

(Quercus libani)

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(Quercus libani)

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(hedayat@nrf.ut.ac.ir)

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- ∧ -Arista
- ∨ -Stand Dynamics
- ∩ -*Abies pinaspo*
- ∪ -Abrams
- ∂ -Dendro-ecological
- ∫ -Cross Dating
- ∫ -Chojnacky
- ∧ -*Pinus edulis & P. discolor*
- ∫ -*Juniperus monosperma & J. osteosperma & J. erythrocarpa*

∧ - Leica wild M 32

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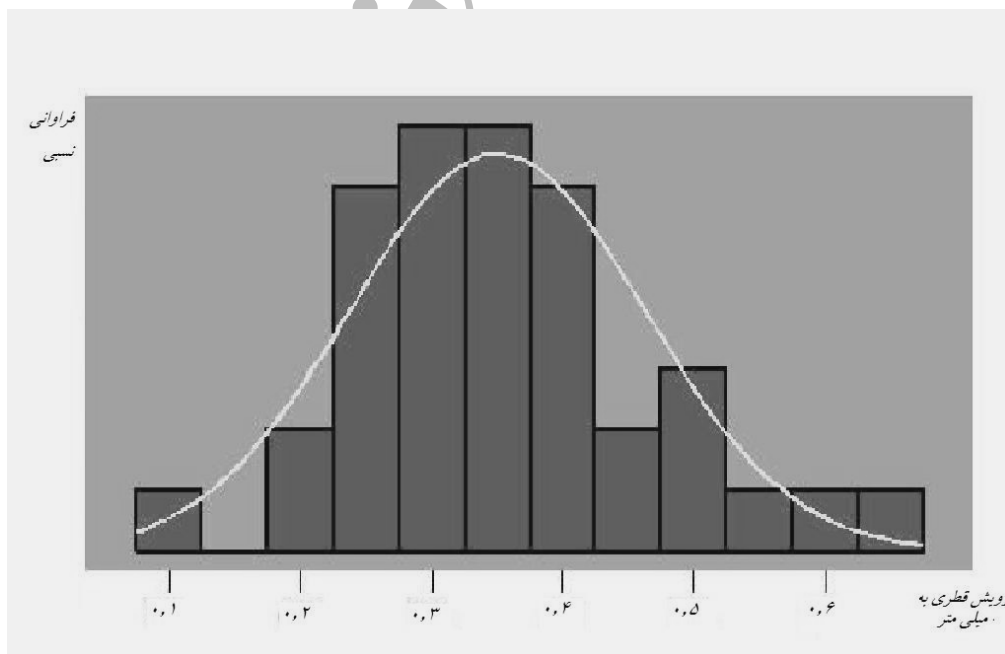
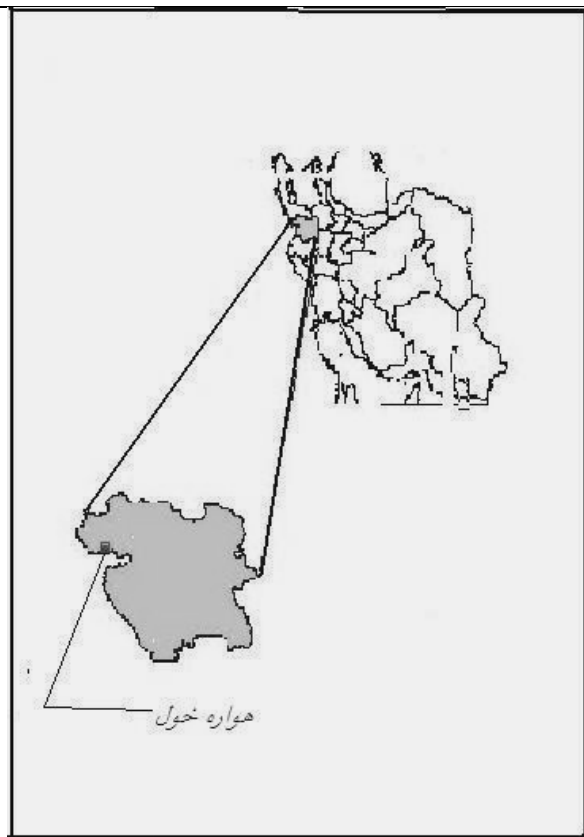
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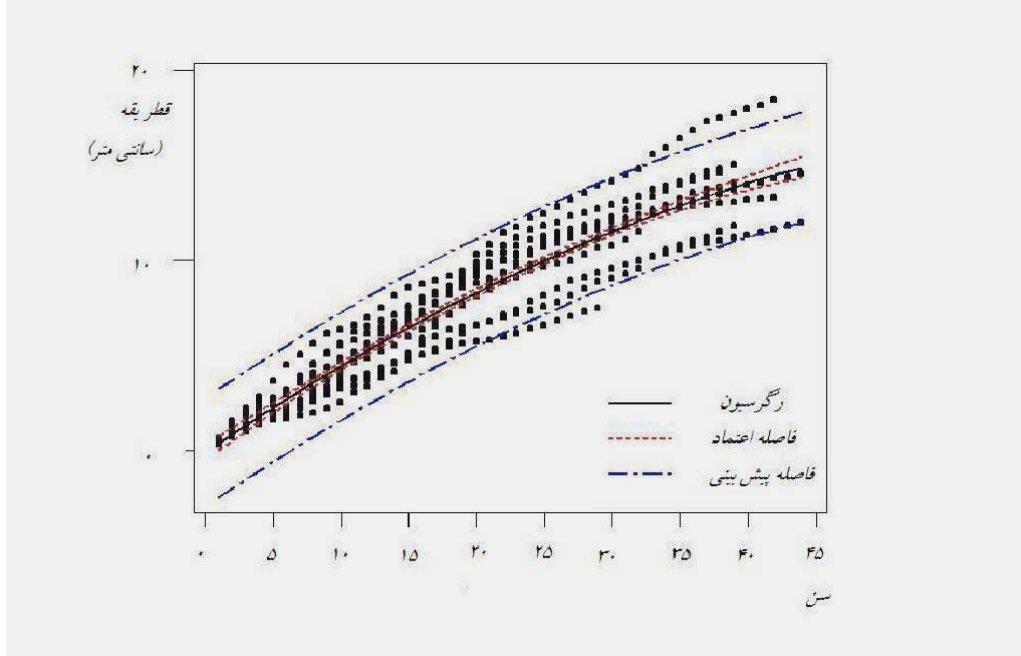
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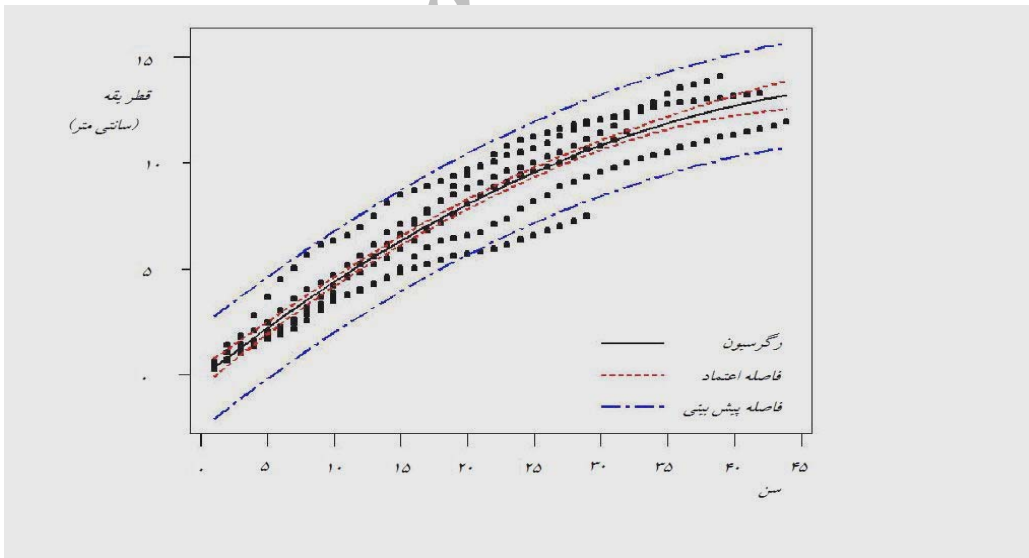
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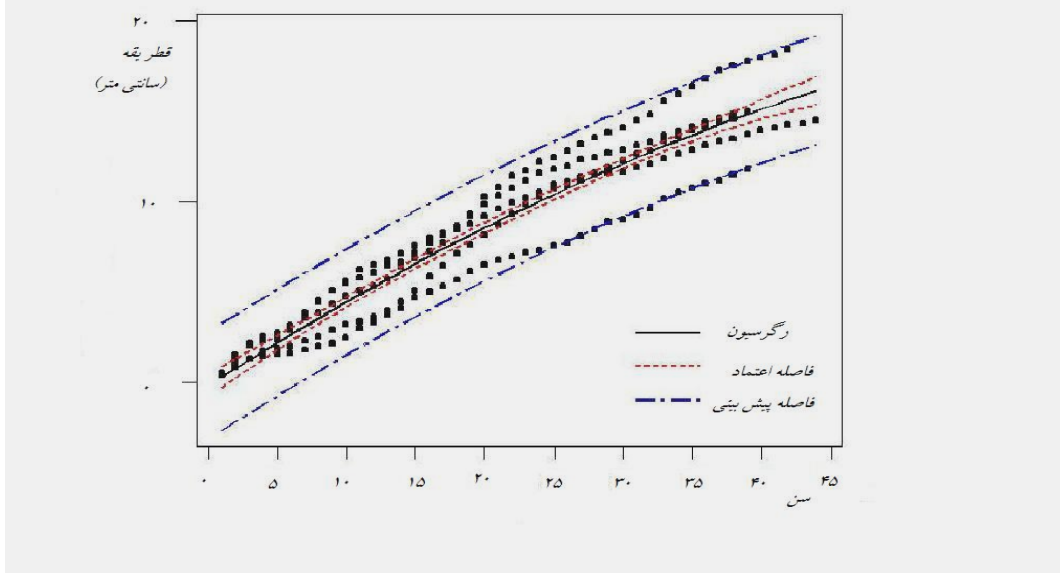




