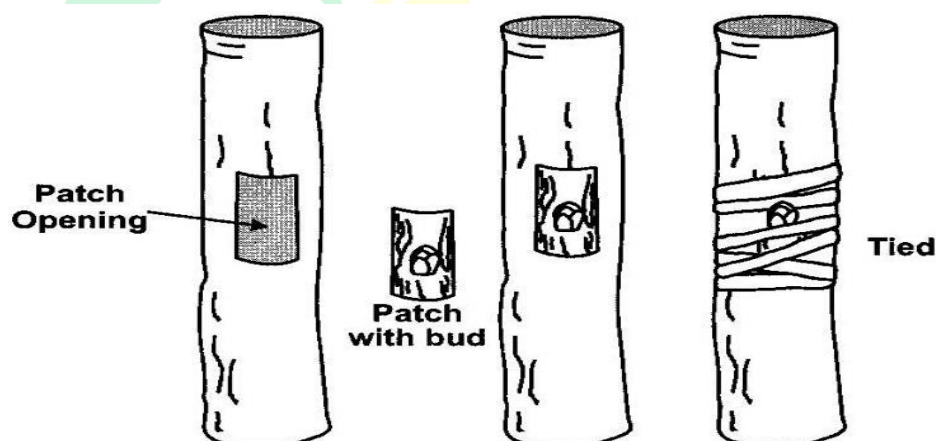


Propagation

Aonla can be propagated by seeds but the plant will not be true-to-type. Shield budding, patch budding, and soft wood grafting are vegetative propagation methods to obtain true-to-type plant. Among these three methods, patch budding gives highest success rate of 63.33 per cent and it has been found to be the most successful technique for commercial method of aonla propagation.

Method of patch budding

In aonla, budding operation should be performed in mid-July. It has been reported that more than 90 per cent success can be obtained through patch budding when perforated polythene bags were used for raising root stock. For root stock raising, mature aonla fruits are collected



and their seeds are extracted after drying. Seeds are sown in raised beds and then seedlings are transplanted to polythene bags. On one year old aonla root stock ,budding operation is performed. A rectangular patch of bark is removed completely from the root stock (25 mm long and 10-15 mm wide) and replaced with a patch of bark of same size containing a bud of the desired cultivar (scion). The most important feature is that bud must be upside facing. Entire patch is then tied with polythene thread leaving bud portion to restrict the entry of water. After bud initiation, remaining upper portion of root stock is removed after removal of polythene. Now this budded plant is ready for establishment in field.

In Gujarat condition, 'Desi' variety is used for raising root stock and 'Krishna (NA-4) is used as scion.