

# The Effect of Formation of Pumpkin Varieties on the Phases of Development

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**Annotation:** This article mentions the passage of phenological phases during the growing season of plum varieties, which are shaped in different ways.

**Keywords:** varieties, phenological phases, methods of formation, flowering periods, ripening periods.

Currently, 12.1 million tons of plums are grown annually worldwide. In particular, China leads in the production of more than 6.6 million tons of plums a year, while Romania is in second place with 512,975 tons. The Russian Federation ranks 13th with a yield of 164,602 tons. Annual plum production in Uzbekistan is 134,103 tons. This figure is 4.1 kg per person. In our country, the average yield of plums is 14.5 tons per hectare [10]

Presidential Decree No. PP-4246 of March 20, 2019 "On measures for further development of horticulture and greenhouses in Uzbekistan" and December 11, 2019 No. PP-4549 "On further development of the fruit and vegetable and viticulture sector, the value chain in the industry Resolutions and decrees "On additional measures to create high-value-added products in the field of fruit and vegetables and viticulture, increase exports, development of obsolete and dry lands, increase the sowing of export-oriented agricultural crops on cotton and grain fields" .

Based on these identified issues, we aim to study the impact of shaping methods on the cultivation of plums from fruit crops, which are less common among others, but the demand is growing. Mistakes in the organization of plum orchards, as a result of thick planting of trees and their care, including improper shaping, can adversely affect the quantity and quality of fruit [6].

In horticulture, the goal is to get as high a quality and abundant harvest from the trees as possible. On the one hand, this issue requires timely and effective implementation of agro-technical measures, such as proper pruning and shaping of trees in early, medium and late harvest varieties.

The study of methods of shaping local and imported plum varieties was carried out in intensive plum orchards established at the Andijan Institute of Agriculture and Agrotechnology, using 4 shaping methods and 3 local and introduced varieties.

Research "Methods and programs for the study of fruit, berry and plum varieties" (Oryol 1999) [6] and methods of calculations and phenological observations in experiments with fruit and berry plants, developed by the All-Russian Research Institute of Fruit Selection. H.Ch.Buriev 2014) [1].

According to the results of the study, this year, the transition periods of the vegetation period also vary when plum varieties are formed in different ways.

The recording of buds in the Leto variety of plum began on March 3 in the 4th variant control (Kosasimon) variant. The buds began to form in Option 1 (Austrian bush) at 02 / III, 1 day earlier than the control, in Option 2 (Rare Tier) on 04 / III, 1 day later than the control, Option 3 (KGB Kim In the Green bush) it was found that the buds are recorded 2 days later than the control, starting on 05 / III.

The onset of flowering began on day 20 / III in the control (Kosasimon) variant, the end of flowering ended on day 31 / III, and the duration of flowering was 11 days. In variants 1,2,5, flowering began on day 21 / III and 1 day later than control, while flowering ended 1 day earlier (30 / III) than on all options. Flowering duration was 9-11 days.

The cooking period started on 06 / VI in the control (Kosasimon) variant, ended on 01 / VII, and the cooking duration was 24 days. In options 1,2 and 5, ripening began on 04 / VI and 2 days earlier than control. In variant 4 (KGB Kim Green bush), the ripening period began on 05 / VI, 1 day earlier than control. The end of the ripening period was 2-4 days earlier than the control in all variants, and the duration of ripening was 23-25 days.

The recording of buds in the Burton variety of plum began on March 18 in the 4th variant control (Kosasimon) variant. The recording of buds began in Form 3 (KGB Kim Green bush) on 16 / III, 2 days earlier than the control, and in Option 1 (Austrian bush) on 23 / III, 5 days later than the control.

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The onset of flowering in the control (Kosasimon) variant began on 25 / III, the end of flowering ended on 08 / III, the duration of flowering was 13 days. In variants 1,2,5, flowering started on days 26 / III and 27 / III, 1-2 days later than in the control, and in the variants 2, 3 and 5, the flowering ended 13 days later than in the control. The duration of flowering was 13–16 days.

The cooking period was 29 / VII in the control (Kosasimon) variant, which ended on 21 / VIII, and the cooking duration was 23 days. In option 1 (28 / VII), option 3 (28 / VII) and option 5 (26 / VII), the cooking period started 2-3 days earlier than control. In variant 2 (sparse tier), the ripening period started on 30 / VII and was 1 day later than control. The end of the cooking period was 2–5 days earlier than the control in all variants, and the duration of ripening was 19–23 days.

The recording of buds in the Chyorny Bagira variety of plum began on March 19 in the 4th control (Kosasimon) variant. The recording of buds began in variant 2 at 22 / III and in variant 3 at 21 / III, and buds were recorded 2-3 days later than in the control and in the 1st and 5th variants on the same day as the control variant.

The onset of flowering in the control (Kosasimon) variant began on 27 / III, the end of flowering ended on 09 / IV, the duration of flowering was 13 days. In variant 1 (25 / III), variant 3 (26 / III), and flowering in variant 5, it started 1-2 days earlier than control, starting on 26 / III, and the end of flowering was controlled in variant 3 (10 / IV). relatively 1 day late. The duration of flowering was 13–15 days.

The cooking period started on 01 / VIII in the control (Kosasimon) variant and ended on 24 / VIII, and the cooking duration was 23 days. In option 1 (31 / VII) and option 3 (31 / VII), the cooking period began 1 day earlier than control. In option 2 and option 5, the cooking period started on day 01 / VIII, i.e. on the same day as the control option. The end of the ripening period ended on 22 / VIII in variant 2, 2 days earlier than the control. In all other variants, it was completed 1-2 days earlier than the control and the cooking duration was 23-25 days.

#### List of used literature

1. Бўриев Х.Ч. Мевали ва резавор мевали ўсимликлар билан тажрибалар ўтказишда ҳисоблар ва фенологик кузатувлар методикаси Тошкент 2014 й.
2. Мевачилик асослари Т.Э.Остонақулов, С.Х.Назиева, Б.Х.Фулумов Тошкент 2010 й, 13-20 б.
3. Мирзаев М, Темиров Ж. Боғдорчилик ва тоқзорчилик агротехнологияси. – Т.: Ўзбекистон, 1977. 31-35 б.
4. Рыбаков А.А., Остроухова С.А. Ўзбекистон мевачилиги. – Т.: Ўқитувчи, 1981. 300-302 б.
5. <http://www.fao.org/faostat>