

Westcott ، N.D. and A . D .Muir . 2000 . Variation in flax seed lignan concentration with Variety ، location and year ، proceeding of the 56th flax institute of the United States ، March 20 – 22 ، Doublewood Inn ، Fargo ، North Doublewood Inn ، Fargo ، North Dakota ، pp 77 – 85 .

NITROGEN AND IRRIGATION FOR ،THE EFFECT OF IRON ENHANCEMENT CONTENT OF SECOISOLARICIRE SINOL DIGLUCOSIDE OF SEEDS FLAXSEED.

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ABSTRACT

Afield experiment of flaxseed was carried out during the growing Seasons of 2010 – 2011 and 2011- 2012 in college of Agriculture – University of Mousl in clay soil. The experimental design was split- split plot design according to the complete random block design (RCBD) with two replications which in volve soaking seeds at three levels of concentrations the first is iron (0.5، 1، 1. 5) % Fe sub sub plot، The second is three levels of nitrogen fertilization (urea 45%)، (0، 100، 200) kg N.h⁻¹ as sub plot under rain fed only and with. Supplementary irrigation as main plot The results revealed that :

1-The Addition of (100 kg N . h⁻¹) of Nitrogen fertilization led to asiginificant increasing in content secoisolariciresinol diglucoside for the first and second seasons of growing، while (100 and 200) kg N.h⁻¹ led to asiginificant increase of yield secoisolariciresinol diglucoside in the first and second seasons of growing

2- The soaking seeds of I% Fe concentration led to significantly increase in secoisolariciresinol diglucoside in the first and second seasons، whereas the soaking of 1% and 1.5% Fe led to siginificant increase yield secoisolariciresinol diglucoside in the first and second seasons of growing

3- The rain fed led to significant increase of secoisolariciresinol diglucoside in the first and second seasons of growing. While yield secoisolariciresinol diglucoside gained significant increase at the supplementary irrigation for the first and second seasons .

The second order interactions between different factors show significantly differences in the studied characters

Key words : Flaxseed ، Iron ، Nitrogen ، Irrigation ، Secoisolariciresinol diglucoside .