

REPRODUCTIVE MANAGEMENT OF RABBIT BACKYARD PRODUCTION IN THE AREA OF VOLCANOES IN THE STATE OF MEXICO

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ABSTRACT

The backyard rabbit production is an activity in which, for easy keeping and relative small space can provide protein for all the family members. To ensure that here is a production it must be taken into account the technical aspect such as food, health and specially the reproduction issues.

Objective. The following management study shows that small-scale breeders performed on their farms in the productive and reproductive aspects. **Methodology.** The study was conducted in 10 municipalities in the volcanoes area of at the Southeast of the Mexican Valley. 55 interviews were carried out to small producers, using a structured survey. **Results.** A total of 2910 doe rabbits were located in the area. The rabbit's breeds were New Zealand, Hybrid, California and Creole; 28.5%, 27%, 22.6% and 21.8% were reported, respectively. At most all runs an external stallion and most uses 4 times per month (41.8%). The annual number of births varies according to the intensity with which the doe but this data is handled accentuated between 4 and 6 (66.1%), as reported 7 and 8 births (41.5%). The doe reproductive life varies from 12 to 24 months; 38.8% cases reported that they use from 12 to 18 months in 25.6% cases, and 39.6% cases for 24 months. 90% cases reported to give one services per doe and 4% give two and 6% cases 3 services. None reported deformities in their kits. **Discussion and conclusion.** Reproductive management for productions backyard area of volcanoes in the state of Mexico courage positive data at weaning as the number of weaned rabbits for the majority of backyard rabbit producers is



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high. With these data rabbit production for auto-consumption is considered good enough, and may cover part of the nutritional needs of farm families. Besides the local restaurants consume most of the rabbit production, which made be consider as an important touristic corridor at the volcanoes area.

Keywords: volcanoes area, reproduction, backyard production



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Introduction

From the pre-Hispanic times the local rabbit known as teporingo or volcano rabbit (*Romerolagus diazi*) has been an important part of the diet of local people. Since then the rabbit activity has been significant as part of their agricultural and forest resources management. The rabbit activity persists as familiar backyard in rural areas and is orientated for home consumption; some animals are traded at the local market and among neighbors. During the last years the rabbit activity has been increasing in technology adapting new and modern systems intensifying the meat production. In spite of this new technology the large production does not come from the modern systems. A considerable meat and sub-products come from the backyard systems (Lopez, 1999) were in most of the cases is carried out in rustic equipments. The domestic rabbit has great potential of meat producing animal. Rabbits can produce more meat from forage-based diets than can any other type of livestock. Feed conversion ratios* of 3-4: 1 can be obtained with high roughage diets. Rabbits are adaptable to both small and large-scale production, and may be especially useful in tropical developing countries. Profitability of commercial rabbit production is currently limited by labour intensive management techniques, severe disease problems, and inadequate knowledge of nutritional requirements and nutritional effects on the development of reproductive management.

The rabbit systems must have an adequate supply of both feeding and the reproductive management. These are two elements that must be very close to having efficient and productive farms. The paper presents the reproductive management of farms in 10 municipalities of the volcanoes located in the State of Mexico.

Methodology

The study was conducted in 10 municipalities in the volcanoes area of at the Southeast of the Mexican Valley. 55 interviews were carried out to small producers, using a structured survey. The survey included open and close questions and social, technological and economic aspects. Before to run the whole previous exhaustive fieldwork test was developed. The producers were located visually, recommendation among producers and by local authorities. The questionnaires were analysed using frequencies and percentages the information was processed in excel software.

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Results

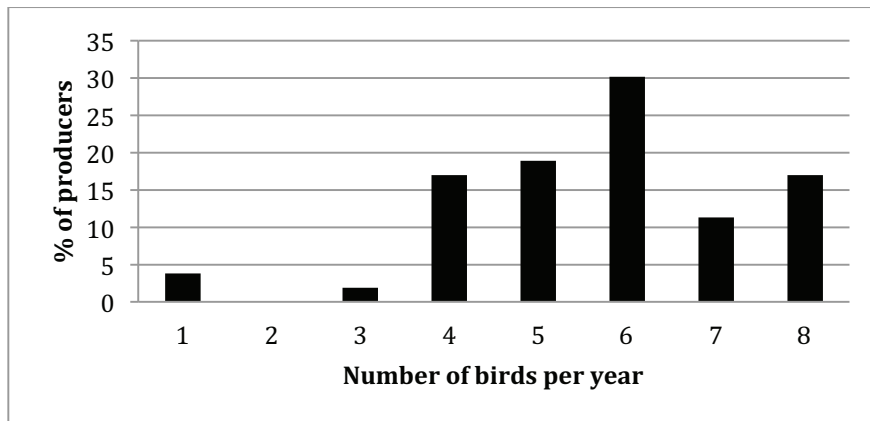
The rabbit production reported include traditional backyard and more technical systems, which satisfied the basic necessities of the family and is oriented for meat production. 97.6 reported private house and 2.3% rent. Rabbit production is mixed with other domestic species like pigs, sheep, horses and bovine and agricultural and forest activities. 66.4% of the producers reported combine with agricultural activities, 21.9% as employer, 9.4% tradesman and 2.3% other occupations. The reported number of births per year concentrated mostly between 4 and 6 births per year (66.1%) and to a lesser extent with two to three births (4.2%), however some producers reported 7 and 8 births year (41.5) (Figure 1). The table 1 present that the New Zeland breed is the more representative with 30.5%, following the hybrid and California with 23.55% and 21.25% but creole rabbits are representative with 16.6%.

