

## THE EFFECT OF SIEVE HOLES AND TYPE OF GRAINS ON SOME PERFORMANCE INDICATORS OF HAMMER MILL.

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### ABSTRACT

The experiment was conducted to evaluate the effect of sieves holes and type of grains on some performance indicators of hammer mill in college of Agriculture / University of Diyala during may and June 2011. the sieves holes for grinder with Two levels of Diameter were used included 1.5 and 3.5 mm with grinding three types of important grain in the manufacture of feed included wheat, barley and maize. The technical indicators which studied were: Specific Capacity Kg/Kw.h and the specific energy Kw.h/Kg, were also examined some of the qualities of the volumetric of the grinding grains Average particle size mm and standard deviation and Milling evaluation Factor. The experiment carried out using the completely randomized design (CRD), with three replications.

Resulted in an increase of sieve holes change the diameter from 1.5 to 3.5 mm resulted a significant increase in Specific Capacity and Average particle size and standard deviation either the specific energy and Milling evaluation Factor recorded lower significant. Led change the type of grain to excellence wheat and maize got significantly higher specific capacity and less specific energy either the barley got significantly highest of the milling evaluation factor and less a average particle size and standard deviation, given the combination factors of the study the highest Specific Capacity and lower specific energy with holes sieve 3.5 mm and wheat and maize either excellence the holes 1.5 mm sieve and barley against giving them the highest the Milling evaluation Factor and less a Average particle size and standard deviation,

**Key Words** : grain grinding, Particle Size, Hammer Mill, grinders