

Pistachio, Quality and Quantity in Iran

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Pistachio (*Pistachio vera L.*) is one of the precious agricultural (green gold) and medicinal products in the world that is highly resistant against drought and water salinity [1]. Moreover, given its exchange value, employment, and value added, this product has a significant effect on the social and economic status of the farmers living in arid and semi-arid regions of Iran [2, 3].

Iran is known to be the most reliable producer and exporter of pistachio in the world; more than 70 percent of the pistachio produced in Iran is imported [4, 5]. Pistachio accounts for as much as 8% of Iran's non-oil exports that indicates the high value of this product [6]. The most important international markets of Iranian pistachio are the Persian Gulf Countries, East Asian Countries including China and Hong Kong, and European countries such as Russia [7]. The area under cultivation for this product includes more than 450,000 hectares in our country. Every year, more than 250,000 tons of pistachio is produced in Iran; Iran, the US, Turkey, China, and Syria are considered to be the most important producers of pistachio in the world [8]. Moreover, Kerman, Semnan, and Razavi Khorasan provinces are the most important producers and exporters of pistachio in Iran [9].

The value of pistachio export was 678 million dollars in 2016. Moreover, based on the report released by the Iranian Customs Administration, the export value of pistachio was 586 million dollars in 2019; this indicates that it had a relatively declining trend [10]. The average pistachio yield is 1200 kg per hectare in the gardens of Iran. Given the global pistachio yield of 14255 kg, the Iranian pistachio yield is not appropriate and adequate [11]. The most important obstacles and problems of pistachio production in Iran include reduced export rate (due to the reduced quality), lack of adequate advertising and marketing, lack of modern irrigation systems for the products, overexploitation of groundwater resources (and thus the reduced quality of the products irrigated with this water), excessive use of pesticides for controlling the pests, lack of adequate investment in processing industries, and the farmers and producers' low-level knowledge and expertise [6, 12, 13].

Thus, the authorities and more importantly the farmers are required to give due attention to quality as the most important factor for success in the global arena, using new pest control systems such as integrated pest management systems (IPM), increasing productivity in water consumption and using new irrigation systems, and providing appropriate training programs for the farmers can be considered as the appropriate solutions for improving both quantity and quality of pistachio in Iran.

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