Table 1. Number and average of rabbit breed located in the area of Volcanoes

N. Zeland	30.50%
California	23.55%
Hybrid	21.25%
Rex	4.25%
Ornamental	3.85%
Creole	16.60%
Total	100.00%

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Figure 1. Percentage of producers and number of births per doe

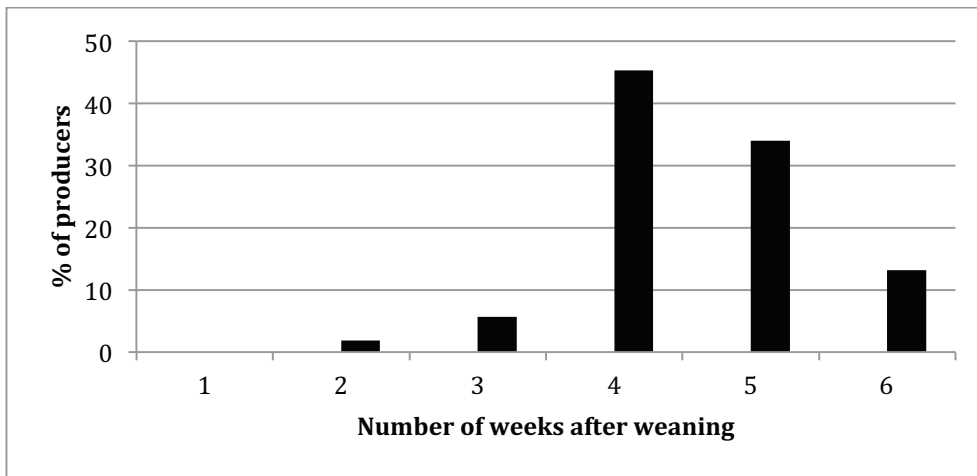


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The figure 2 present the number of birds per doe, most of rabbit producers 79.3% weaning between 4 and 5 weeks, and 13.2% weaning at 5 weeks.

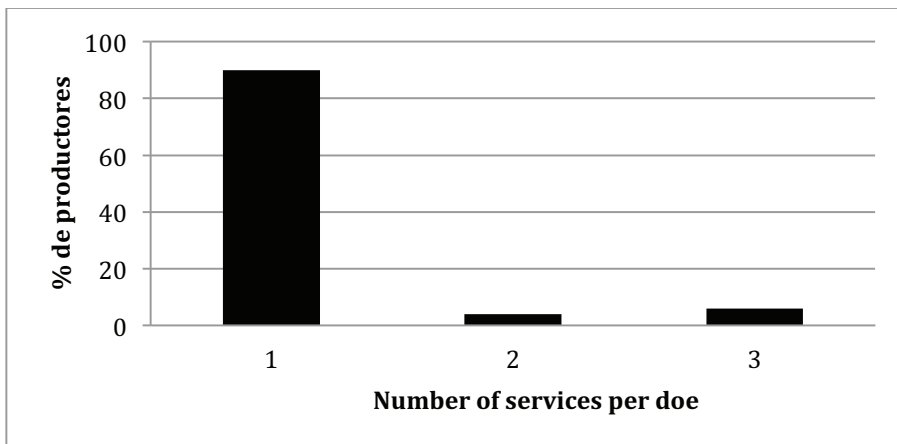
Figure 2. Percentage of producers and number of weaning per doe per weeks



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According with the local rabbit producers 56.4% believe that has good quality of rabbit breed and 43.6 do not consider that have good quality of rabbit breed.

Figure 3. Percentage of producer



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Discussion and conclusion.

As shown the rabbit production reproductive management of rabbit backyard production in the area of volcanoes is a productive system, which is clearly adapted to the social and environment conditions. Rabbit production is an important option among the folder opportunities of the local people. Apparently the incomes from rabbit activity are not significant however the agricultural and forest activities which are linked with the natural resources which are inserting into their life style. In this way producers build a steady familiar income round the year. As well as producers combine the rabbit activity with other occupations like employer, taxi driver, peasant, tradesman and retired. However there is a profitable business for local people because of their location as part of the ecotourism Popocatepetl and Iztaccíhuatl Park.

A good government program could include advice on areas such as the production of reproduction, genetic food, facilities, sanitation, primarily but equally is marketing its products and byproducts. This could be achieved with the diffusion and relevant information about the rabbit and the existence of these small rabbit producers. In technology, the production system could be considered as one of serious low-input near a proposed sustainability. Rabbits generates direct and indirect jobs and is an activity that generate other needs such as manure compost. As well as Important also should consider the training courses for the elaboration of sub-products like handcraft, ham and sausages and compost elaboration.

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