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(Saracoglu-n,1991)

.Kim ,1992))

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.(Evans,1997)

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subcordata C.A.M,1831)

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(Muller & Werner,1990

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Eucalyptus grandis

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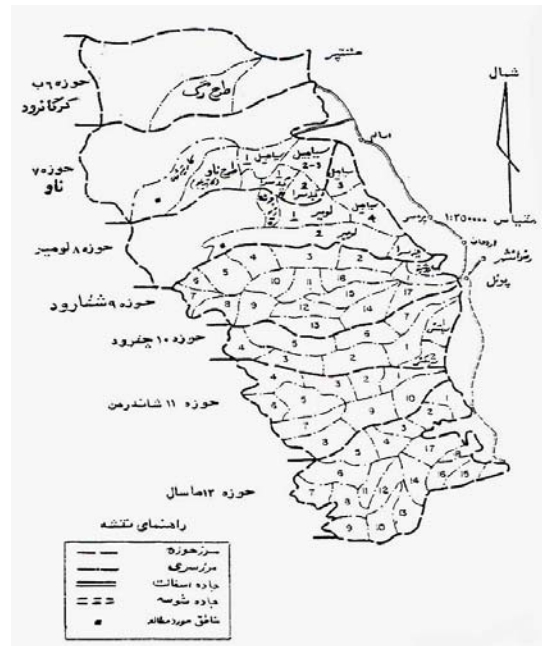
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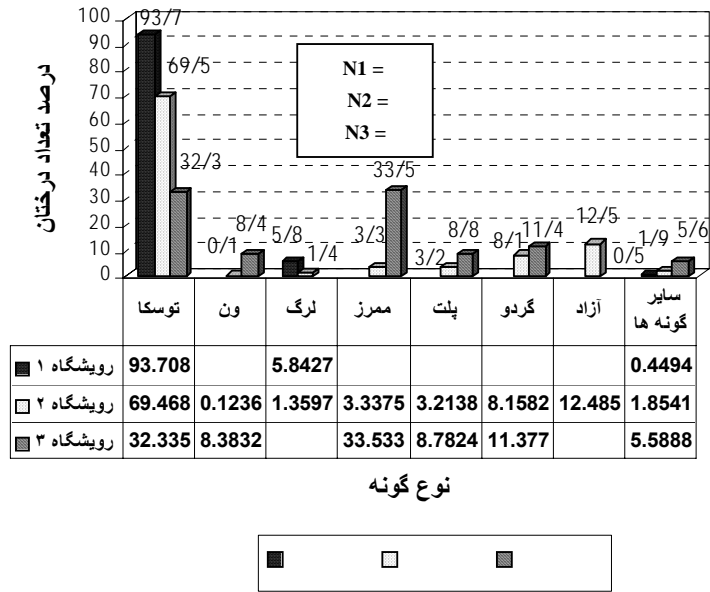
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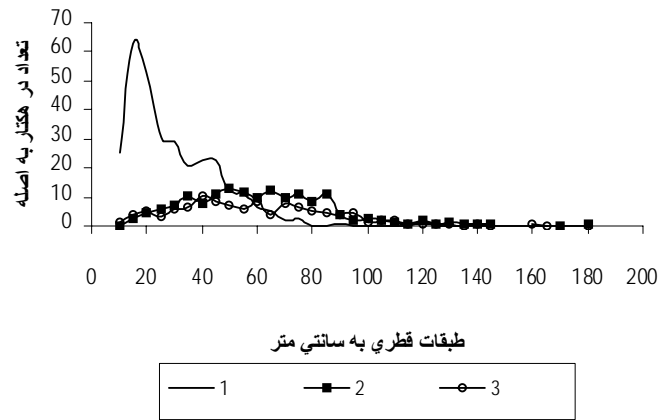
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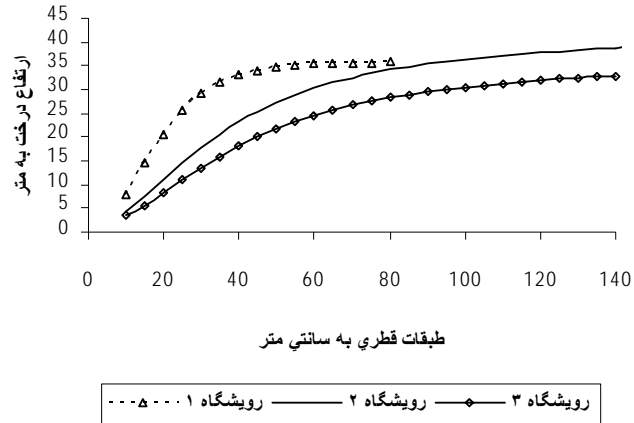
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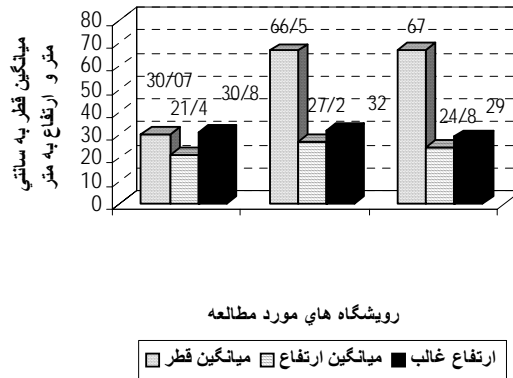


