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Investigation of the Relationship between Infection Intensity to mistletoe (*Viscum album* L.) with Some Host Species Features in Nour Forest Park

D. Kartoolinejad^{*1}, S. M. Hosseini², S. K. Mirnia³, M. Akbarinia⁴ and F. Shayanmehr¹

¹ M.Sc. Graduate, Faculty of Natural Resources, Tarbiat Modarres University, I. R. Iran
² Associate Prof., Faculty of Natural Resources, Tarbiat Modarres University, I. R. Iran
³ Associate Prof., Faculty of Agriculture, Tarbiat Modarres University, I. R. Iran
⁴ Assistant Prof., Faculty of Natural Resources, Tarbiat Modarres University, I. R. Iran
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Abstract

In order to investigate the relationship among mistletoe (*Viscum album*) infection intensity with some parameters, such as host species, DBH, height and location of host trees in Nour Forest Park, the number of 30 circular plots with an area of 1000 m² were selected and sampled in regions had an aggregation of infected trees. In each plot, diameter at breast height, number of mistletoe's clumps per each tree and trees location (in two conditions, adjacent to gap and inside of stand) and either host species for all infected to mistletoe individuals were recorded. The results revealed that mistletoe abundance and infection intensity to mistletoe in Iron trees had a direct significant relation with DBH and locating at edge of forest stand, but there was no relation with trees' height as well. Totally, trees located at the edge of gap or adjacent to roads were more either in abundance or infection intensity than interior trees. This result shows that opening stand due to intense harvesting and also forest destruction can increase the potential of infection to mistletoes in each region.

Keywords: Mistletoe, Parasitic plant, Viscum album, Ironwood tree, Hyrcanian forests