

Agroecological Zone of Mtskheta-Mtianeti Region

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According to materials of the long-term meteorological observations (Mtskheta-Mtianeti Region s) are calculated corresponding of agro-meteorological indices - sum of air temperatures $>10^{\circ}\text{C}$, sum of atmospheric precipitations (mm). On the basis of which Agroecological zones for propagation of corresponding crops are selected.

In the I zone, the sum of active temperatures is 4000°C to 3000°C . The given zone is located at 500 m to 1000 m altitude above sea level. The sum of atmospheric precipitations in the warm period is 390-500 mm. The last frosts are observed from 13.IV to 23.IV on average, at 500 m and 1000 m above sea level, respectively. The first frosts at the same altitudes are observed from 27.X to 3.XI, respectively. Cereals, vegetables, cucurbitaceous, vine (early, of average ripeness and late), fruit trees and other cultures can be successfully produced here.

In the vegetation period (IV-X), the given zone is not sufficiently supplied with atmospheric precipitations. Therefore, rich and guaranteed harvest is possible to gain (particularly, in the active vegetation period (VI-VIII) by means of 2- or 3-time irrigations of annual crops mostly and soil loosening.

The II zone spreads at 550 m to 1200 m altitude above sea level. The sum of active temperatures is 3000°C to 2000°C and sometimes more. The sum of atmospheric precipitations in the warm period is 400-700 mm. The last frosts are observed from 13.IV to 23.IV on average, at 550 m and 1200 m above sea level, respectively. The first frosts at the same altitudes are observed from 22.X to 3.XI, respectively.

Cereals, vine (early and of average ripeness) and vegetables can be grown in the given zone. Soil irrigation (once or twice) or soil loosening in some years, particularly in the VI-VIII months is desirable in the given zone.

The III zone is located at 1000 m to 1800 m altitude above sea level. The sum of active temperatures above 10°C is 2000°C to 1000°C . The sum of atmospheric precipitations in the warm period is 600-800 mm. The last frosts are observed from 28.IV to 12.V on average, as the altitude above sea level increases. The first frosts are observed from 15.X to 3.XI, respectively, with the increased altitude above sea level. Growing capacity of continental fruit trees is limited to a certain extent in the given region. However, early crops can be grown favorably. Barley, rye, oats, vegetables, potato, spicery and aromatic crops can be grown here successfully. Besides, the given zone offers favorable conditions to grow root crops needed in cattle-breeding or use the area as hay-fields and pastures.

The IV zone is located 1200m to 2000 m altitude above sea level and a bit higher. The sum of active temperatures above 10°C is less than 1000°C . The sum of atmospheric precipitations in the warm period is 800-1000 mm. The frosts end from 28.IV to 9.VI on average. The first frosts are observed from 3.X to 21.X. Potato, vegetables, cauliflower and early cabbage can be grown in the given zone. It is also possible to grow berries and root crops needed in cattle-breeding or use the area as hay-fields and pastures.