

-50- Summary of

Name: Ahmed Nabil Abd El-Hamid Nawar National: Egyptian

Department: Animal and Poultry Production

Title: PRODUCTION OF 3-WAY CROSS OF CHICKENS TO
IMPROVE EGG PRODUCTION TRAITS

(Summary)

The present study was carried out at EL-Sabhia Poultry Research Station, Animal Production Research Institute, Agricultural Research Center during .2005 to 2008

Two local strain of chicken Mandarah (Mn) and Silver Montazah (SM) and .one commercial strain Lohman Brown (LB) were used in this study

In the first generation a total of 10 males for sire line (SM) and (Mn) and 100 females of (LB) strains were used to produce Mn x LB and SM x LB crosses. In the second generation, which the three-way crosses and the reciprocal cross was developed, with matting between males and females of .two-way crosses, (LB) contributed 50% of the three-way cross

Three-way crosses improved ASM, BW at different ages, EN and EM during different periods and decreased fertility %, hatchability traits % and .BW at sexual maturity than the local strains

.These results may be due to cross local strain with commercial strain

Department Head

/Prof. Dr

SUMMARY 200 WORDS

Name: Ahmed Nabil Abd El-Hamid Nawar National: Egyptian

Department: Animal and Poultry Production

Title: PRODUCTION OF 3-WAY CROSS OF CHICKENS TO
IMPROVE EGG PRODUCTION TRAITS

(Summary)

The present study was carried out at EL-Sabhia Poultry Research Station, Animal Production Research Institute, Agricultural Research Center during .2005 to 2008

Two local strain of chicken Mandarah (Mn) and Silver Montazah (SM) and .one commercial strain Lohman Brown (LB) were used in this study

In the first generation a total of 10 males for sire line (SM) and (Mn) and 100 females of (LB) strains were used to produce Mn x LB and SM x LB crosses. In the second generation, which the three-way crosses and the reciprocal cross was developed, with matting between males and females of .two-way crosses, (LB) contributed 50% of the three-way cross

:Effect of crossbreeding

Three-way crosses decreased fertility and hatchability traits % than the -1
.pure lines

BW at different ages was improved when crossed local strain with -2
.commercial strain

Three-way cross lines improved ASM, while, decreased BWSM for -3
.three way-crosses

4- Three-way crosses were improved EN and EM during different periods
of production, while decreased