Genetic Improvement of Lysine Production from Yeast (Saccharomyces cerevisiae) Mutants Resistant to Lysine Sulfur analog

BY
GAMAL MOHAMEDIN HASSAN
B. Sc. Agric. (Genetics)
Faculty of Agriculture
Assiut University, 1990

THESIS
Submitted in Partial Fulfillment for the Requirements for Master of Science In

Agriculture Science (Genetics)
Department of Genetics
Faculty of Agriculture
Cairo University
Fayoum

1997
**ABSTRACT**

The present investigation was carried out to develop yeast strains capable to supply lysine, different in wheat protein, by using UV irradiation and EMS.

The mutant’s strains were tested under different environmental conditions, such as different sources of carbon and nitrogen, temperature and pH. The production of lysine in the mutant’s strains did not effect on the fermentation capability.

**Keywords:** Lysine production, Mutants, UV irradiation, EMS, *Saccharomyces cerevisiae*, RAPD-PCR, Plasmids, Curing.