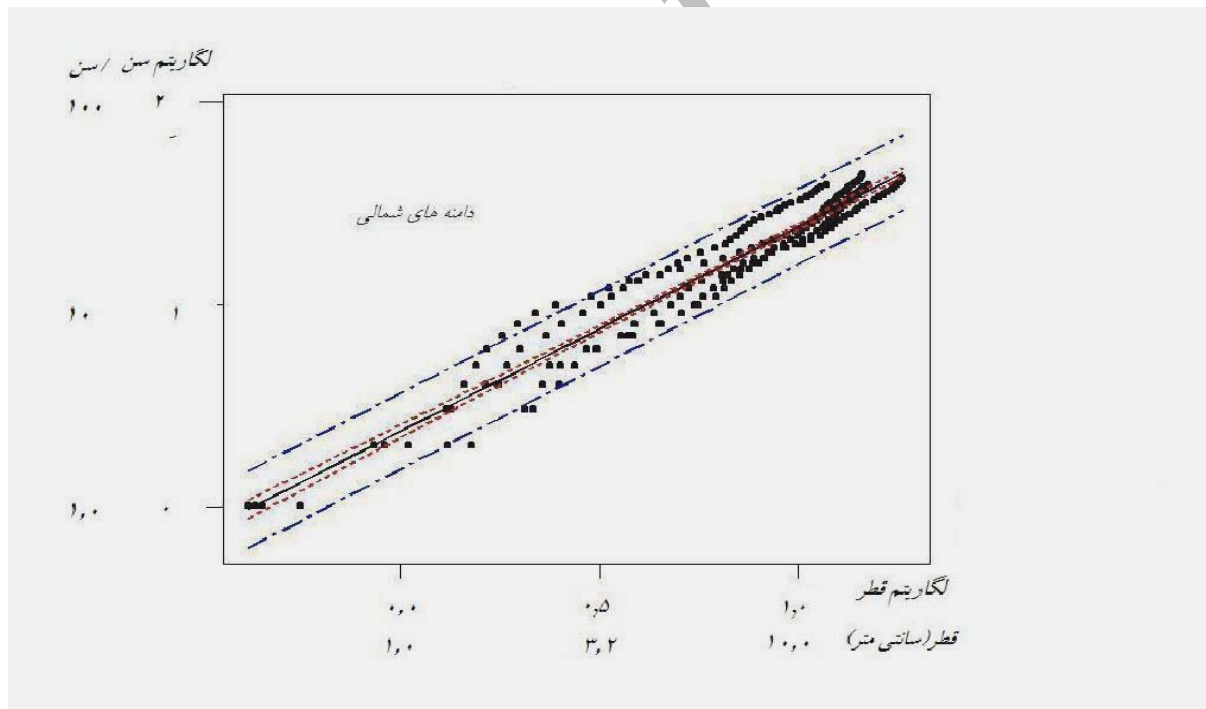
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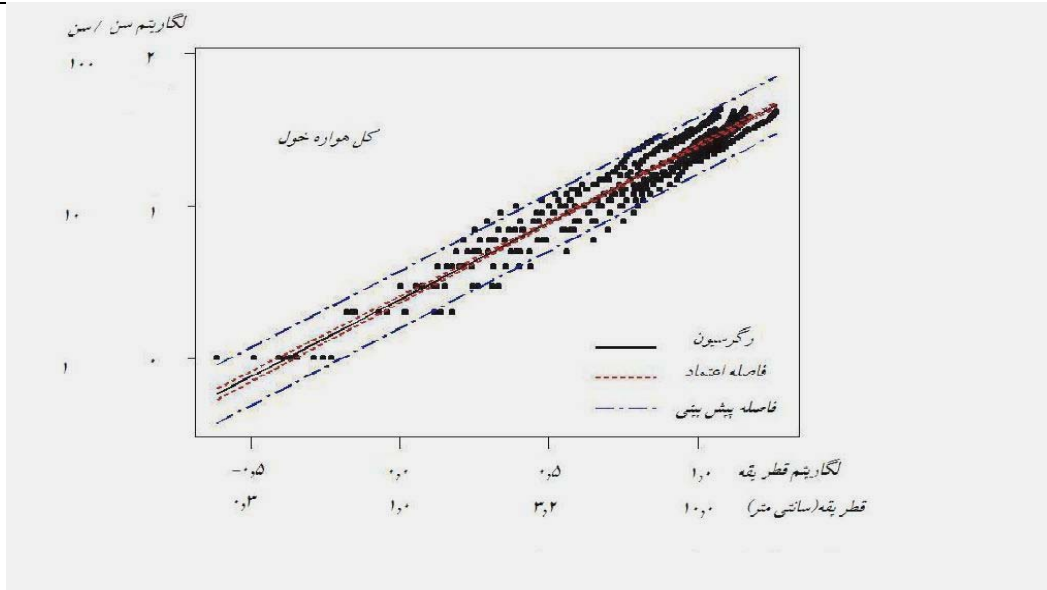
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