EFFECT OF THE ANIMAL WELFARE IN DAIRY COWS ON REPRODUCTIVE PARAMETERS


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INTRODUCTION

The goal of every dairy farmer is to produce as much milk as possible under minimal cost; however, to achieve this goal it is necessary to provide the necessary environments, which should promote animal welfare in (Tucker et al., 2004). Currently, considering animal behavior in UPAS can be improved production, since knowledge of BA can be applied in feeding programs, reproduction, facility design, handling and transportation of animals (Duncan et al., 1992; Albright 1993; Arabic and Albright, 1997; Rushen et al., 2001; Etol, 2004; Ortega y Gómez, 2006). Vellum et al (2004) found that cows spend most of the time to behaviors that are classified as maintenance, predominating the time devoted to rest, ruminant and social behavior; mainly to social licking, cows are found in a welfare state, a condition attributable among other factors, housing conditions and ambient temperature. Animals that are crowded, it is common stereotypical...
behaviors develop, severely affecting their productivity (Vickery and Manson, 2005). The aim of this study was to evaluate the effect of animal welfare (AW) on reproductive parameters in dairy cows.

**MATERIAL AND METHODS**

This work was performed in 25 UPAS of Cuenca Lechera Tizayuca, Hidalgo, Mexico. Comfort where are the UPAS, in terms of facilities, management, health, food, cleanliness and behavior was assessed visually this evaluation was subjective and was based on a questionnaire called Score for cow comfort on the Dairy Farm, which it was developed by Dr. Frank JCM Van Eerdenburg. Two hours a day were spent by each UPA, cleaning waterers, feeders, beds, floors revised; aba observed the treatment provided to the animals by managers; noise was in each UPA; the number of beds, feeders and drinking troughs counted; the material of the beds and floors verified; was measured with a tape measure the width and length of feeders, beds and walkways; with environmental thermometer, the temperature in each UPA was measured; light periods checked; finally the body condition was assessed. Points earned by UPA, were emptied into an Excel spreadsheet in order to assess that obtained UPAS comfort and which fell into the category of less comfort. With the help of reproductive records fertility was assessed, taking into account labor-partum interval, calving to conception, design services, doses per conception, percentage of waste for reproductive problems and age at first birth, only primiparous cows. Reproductive data were recorded in Excel. Subsequently, data and data comfort of fertility in the JMP3.1.2 SAS Institute program, which correlated with fertility comfort was performed, were ordered. With fertility data collected, descriptive statistics of UPAS performed together. Reproductive parameters of each of the UPAS with those reported in the literature were compared. Finally, the type of hormones used in each was assessed UPAS.

**RESULTS**

The UPAS who had maximum comfort, had an average value of 17.5 fertility and those with minimal comfort, had minimal comfort level was 8.63; the significance level was (P = 0.13). One $R^2 = 0.09$ was obtained indicating that fertility is explained by .91 comfort and other variables comfort; in addition, there is a positive relationship between the animals comfort and fertility are. Of the 14 rated UPAS only work under conditions of cow comfort and the remaining 11 have minimum conditions of comfort. Services per conception, dose per conception, birth-partum interval, age at first birth; they were high regarding optimal; however, without reaching values that cause problems; the percentage of waste for reproductive problems, said serious problems. The interval calving to conception was unique that was within the optimum values, according to the average of descriptive statistics.

**DISCUSSION**

Has been reported in several studies (Hazard, 2000; Rushen et al., 2001; Xolalpa et al., 2003; Dominguez, 2006 Cordova-Izquierdo et al, 2010) that the existence BA in UPAS should be taken into account different environmental factors and management; the results obtained in this work, prove it. Ortega y Gomez (2006) indicated that mention the good handling of animals, especially from an early age can prevent them from developing fear of humans, so it is very important to train people responsible for their management for not wearing out aggressive practices; which often they are unnecessary in routine work in the UPA and also affect the BA of animals.

**CONCLUSION**

We need to WA, in the UPAS analyzed, so it is recommended awareness among the staff working in the UPAS of the importance of WA, on the productivity of animals.

**Bibliography**


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