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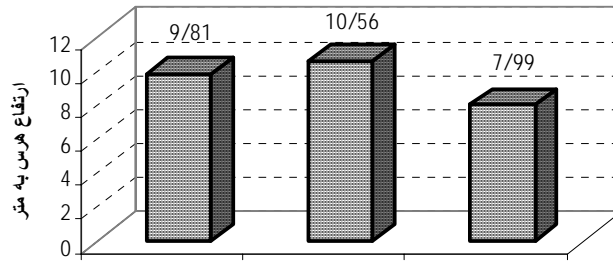
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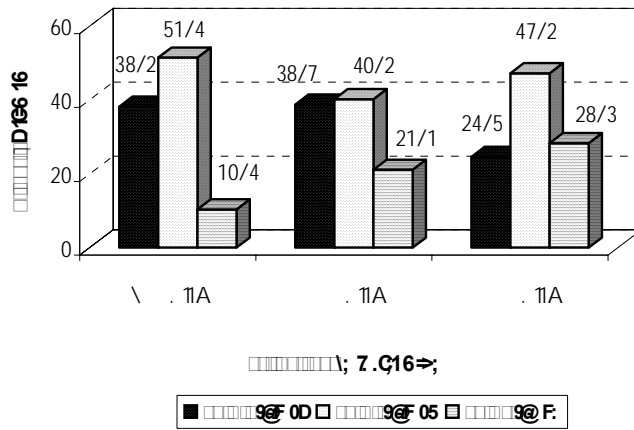
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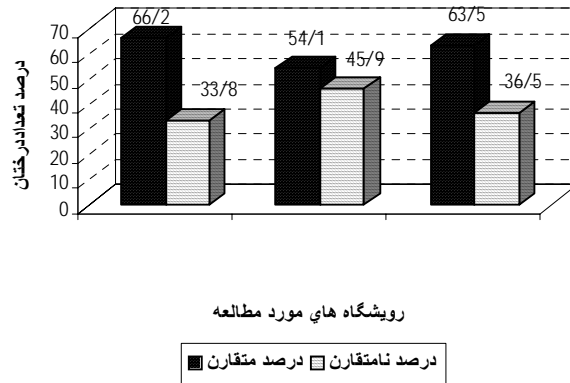
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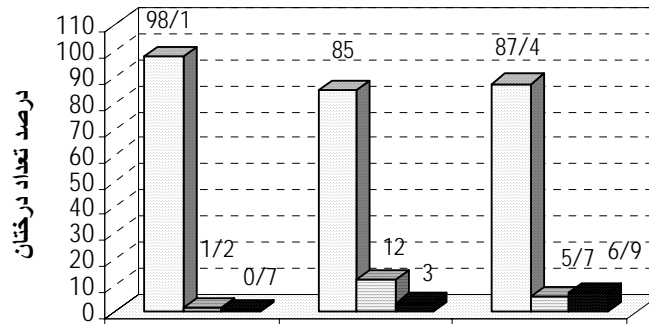
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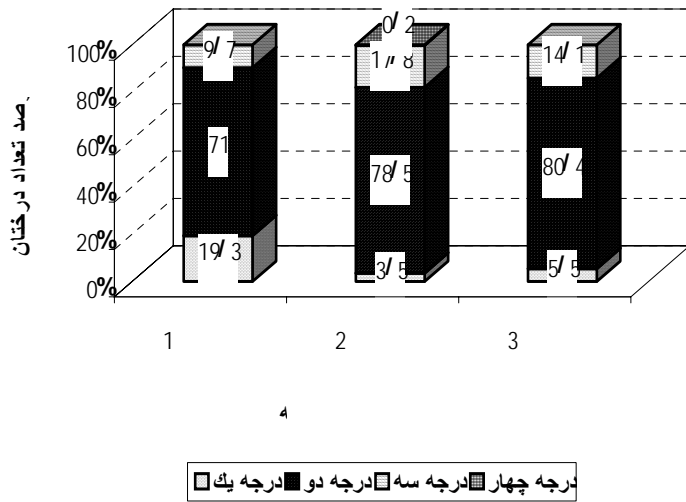
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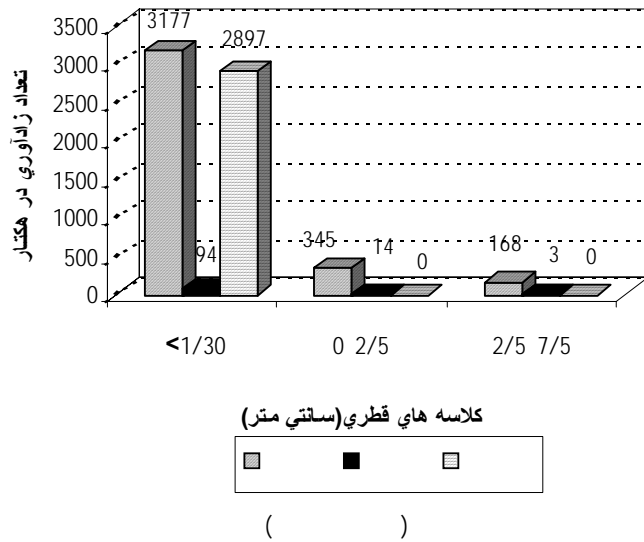