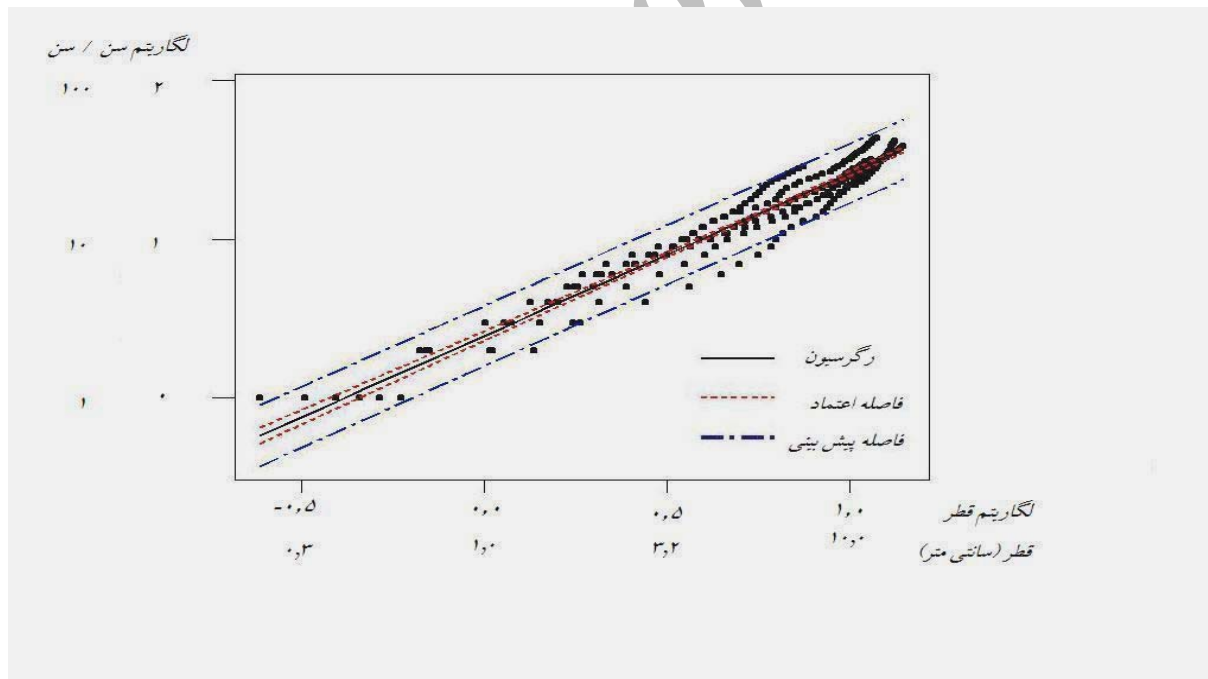
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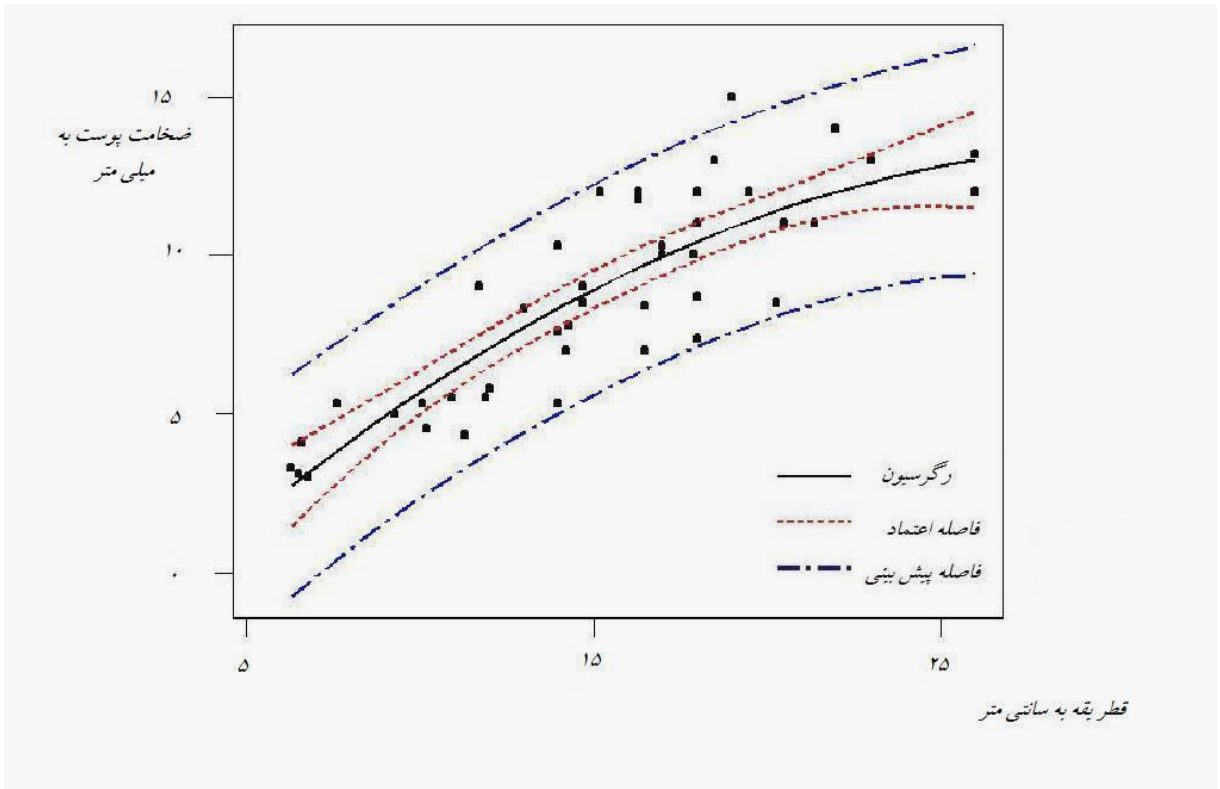
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An Estimation of Tree Diameter Growth of Lebanon Oak (*Quercus libani*) in Northern Zagross Forests (Case Study, Havareh khole)

