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(Crookston, 1984)

(Marenco &

(Crookston, 1984)

(Khajehpour, 1995)

(Power & Follett, 1987)

(Kouchaki & Khalghani, 1998)

(Gebremedhin & Schwab, 1998)

(Poehman, 1992)

(Peel, 1998)

(Zylstra, 2003)

(Ainehband, 2005)

(Kouchaki & Soltani, 1998)

(Copeland et al., 1993; Zylstra, 2003)

(Walker & Buchman, 1982; Norton et al., 1995)

(Cook & Haglund, 1991)

(Walters, 1980; Walker & Buchman, 1982; Derksen et al., 1993; Blackshaw et al., 1994)

(He et al., 2008)

(Cutforth et al., 2001)

(Santos et al., 1993)

(Santos, 1999; Mitchell et al., 1991)

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(Rousan, 2007)

(Binici et al., 2007)

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(Chatakul, 1990)

(Warriner & Moul, 1989; Semgalawe, 1998;

(Barasa, 2001) Chatakul, 1990)

(Chatakul, 1990)

(Krejcie & Morgan, 1970)

(Warriner & Moul, 1989; Semgalawe, 1998; )

Cramb, 1999)

(Karami,

1995; Warriner & Moul, 1989; Napier, 1991;

Sanders et al., 1999)

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(Khajehpour, 1995)

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(Rousan, 2007)

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(2008) He et al.

(Mahboobi, 2004)

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(Warriner & Moul, 1989; Chatakul,  
.1990; Cramb, 1999; Mahboobi, 2004)

(Warriner & Moul, 1989; Chatakul, 1990;  
.Semgalawe, 1998; Mahboobi, 2004)

(1991) Napier

(1999) Sanders et al.

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Sanders et al. (1991) Napier (1999) He et al. (2008)

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Mahboobi (1989) Warriner & Moul (2004)

(1989) Warriner & Moul (1995) Karami

Z=12/070-8/343x46-  
7/258x49+67/495x55+61/565x56+100/043x60-  
16/913x65+29/850x66-26/864x67

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**Factors Affecting on Implementing of *Crop Rotation* by Farmers in the Suburbs Division of Gorgan Township**

**M. R. MAHBOOBI,<sup>1</sup> AND. A. SHARIFZADEH<sup>2</sup>**

**1, Assistant professor and Faculty member of Gorgan University of Agricultural Sciences and Natural Resources (Correspondent Author), 2, Assistant professor and Faculty member of Gorgan University of Agricultural Sciences and Natural Resources**

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**ABSTRACT**

The purpose of this study was to demonstrate factors affecting on implementing of *crop rotation* by farmers in the suburbs division of Gorgan Township. The methodological approach was a descriptive-correlational study and the target population in the study consisted of 4000 resident farmers in 14 villages in the suburbs division of Gorgan Township in Golestan province. Using systematic classified random sampling method, 350 farmers were chosen. Data were collected through a questionnaire and were analyzed using SPSS, V.11. The Content and face validity of the instrument were obtained by the faculty members of Agricultural Extension and Education Department at Gorgan University of Agricultural Sciences and Natural Resources and the agronomy specialists board of the Agricultural Jihad Organization in the Golestan province. The reliability analysis was conducted and Cronbach's alpha value was 0.88. The results obtained from correlation analysis indicated that there are significant relationships (99%) between variables namely age, experience, literacy level of farmers and cultivated area and (95%) between variables namely attendance in extension classes, number of borrows and membership time in agricultural cooperation and crop rotation implementation. Also the results of forward stepwise logistic regression model indicate that discriminative factors are consisted of farm distance from sell market of products, experience of agricultural occupation, number of agricultural products, membership in the Islamic Council, extent of irrigated lands, attendance in extension and education classrooms, number of agricultural products under of insurance coverage and home distance from support center were correctly classified 95.4 percent of the respondents. For continuing of crop rotation operations, this study recommended execution of educational activities and continuing insurance programs for agricultural productions.

**Keywords:** Crop rotation; Sustainable agriculture; Soil fertility; Gorgan Township; Golestan Province

E-mail:

\*Corresponding Author: