

VOLUME VIII · DECEMBER 1979

THE LIBYAN JOURNAL OF

AGRICULTURE

Editor in Chief

Dr. M. M. BEN HALIM

Editors

Dr. MOHAMED SHAGROUN
Dr. GILANI ABDULEGAWAD
Dr. M. BAYOUMI

Secretary

M. NASSAR

When citing from this Journal, use the following abbreviation:
Libyan J. Agr.

Published annually by the Faculty of Agriculture,
University of Alfateh, TRIPOLI, Socialist People's Libyan Arab Jamahiriya (S.P.L.A.J.)

Contents

AGRICULTURAL ECONOMICS

- A Study of the Production and Marketing of Onion in the Tripoli Area:
BASHIR EL-WIFAT and FARID NAWAS.....

1

AGRICULTURAL MECHANIZATION

- Yield Response of Irrigated Wheat Grown on Sandy Soil to Deep Tillage
and Phosphorus Fertilizer: MUHAMMAD S. CHAUDHRY and SHARAFEDDIN
M. SHERIF.....

9

AGRONOMY

- Observations on the Parasitic Behaviour of *Thesium humile* Vane.
(Santalaceae).
II. *Thesium* Fruit and its Uptake of Water: M. A. ABOU-RAYA, M. A. EL-
SHARKAWY.....

15

ANIMAL SCIENCE

- Effects of Cage Density and Level of Added Fat on Laying Hen
Performance: FAROUK G. HORANI.....
- The Effect of Clomid (Clomiphene Citrate) in Chickens
I. Laying Performance: M. M. SHANAWANY, A. K. AL-KHAZRAJI and O.
HAMED
- The Effect of Clomid (Clomiphene Cetrate) in Chickens
II. Histo-Physiological Study: A. K. AL-KHAZRAJI, M. M. SHANAWANY, and
O. M. HAMED.....
- The Effect of Clomiol (Clomiphene Citrate) on Chickens
III. Sexual Characteristics in the Male: M. M. CHANAWANY, A. K. AL-
KHAZRAJI and O. M. HAMED
- Simulation of a System of Lowland Sheep Production with Different
Times of Lambing: P. R. EDELSTEN and J. E. NEWTON.....

25

33

39

51

59

FOOD SCIENCE

- Liquid Sugar from Egyptian Treacle
*I. A Study of Some Characteristics of the Coloring Matters Isolated from
Egyptian Treacle:* MOSTAFA A. MOHAMED.....
- Liquid Sugar from Egyptian Treacle
*II. Chromatographic Fractionation of the Treacle Colorants with Molecular
Sieves:* MOSTAFA A. MOHAMED
- Studies on the Coloured Components of Black Tea: MOSTAFA A.
MOHAMED

73

87

95

HORTICULTURE

- Changes of Minerals in Fruits and Leaves of Date Palm During Fruit
Development: MAHAMED Y. EL-SHURAFA and SAMIA E. ABOU-NAJI

107

Effect of Set Size on the Yield of Onion Under Libyan Conditions: M. M. EL-SHARIE	115
Effect of Sowing Dates on the Performance of Grownvetch (<i>Coronilla varia</i> L.): SAMIR SALLAM, M. A. BAYOUMI, M. Z. MAHDI and J. H. EL-FALEIT.....	119
Impact of Cultivars and Planting Dates on Yield of Onion Bulbs: M. W. EL-SHAFIE and W. A. WARID	127
Inheritance of Flower Size in <i>Petunia Hybrida</i> L.: H. A. KAMEL, SAMIR SALLAM., A. MISHIHA and H. A. HUSSEIN.....	137
Onion Varietal Test Under Libyan Conditions: M. W. EL-SHAFIE.....	143
Sugar contents and physical characters of six leading date cultivars of Southern Libya: MOHAMED Y. AL-SHURAFA, HUSAIN S. AHMED, SAMIA A. NAGI	153
 PLANT PROTECTION	
Powdery Mildews in the Libyan Jamahiriya. I. Identity of certain powdery Mildew Fungi: M. WAJID KHAN and AHMED E. A. MUSSA	161
Broad Bean Mosaic Caused by Pea Mosaic Virus: ABD EL-SHAFY A. FUDEL-ALLAH and HOSNY A. YOUNES.....	169
Ecological and Preliminary Control Studies of the Citrus Brown Mite <i>Eutetranychus orientalis</i> (Klein) (Tetranychidae: Acarina) on two Citrus Varieties: NAWAL A. HESSEIN, IBRAHIM FAHMY and HODA M. KABBARA....	175
Interaction between <i>Meloidogyne incognita</i> and <i>Tylenchorhynchus brassicae</i> on Tomato: M. WAJID KHAN and S. HAQ.....	181
Notes on the Biology and Control of the Maize Shoot Fly <i>Delia Flavibasis</i> Stein (Diptera, anthomyiidae): MOSTAFA KAMAL AHMED	187
Onion Diseases in the Libyan Jamahiriya: ABDULNABI ABUGHNIA and FAWZI ADAM	195
Studies on the Biology and Habits of the Maize Stalk Borer <i>Sesamia Cretica</i> Lederer (Lepidoptera moctuidae): MOSTAFA KAMAL AHMED	199
 SOIL AND WATER SCIENCE	
Agrosil Influence on Soil Water Relationships of Calcareous Sandy Loam Soil: MOHAMED ASSED and GILANI ABDELGAWAD	207
Autotrophic Nitrification in Soils Irrigated with Diluted Seawater: S. M. SALEH.....	215
Studies on the Microbial Population of a Libyan Desert Soil: A. H. SIALA	221
 NOTES	
The Effect of Confinement on Differential Leukocyte Count of Laying Pulletts: A. K. AL-KHAZRAJI, A. S. AL-JANABI, S. LAWAND and H. V. SHIRLEY	227
The Effect of Carbachol in Stomach and Oesophageal Motility in Sheep T. M. ALI	231
A New Record for Loose Smut in the Libyan Jamahiriya: ABDULNABI ABUGHNIA	235