

## **REPRODUCTIVE PARAMETERS OF RABBITS UNDER TROPICAL CONDITIONS: CASE TUXTEPEC, OAXACA**

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### **ABSTRACT**

In Mexico, rabbit production is located mainly in the states with an average annual temperature of 20°C. The optimum temperature for the normal development of the rabbits is between 18 and 20°C. Rabbits are very sensitive to high temperatures seeing decreased production and reproduction. Rabbit production under tropical conditions emerges as an alternative due to the ability of this species to consume forages. In Mexico, the knowledge about the reproduction of rabbits under tropical conditions is scarce. The aim of this study was to evaluate the reproductive parameters of two farms of rabbit producers located in the region of Tuxtepec, Oaxaca. Data of 40 (farm A) and 35 females (farm B) was analyzed. Data of 183 births (farm A) and 158 (farm B) recorded during two years was analyzed. Data was analyzed by two-way analysis of variance (ANOVA) using the SAS program. Means were compared for significant difference ( $p < 0.05$ ). Non-significant difference on fertility rate between both farms was found (71.3 vs 68.5%), births during autumn and winter were different ( $p < 0.05$ ) between both farms (38.7 vs 41.9%), there was no-significant difference in litter size between both farms (7.35 vs 6.6) and significant differences were found ( $p < 0.05$ ) on kits sex ratio (56.14 and 54.94% females, respectively). In comparison, results obtained under non-tropical conditions from fertility rate, litter size, births and females

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kits (sex ratio) are 87%, 7.60 and 41.7, respectively. We conclude that under tropical conditions the reproductive parameters of rabbits are altered, such as fertility and female kit ratio.

**Keywords:** rabbit reproductive parameters, tropical conditions, litter size, fertility, sex ratio



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