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An Investigation of the Quantitative and Qualitative Characteristics of *Alnus subcordata* in Three Areas of Different Altitudes in Asalem (Guilan Province)

I. Hassanzad Navroodi¹

Abstract

In order to evaluate the quantitative and qualitative characteristics of *Alnus subcordata* in areas of different altitudes, three sites were selected and studied in Asalem. The areas of the first, second, and third sites were 1.8 , 5.1 and 4.9 hectares respectively. In these sites, the following parameters were studied: kind of tree species, DBH, tree height, trunk quality analysis, extent of the branchless part of the trunk, number of branches from tree trunk, form and symmetry of crown, and tree regeneration. 100% inventory was taken as a means for sampling method. Height above sea level, slope in percent and aspect were also among factors determined for the sites. There was no significant difference observed among curves relating tree diameter with site elevation at a probability level of 0.01, but at a probability level of 0.05 a difference was observed between sites of the 2nd and 3rd elevations. The 1st and 2nd sites are in a more favorable condition than site 3 as far as branchless section of the tree trunk and intensity of branches on the trunk are concerned. Regeneration was in a better state in site 1 than in the other two. It is finally concluded that in addition to elevation, other factors such as slope, soil moisture and pH and above all the site situation are all effective in quantitative and qualitative characteristics of mountainous *Alnus subcordata*.

Keywords: *Alnus subcordata*, Altitude, Quantitative and qualitative characteristics, Asalem area.