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*(Ulmus glabra)*

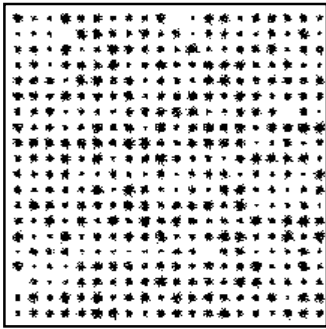
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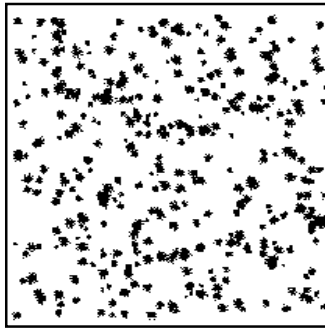
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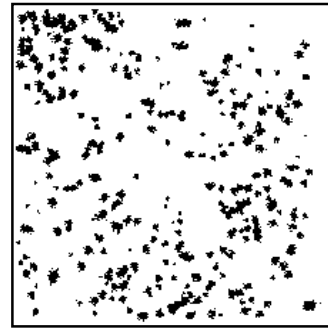
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(Dispersed)



(Random)



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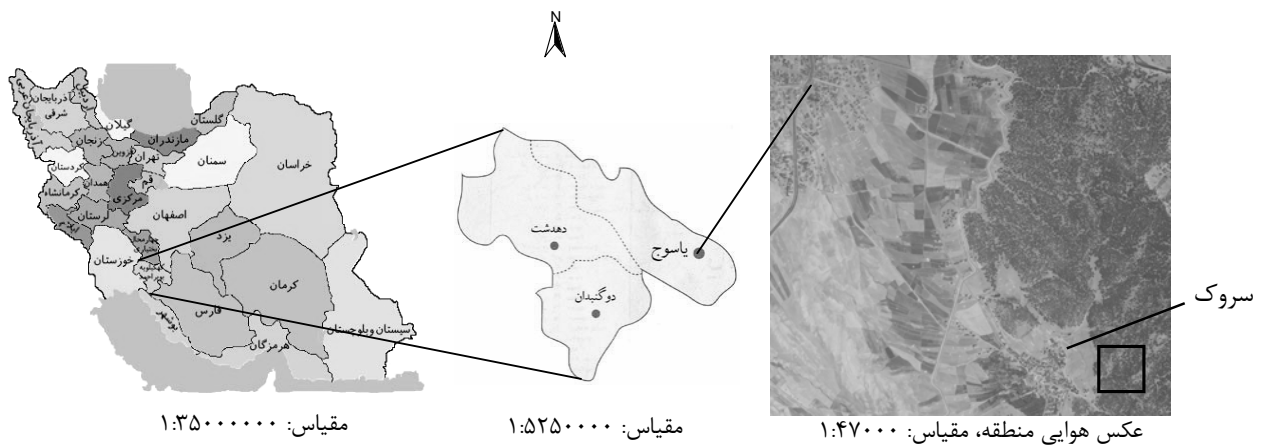
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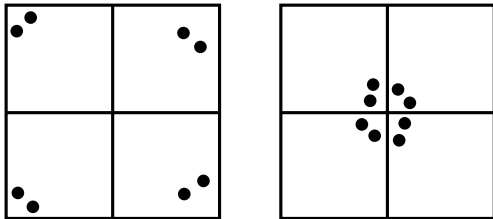
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(Spatial Point Pattern)

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(Philip Clark & Frances Evans)

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(Quadrat analysis)

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(Nearest neighbor index)