H. Ghazanfari¹

M. Namiranian²

H. Sobhani³

M. R. Marvi Mohadjer⁴

K. Pourtahmasi⁵

Abstract

The domain of growing Lebanon oak covers around 106316 hectares (%24) of northern Zagross forests. Even though forest service in the Organization of Forests and Rangelands considers Zagross forests as protected, yet continuing exploitation as wood and fodder by local population to meet their basic daily needs is quite usual and the forest service has not so far been able to put an end to this. As it is necessary to manage forests with due consideration to people's rights and activities rather than denying them, the forest service has adopted a policy of management in which active participation and cooperation of local people is fully taken into account. Considering the new policy along with applying the new regulations, to manage forests as regards timely harvesting as well as reproduction based on stand age structure, collection of information on tree diameter growth seems to be a must and a key part of management.

This research was conducted to estimate the diameter growth of the trees growing in Havareh khole forest area to present a model of forest regulation in the future studies. Thirty four pairs of increment cores of Lebanon oak were randomly selected through line sampling. Also 7 trees were cut to be used for further and more precise measurements. Current annual diameter growth in these trees was measured to be 3.5 mm/year with relative sampling error of 10.7% at 95% confidence level. There made it 12 cases of samples that made it possible to get the precise age of the trees. Based on these measurements, age-diameter regression line was developed to help find the age of trees through diameter measurements.

Keywords: Diameter growth, Age-diameter relation ship, Predicting age-diameter model, Northern zagross forest, *Quercus libani*.

¹ -Ph.D. Scholar of Forestry, Faculty of Natural Resources, University, of Tehran (E-mail: Hedayat@nrf.ut.ac.ir)

² -Associate Professor, Faculty of Natural Resources, University of Tehran

³ - Associate Professor, Faculty of Natural Resources, University of Tehran

⁴ -Assistant Professor, Faculty of Natural Resources, University of Tehran

⁵ -Assistant Professor, Faculty of Natural Resources, University of Tehran