Assessment of Climate Suitability for *Prunus armeniaca* L. in Turkey in a Changing Climate

**Nazan An**, M. Tufan Turp, and M. Levent Kurnaz

1Center for Climate Change and Policy Studies, Boğaziçi University, Istanbul, Turkey (nazan.an@boun.edu.tr)
2Institute of Environmental Sciences, Boğaziçi University, Istanbul, Turkey (tufan.turp@boun.edu.tr)
3Department of Physics, Boğaziçi University, Istanbul, Turkey (levent.kurnaz@boun.edu.tr)

Climate is a crucial factor for agricultural production and productivity. Foreseeing climate change in the future means predicting the possible effects on agriculture, and such studies observing year-dependent variability and predicting the effects of the near and mid-future climate change are valuable for both food security and economic value especially for countries which have commercial agricultural products like Turkey, as a Mediterranean Basin country with significant agricultural diversification. Apricot (*Prunus armeniaca* L.), which is one of Turkey’s most important export products are expected to be affected significantly by climate change. Therefore, it is very important to see whether it will grow in the same regions in the future due to climatic changes for apricot. Hereunder, high resolution climate data, as an input for the membership function to be applied for classification of the climate suitability index, were obtained from RegCM4.4 under the RCP8.5 scenario for the period of 2021-2050 v.s. 1991-2018 for different phenological periods. Briefly, results indicate that adverse changes in climate suitability conditions for current apricot growing locations, 48 locations in the study, and the number of climate suitable locations for apricot will significantly decreases in the near and mid-future.

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