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Archive of SID

C/N

C/N

C/N

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(E\_mail:Vahidit@yahoo.com)

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*A. subcordata* (C/N)

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C/N

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C/N

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(*Alnus*)

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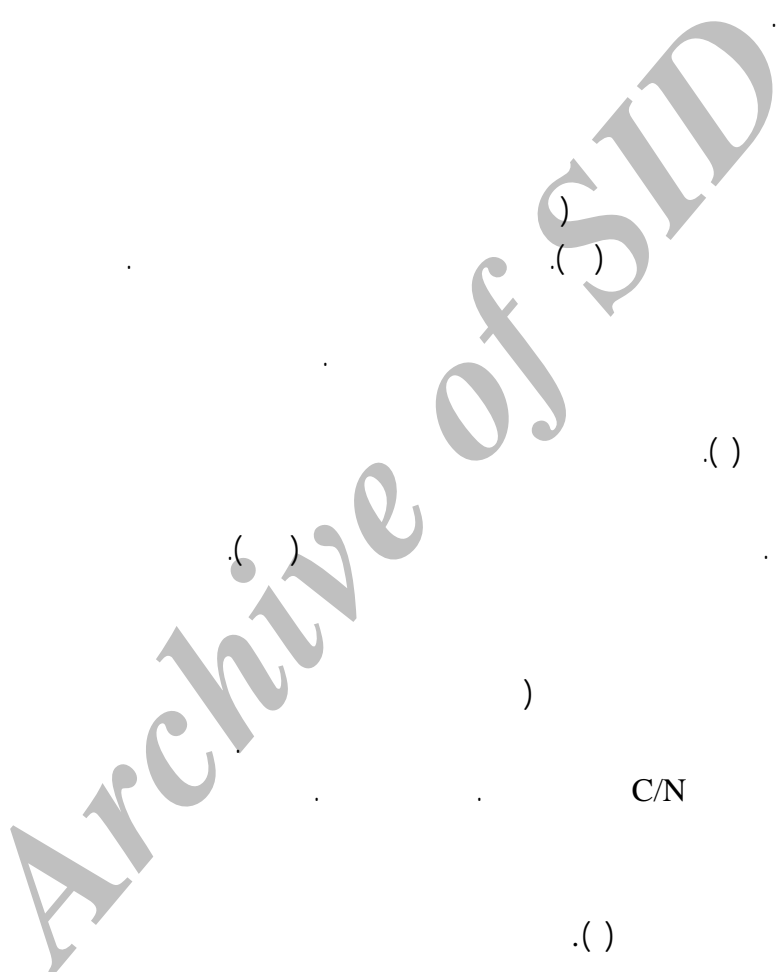
(.)

*A. acunata*

/ *A. rugosa*

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( ) C

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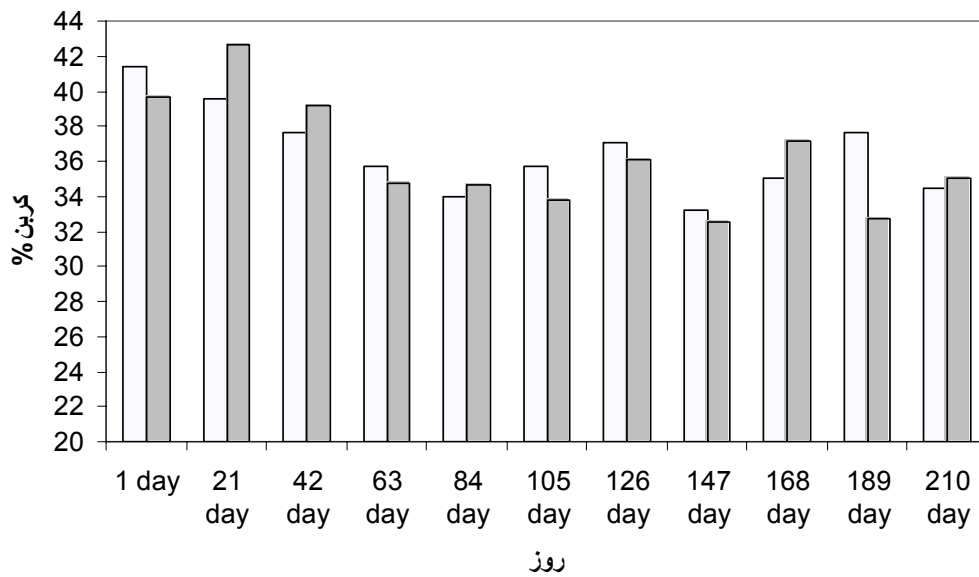
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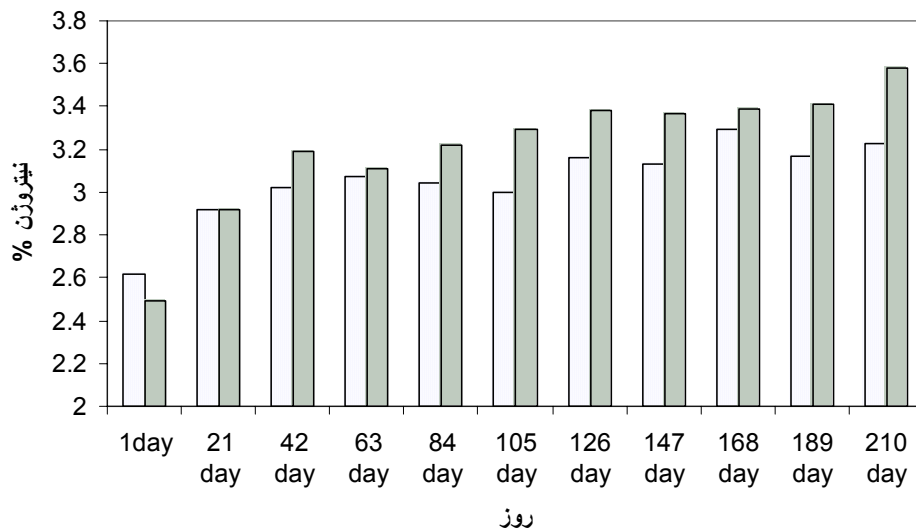
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Arcsin (N / )

