The Impact of Global Warming on Vine Sorts

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Global climate warming was observed in the last decade of the XXI century. This process continues up today and creates huge danger to the ecological balance established millions of years ago. Based on the conclusions of the researchers, anomalistic eocological occurrences in biosphere are conditioned by the unforeseen anthropogenic effect.

In the begining of this century, the researches conducted by World Meteorological Organization (WMO) confirmed climate global warming.

Even this minor increase of the temperature should be taken into account, because if growth or reduction tendency goes on this way, its will influence on productivity of agricultural crops and agricultural zones of their dissemination. Besides that, the mentioned above might result in change of agriculture planning strategy, etc.

Calculation based on forthcoming thermal change in Georgia have revealed that tendency of temperature increase in the eastern part of the country is more comparing to that in the western part. Therefore, by the developed scenario, we expect 1°C increase in the west and 2°C increase in the east of Georgia. Analyze and processing of the data showed that average increase of the sum active temperatures makes little more than 180-200°C and little more than 350-400°C correspondingly.

Considering this, we have separated corresponding distribution zones by altitude for various vine sorts cultivated in Georgia. In the first zone, where sum of active temperatures is more than 3500°C all sorts of vine may be generated (early ripening sorts - Pino, Kachichi etc; middle - Sapheravi, Manavis Mtsvane, Ojaleshi, Aligote etc; serotinous - Rqatsiteli, Tsolikauri, Mtsvane, Chkaveri, Izabela etc.). In the second zone, sum of active temperature is 3000°C and more. In this zone, middle and early ripening sorts may be produced. As for the third zone, where sum of active temperatures is 2500°C, only early ripening vines are to be grown.