

Sustainable Production of Pistachios in dealing with Climate Change in Iran"

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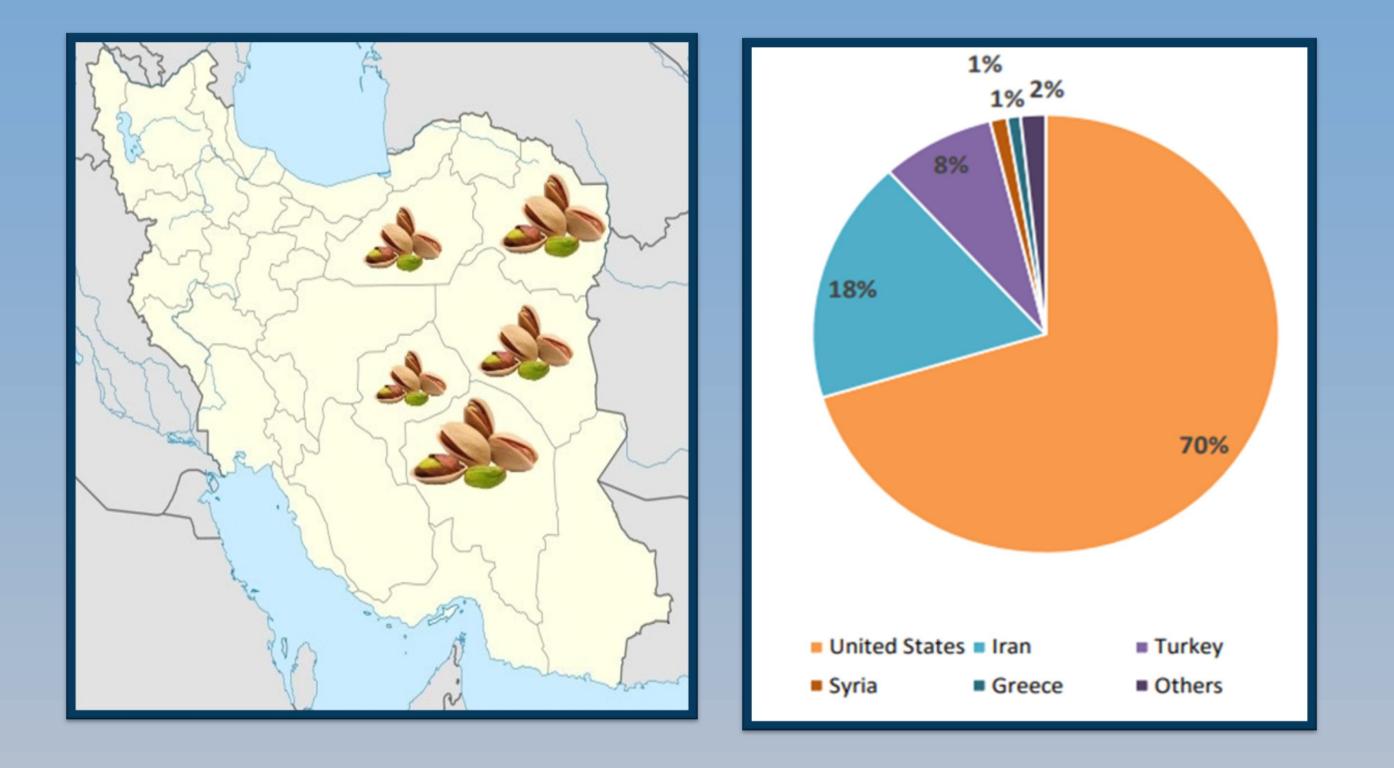
Introduction:

Pistachio is one of the most important horticultural and agricultural products of Iran with a high export value, which accounts for a significant share of farmers' income, especially in the central plateau of Iran. Due to the increase **climate change**, water scarcity, water and soil salinity and trend of changes in pistachio chilling need, this agricultural garden product, suffered a lot of damage.

Result and Discussion:

The effect of climate change on the pistachio product :

- 1. Increase in temperature and lack of cooling needs,
- 2. Fluctuations in the amount of precipitation,
- 3. Fluctuations in temperature cycles,
- 4. Sudden increase and decrease in temperature,



In terms of resistance to salinity, pistachio is the last product that can be cultivated in saline areas or tolerant to salinity.

- 5. Increase in hot and scorching summer days and continued drought
- 6. Change in the level of surface and underground water resources,
- 7. Increase in salinity and imbalance of nutrients in the soil and finally
- 8. 8) the decrease in water quality.

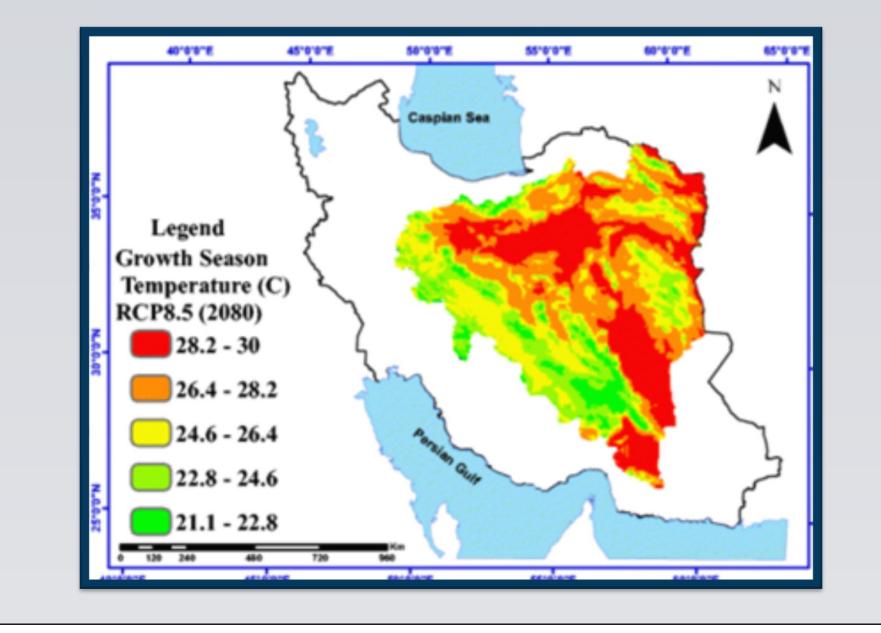
The correct solutions of irrigation and soil amendment at different levels of growth lead to the conservation of water resources, increasing productivity and reducing production costs.



Material and Methods:

The statistical population of the collected data from a number of pistachio authentic research centers in the country.

The variables that were studied are the area of the gardens, the geography, and climate of cultivated gardens, the type of irrigation operations used in the stages of planting and harvesting, common and traditional and also modern methods of pistachio planting, inputs such as fertilizers, Pesticides, comparison of different pistachio cultivars and pistachio morphology.



Conclusion:

- Sustainable pistachio production requires identifying approaches and solutions to deal with climate change, including the use of low-cold cultivars, controlling pests caused by climatic stress, and choosing the right place to build new orchards.
- Knowing the climatic suitability and modifying the cultivation pattern will be the basic solution to maintain production security and change the pattern of water consumption in the agricultural sector.

Climate change is understood to mean a global change in

the Earth's Ecosystem. This is a threat to the composition of natural ecosystems, their ability to recover and their productivity, economic and social development, and the health and wellbeing of citizens.

