

## Salahaddin University-Erbil

PhD Research	پرۆپۆزەلى تويّژينەوە بۆ بەدەستهيّنانى بروانامەى دكتۆرا		
Proposal			
1. Title of PhD	ناونیشانی پرۆپۆزەلی تۆێژینەوەی پێشنیازكراو		
research proposal: Comparison between iron status of main soil order in			
Erbil using Fe-solubility diagram and DRIS methodology and role of Humic			
acid in improving it			

2. General informa	<b>زانیاری گشتی</b> ناوی سیانی	
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## 3. Summary (Abstract) of PhD research proposal

This should be not more than 200 words and not less than 75 words.

The study includes studying Iron status of main soil orders in Erbil governorate using Iron solubility diagram, Diagnosis recommended integrated system (DRIS) methodology and iron critical value or range. The soil samples will be taken from 30 locations or agricultural lands. The soil analysis is including EC, pH, Organic matter, cation exchange capacity, concentration of main cations and anions, active calcium carbonate, total calcium carbonate, particle size distribution, bulk density, real density and available iron. The pot experiment will be done using completely randomized design with three replicates, to test the role of humic acid application in conversion of iron status and its availability with and without using humic acid. The iron status will be grouping depending on soil calcium carbonate, organic matter and soil texture.

A.O.Esmail Prof. Dr.Skram Othman Esmail

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