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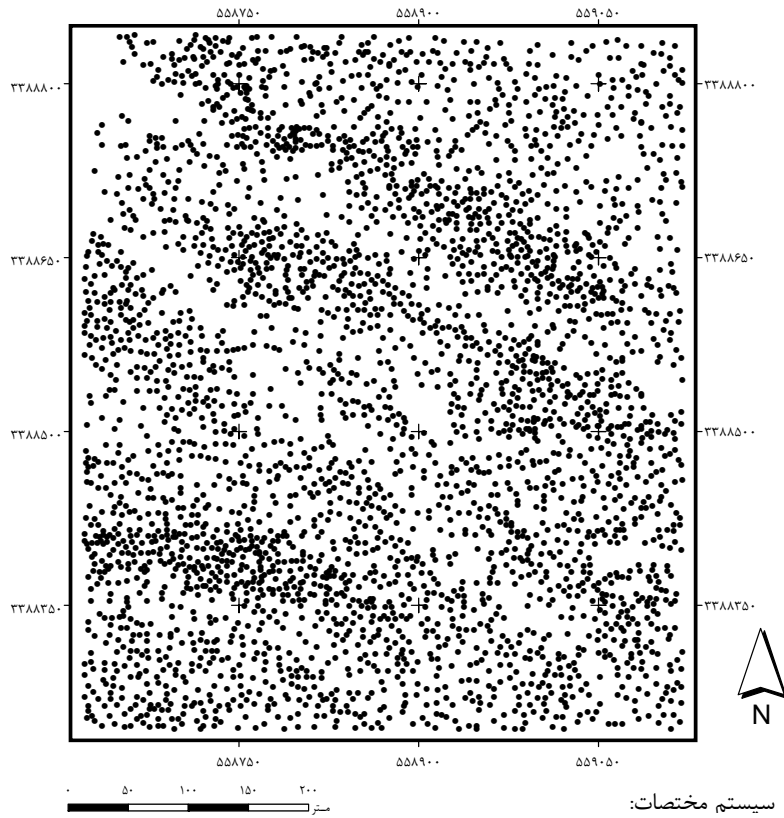
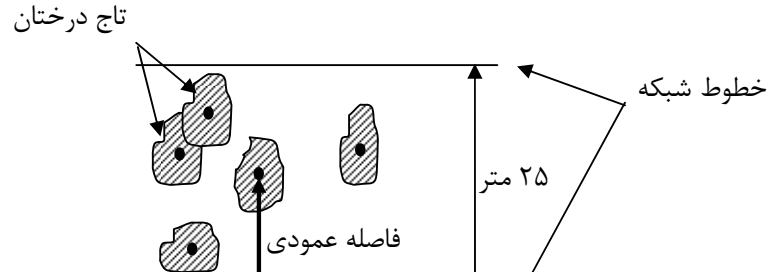
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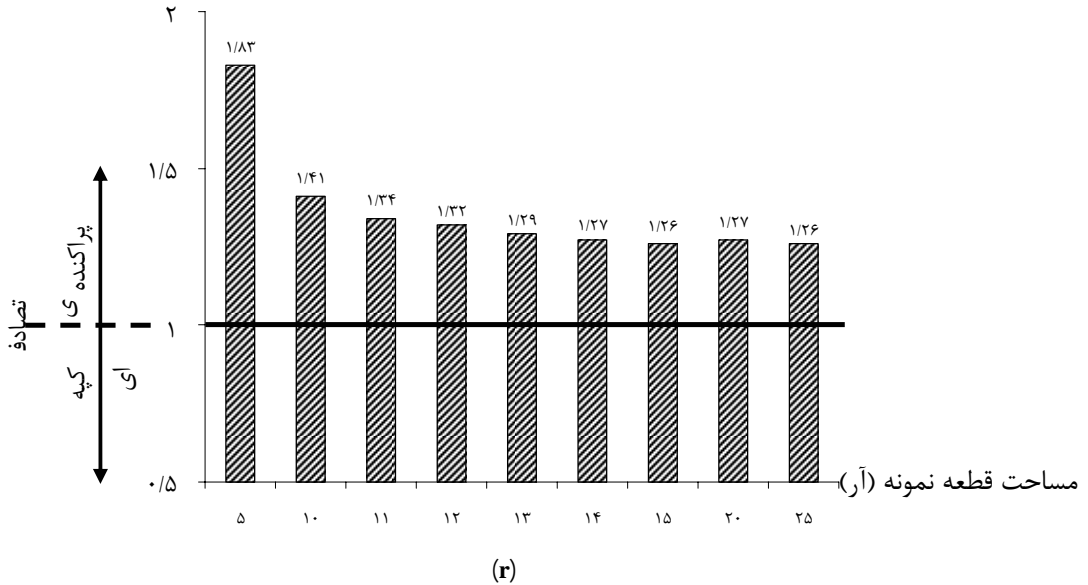
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## Investigation on the Spatial Pattern of Trees in Zagros Forests

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### Abstract

Zagros forests have an important role in the life of the residents due to its area, distribution, species and forest products. In addition, it is one of the most important biological sources and genetic reservoirs of Iran. Spatial pattern of trees is an important characteristic of plant communities. Generating hypotheses relating to the structure of ecological communities is the aim of spatial pattern recognition. Forest management planning has direct relationship with spatial pattern of trees. Regarding the importance of Zagros forests and the spatial pattern as a criterion to control changes and monitor forests, the spatial pattern of trees was studied in Zagros forests in this research and a proper method was presented. In Kohgiluyeh-Boyer-Ahmad Province, Servak Forests near Yasuj was chosen as the study area. A 30-ha plot was surveyed by full calliper method and position of each tree was determined via azimuth and distance in order to prepare tree position map. Using Nearest Neighbor Index, the spatial pattern was determined as "dispersed". Moreover, different surface areas measuring 500, 1,000, 1,500, 2,000 and 2500 m<sup>2</sup> in the form of circular sample plots were investigated. According to the total spatial pattern, 1,500 m<sup>2</sup> circular sample plot was chosen as the most suitable plot to study spatial pattern of the study area.

**Keywords:** Nearest Neighbor Index, Plot Area, Spatial pattern, Zagros