Climate Variability Impacts in the Long Term: Hazelnut Yield in Turkey

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Many studies indicating changes in agricultural productivity due to climate change examine the impact of climate change on crop productivity and do not take into account the impact of climate variability in the long run. We have considered the hazelnut crop, which is the most exported crop of Turkey and we tried to see how the fruit yield has changed based on climate variability in the long term. Correspondingly, we have used the minimum, maximum temperature values, total precipitation, relative humidity, duration of sunshine, growing degree days and other related indices obtained from the regional climate model called RegCM as the climate data for the future period of 2020-2049 and the reference period of 1991-2012. Accordingly, in the study, the effects of climate variability on the production of hazelnut, mostly growing in the eastern part of the Black Sea and the Marmara region were determined and future studies and evaluations were conducted to show that they lead decision makers in terms of product management in Turkey.

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