



## Factors affecting pistachio tree destruction in arid and semi-arid regions

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### Abstract

Pistachio trees (*Pistacia*) play combined roles in ecotourism, conservation of soil and water, flood control, forage production for domestic and wild animals and resin and seed production in arid and semi-arid areas. It is very important to protect this species but, in recent decades, several factors have caused damaged to these trees. One of the most important factors of *Pistacia* forest destruction is the stripping of bark from the trunks by *Hystrix indica*. Knowing the factors affecting the intensity of damage caused by this pest is necessary for providing proper and scientific solutions. The purpose of this study was to identify the most effective and important factors on damage to *Pistacia* bark and the role of *Hystrix indica* in the extinction of this species in arid and semi-arid areas. After investigating a critical *Pistacia* forest in which tree bark has been stripped by *Hystrix indica*, 200 ha area of the *Pistacia* forest was selected in Chahar Gonbad of Sirjan. In this segment, 50 *Pistacia* trees were randomly selected and damage was evaluated. The least significant difference test was used to measure variation in the results. The results showed that the effect of the age of the trees on the stripping of the bark was significant at the 1% level. The destruction of young trees was 2.5-fold greater than on older trees.

**Keywords:** drought, removing the trunk skin, Sirjan Chahar Gonbad, the Least Significant Difference test, trunk diameter.

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