

Sudan University of Science and Technology

College of Graduate Studies

**Performance of Two Fodder Sorghum Cultivars, Under Different
Irrigation Intervals and Two Seedbed Preparation Methods in a
Saline Soil.**

اداء صنفى ذرة علفية تحت فترات ري مختلفة وطريقتي تحضير مهد في تربه ملحية

**A thesis Submitted in fulfillment of the Requirements for the Degree
of Doctor of Philosophy (Ph.D) in Agronomy**

By:

Sayed Aidroos Ahmed Khalifa

Supervisor:

Dr. Elsadig Elmahdi Ahmed

Co-supervisors:

Prof-Yassein Mohammed Ibrahim Dagash

January 2016

بسم الله الرحمن الرحيم

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بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ

لَمِنَ السَّمَاءِ أَنْزَلْنَاهُ لَكُمْ مَاءً يَنْزِيلًا لِكَيْ تَرَوُوهُ يُخْرِجُ بِهِ زَرْعًا لَكُمْ تَعْلَمُونَ يَهْبِيجُ فَتَرَاهُ
مُضْغَرًّا ثُمَّ يَجْعَلُهُ قُيُوطًا لِكَيْ تَذَكَّرْتُمْ (لِأُولِي الْأَلْبَابِ) (21) سورة الزمر

Seest thou not that God sends down rain from the sky , and leads it through springs in the earth then He causes to grow , therewith , produce of various colours : then it withers; thou wilt see it grow yellow , then He makes it dry up and crumble away . Truly, in this, is a Message of remembrance to men of understanding.

Zumar (21).

مَهْدًا وَيَسِّرُ لَكَ الْيُسْرَىٰ وَأَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجَ بِهِ نَجَاتٍ شَتَّىٰ
سورة طه (53)

" He Who has made for you the earth like a carpet spread out ; has enabled you to go about therein by roads (and channels) ; and has sent down water from the sky. " with it have We produced diverse pairs of plants each separate from the others . Taha (53)

مَاءٍ إِلَى الْأُمِّرِيِّينَ وَأُولَئِكَ نَبَاؤُا الْيَوْمِ الْأَوَّلِ بِرَبِّهِمْ أَنْزَلْنَا بِهِ زُرْعًا تَأْكُلُ مِنْهُ أَنْعَامُهُمْ هُمْ يَوْمَ أَنْزَلْنَا بِهِ يُصِرُّونَ السَّجْدَ
(27)

And do they not see that we do drive Rain to parched soil (bare of herbage), and produce therewith crops, providing food for their cattle and themselves? Have they not the vision?. Sajda(21).

DEDICATION

To the Souls of my Late Mother Bakheita & brother Abumedian