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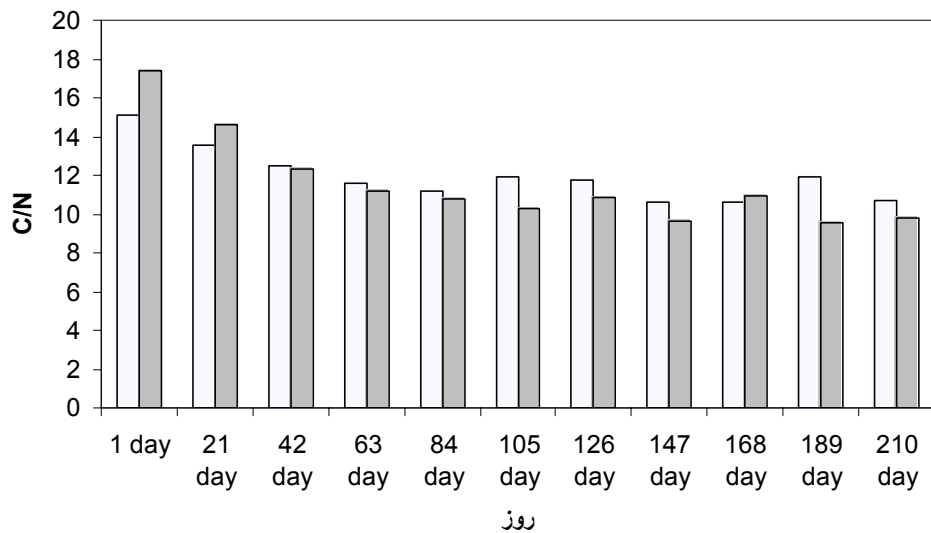
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C/N	/		/

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*Eucalyptus globulus, Alnus glutinosa, Castanea sativa*

*Quercus faginea*

$NH_4^+$

$NO_3^-$

<sup>1</sup>-Graca Canhoto

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## A Comparison of Decomposition Rate in *Alnus subcordata* Leaf Litter from Two Forest Stands of Different Parent Materials and under Similar (Laboratory) Conditions

V. Hosseini<sup>1</sup>P. Azizi<sup>2</sup>M.Tabari<sup>3</sup>S.M. Hosseini<sup>4</sup>

### Abstract

In order to determine the rate of litter decomposition in *Alnus subcordata* in two alder stands, litters from Vaz and Asalem with different parent materials were collected in autumn. Litters from each region were put in four vases for 7 months in laboratory conditions. Sampling was done within every 21 days. Nitrogen and carbon content were measured in each interval. On the first day, the comparative study between the two regions showed that there existed no significant difference between C and N content in litters.

The amounts of N were 2.49 % and 2.62 % in litters of Vaz and Asalem respectively. Carbon content was 43.35 % in Vaz and 33.9 % in Asalem. Rate of carbon variation indicated no significant difference in the two regions. Rate of nitrogen and C/N variation exhibited a significant difference in the two regions. C/N was reduced from 17.38 to 10.35 and from 15.12 to 10.67 in Vaz and Asalem stands respectively.

**Keywords:** Litter decomposition, Carbon (C), Nitrogen (N), C/N, Alder .

<sup>1</sup> -Assistant Professor, Faculty of Agriculture and Natural Resources, Kordestan University (E\_mail: Vahidit@yahoo.com)

<sup>2</sup> -Associate Professor, Faculty of Agriculture, Guilan University.

<sup>3</sup> -Assistant Professor, Faculty of Natural Resources, University of Tarbiat Modarres University

<sup>4</sup> - Assistant Professor, Faculty of Natural Resources, University of Tarbiat Modarres University