



Technology of Bud Grafting of Fruit Crops

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Abstract: this article provides valuable information about the technology of bud grafting of fruit crops. Also, the conditions for grafting are written in the article.

Keywords: fruit seedlings, bud graft, seedling, graft, seed.

When fruit seedlings are propagated from seeds in Uzbekistan, the fruit trees that will be harvested in the future do not retain their original biological characteristics and become wild. Feralized fruit trees are covered with many thorns, the fruits are small, juicy, shriveled, and when the fruit is dried, the dry product is very small. When a seedling is grown by grafting, the same fruit will grow from the bud from which the graft was taken. When seedlings are grown by grafting or other methods of grafting, the biological properties of the original fruit are completely preserved.

In nursery farms, seedlings are grown mainly by bud grafting. Partial winter grafting and annual and perennial branches of wild trees are grafted with needles and buds. There are several methods of grafting in horticulture. The root graft comes from the word “okulis”, which means eye in Greek. Therefore, grafting is done from the eye located in the leaf axil of a one-year-old branch. In the conditions of Uzbekistan, bud grafting can be continued in two periods from the last ten days of July to September 15-20. In the southern districts of our republic, a little earlier, and in the northern regions, the bud grafting begins on August 1.

The height of seedlings grown from buds in autumn and how many seedlings were obtained from each 100 grafted eyes were determined.

In the propagation of apricot seedlings, bud grafting is carried out mainly in August and early September, and when it is watered two to three times and fertilized in time, the grafted shoots will hold well and in the future 25-30 per hectare it is possible to get up to a thousand one-year-old seedlings.

Later, if the grafted seedlings are separated from the mother bushes and planted in a row in the prepared ground, callus will appear in their root system, the grafts will settle very well in the ground, and with the beginning of spring, the shoots will start to grow evenly. It has been proven in experiments that in autumn, the roots of small grafts located close to the ground are not affected by cold, and good results are achieved when 1-2 cm of well-rotted manure or tree shavings are left around the planted grafts in order to maintain moisture in the ground (Mahunu, 2013).

Branches grafted in spring should be cut from certain trees in autumn and stored in special cellars or cold rooms. When the shoots are grafted in the summer, cuttings are made from certain trees in a row. The trees in the gardens where the pen is made should be extremely well-sorted, fertile, disease-free, and their varieties should not be mixed. The obtained cuttings are placed in rows. The type of apricot and the date of preparation are written in black pen on each layer. Soft wire or twigs are used for tying the pens. Cuttings brought to the nursery are stored in a cool place before grafting. Pens cannot be kept for more than two or three days. Bud grafting should be started first with pome fruits,

because pome fruit grafts grow stronger and ripen earlier than seed fruit grafts. When grafting apricots, early ripening ones are grafted first, middle ripening ones are grafted at the end of late ripening ones.

It is a nursery notebook, which type, who, when and how many grafts are recorded. The thickness of the cuttings grown in the nursery (first field) should be 0.8-1.0 cm. Some unripe cuttings should be grafted not at the beginning of August, but at the end of August using the necessary agrotechnics. In all regions of our republic, bud grafting begins on July 25.

Within 10-12 days after the grafting of the shoots, it is checked whether they have caught or not. If the bud is enriched with a ticket, it must be loosened with a sharp garden knife from the opposite side of the graft. Otherwise, under the influence of a weak wind, the upper part of the welded surface may break. A graft enriched with a polyethylene film can be trimmed five to six days later. The wind is less affected when the weld is placed in the direction of the ditch and placed in the north-west direction.

It is clear that the films give very good results when used in the southern districts of our Republic. Films that break down under the influence of sunlight are yellowish in color, very thick, similar to films used in production. Up to 3000-3500 pieces of strips 25-30 cm long and 1.0-1.2 cm wide can be made with one kilogram of film. Films that stretch in the sunlight gradually break down as if cracked, and the welder does not compress the body.

If the bud is placed on the south side, the percentage of bruising under the influence of sunlight will be much reduced. When the bud is placed on the side of the ditch, it is damaged when working between the rows. When grafting, draw a "T"-shaped shape with a grafting knife at a height of 4-5 cm from the ground, open the bark a little with a bone located on the back of the knife, cut a 2-2.5 cm long bud from a branch and make a "T" is placed inside the shape, then two index fingers are pressed over the bark.

The resulting bud should be as thin as possible. The second person wraps the polythene film with his right hand and presses it with his left hand, begins to squeeze the bud and finishes with two knots. The eye must be visible when the bud is tied.

One person can graft 700-1,500 or more shoots per day. A new welder does 300-400 welds a day at first, and later 700-1000 welds. The welder must be one step behind the welder, otherwise the welded eyes may dry out. Grafted seedlings are watered once more. After 10-12 days, it is checked whether they have caught or not, starting from the first grafted area. The leaf band of the holding bud will fall to the ground due to wind or touch, and the holding bud will turn bluer. The leaf band of the bud that has not caught will stick to the bud and dry up. A polyethylene film is poured from the opposite side of the captured shoots. The opposite side of the bud that did not take hold is re-inspected, and then the tie is released when the graft takes hold. In the first half of September, it was observed that due to the cooling of the day compared to August, the weld and the weld tag do not connect quickly.

Seedlings are dug up in the fall after the leaves have fallen. During digging, it is necessary to take care of the root system and the seedling stem. The dug seedlings are divided into two groups.

The first group includes seedlings whose root system is not mechanically damaged, not diseased, not less than 35 cm in length, branching, at least three branches, the stem is straight, not damaged, and consists of 3-4 main branches not less than 50 cm in length. enters.

The second group includes seedlings with a root length of at least 25 cm and at least two main branches with branches of 35-40 cm.

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